



COLLECTED
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OF THE
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Here is a list of those doctors who made supplemental tapes to date:

Charles Bender - "Sports Medicine"

Kenneth Feder - "IVD Technique"

Chris Harrsion - "Vertebral Subluxation"

Stanley Wieczorek - "Pelvic Categories"

Sheldon Deal - "Body Priorities"

Bert Hanicke - "EAV Technique"

David Walther - "Shoulder"

INTRODUCTION

By

Sheldon C. Deal, D.C., N.D.

Chairman

This fifteenth collection of papers by the members of the International College of Applied Kinesiology represents 94 papers written by 49 authors.

These papers will be presented by their authors to the general membership at the Summer meeting to be held in Dearborn on May 25, 26, 27, 28, 1983. The authors welcome comments and further ideas on their findings either in Dearborn or you may write them directly; as their addresses are included in the Table of Contents.

These papers do not represent the official educational material of the International College of Applied Kinesiology, but rather areas of special interest to the individual members which have been under research. The papers are presented in an unedited form.

Pages 285 to 291 are intentionally left out due to a duplication of a paper, so please do not think your book is missing those pages. In the front of the book I have included a list of supplemental tapes made by members to date. In the back of the book I have included some blank pages in case you want to write in some notes.

The papers are being mailed out to the members well in advance of the Dearborn meeting. This will allow the membership at large to read the papers in advance which will save time at the Summer meeting and hopefully stimulate more questions from the members and more demonstrations from the individual authors.

We the members of I.C.A.K. can be proud of the amount of research being conducted and feel fortunate to have it at our fingertips in the form of these Collected Papers. It cannot help but be an asset to our health and also to the health of our patients.

LOVETTE VERTEBRAL TORQUE AND COUNTER TORQUE

Gerard E. Achilly, B.A., D.C.

Abstract

There is a direct correlation in direction of a vertebral subluxation in relationship to its Lovette counterpart.

Introduction

Unisubluxation of a vertebral segment usually demonstrates a clockwise or counterclockwise directional challenge. In rare instances a straight anterior or posterior are found, but most are the torque variety.

In investigating the possibility of the existence of a torque pattern to its Lovette counterpart, to date, approximately forty-five patients have been examined who showed a Lovette subluxation in the lumbar and cervical spine.

All had both subluxations on the ipsilateral side. No contra-lateral Lovette subluxations have been researched at this time. The findings are as follows:

1. If the torque existed, one vertebra would be torqued on one direction while its counterpart Lovette vertebra would be torqued in the opposite direction.

(Example: If the 4th lumbar was torqued

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clockwise, the 2nd cervical would be torqued counterclockwise.)

2. The exception to this was the atlas, 5th lumbar. The atlas demonstrated no torquing only straight lateralization.
3. Straight anterior or posterior subluxations were the same at both levels.

Conclusion

The existence of Lovette torque and counter torque should be considered in correction of structural faults.

ACCESSING THE COMPUTERS

John V.N. Bandy, D.C.

Abstract: A method for accessing information from the computers of the body by the relaxation of each computer's corresponding muscles is discussed.

In the summer of 1982, Dr. Alan Beardall shared with us a new concept in his presentation entitled, "The Living Computer." In his paper, he describes four distinct computer levels used by the body to process and store information. He also discusses his procedures for "clearing" the computers. In practice this has proven to be a truly valuable technique. This paper is to describe a technique which allows us to access the information stored in those computers.

Dr. Beardall gives the names, location, and associated muscles to the computers as follows: Local, K₂₇, SCM's; Spinal, hyoid, hyoid muscles; Endocrine, TMJ, TMJ muscles; Primary, eyes, muscles of the eyes. This author believes that putting the respective muscles in a lengthened, relaxed position is one way to access the information stored in each computer. The technique recommended is to therapy localize the area of complaint and by your chosen method, to locate and correct the related problem until the therapy localization is negative. Then tap the area and retest; if it is still negative, activate the local computer by putting the patient's cervical spine into relaxed extension (this can be done adequately with a rolled towel). Then re-therapy localize the area of interest. If there is a positive therapy localization, clear these in the usual manner. Next the Spinal Computer can be accessed by jiggling the hyoid while therapy

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localizing the area. The Endocrine Computer can be accessed by using a dental spacer to increase vertical dimension and relax the TMJ muscles (a rolled tissue, cotton roll, pencil, etc. works fine). The Primary Computer can be accessed by having the patient look toward maximum distance, which will "blur" everything in his visual field.

All but the Local Computer can be accessed with direction as well as relaxation; however, this necessitates checking therapy localizations in all directions, which is more time consuming.

VISUALIZATION

John V.N. Bandy, D.C.

Abstract: Visualization is a useful tool to relieve symptoms and also allows the body to access "hidden" information so that the doctor can reach the core of the patient's problem and make the necessary corrections.

Visualization is not a new technique, but it is extremely valuable in an Applied Kinesiology practice. The suggested technique involves having the patient therapy localize the area of complaint and, if positive, use preferred technique to clear it. Next, follow the instructions in the paper entitled, "Accessing the Computers", in this volume of collected papers. If the symptom persists and therapy localization is negative, have the patient close his eyes and look at the symptom, for example, with morning sickness, ask the patient to look at the nausea. Ask the patient to describe the nausea, noting the size, shape, color, etc. Ask her things that require the building of a clear three-dimensional image of the nausea. You will note that as the patient looks at the nausea, it will change size, color, shape, etc. Keep asking until one of three things happens: the symptom disappears; the image gets hard to see and describe; or the image gets set, meaning that the size, color, shape stay the same. If the symptom is still present and the image is hard to see or is set, then there will be a positive therapy localization. Clear this therapy localization using your preferred techniques and repeat the visualization process until the symptom is gone.

This technique has proven extremely useful in clinical practice, and it is recommended to you.

" THE ADJUSTMENT OF CERVICAL FIXATIONS USING ONE HAND
(BERNZOTT MANEUVER) "

BY: Dr. J. R. Bernzott

ABSTRACT:

The adjustment of Cervical Fixations using only one hand, has proven more effective than two handed adjusting for the author.

This maneuver was founded like many other new methods out of necessity. Using the two handed method occasionally resulted in contusions to some part of the face, usually the nose, mouth or chin, when administered on my Zenith tables. Once the fixation is determined to exist (for this paper we will use an upper cervical fixation, anterior/left). The patient is placed prone on the adjusting table and the following steps applied.

- # 1. The doctor stands at the head of the adjusting table with the patient prone. He or she then contacts the third cervical transverse process on the left side with the thenar eminence of the index finger of the right hand.
- # 2. Contact the second cervical transverse process on the patients right side with the thumb of the doctors right hand.
- # 3. With the contacts in place, rotate the patients head and neck to the right before applying the double thrust. This eliminates the possibility of contusions to the patients face and has proven to be just as effective for this author.

REACTIVE FIXATIONS

Robert M. Blaich, D.C.

February, 1983

ABSTRACT

Several unique observations, relative to the nature of spinal fixations, are described along with a new concept called reactive fixations. It is of interest that if the gait points on the feet are being activated, a "normal" fixation is revealed by the associated bilateral muscle weakness in the clear. If the gait points are not being activated, the actual fixation area may not be revealed by a bilateral weakness of the associated muscles, but by a reactive weakness of another set of fixation-related muscles. Implications of this are described, as well as efficient testing and correction procedures for the aberrant phenomenon.

INTRODUCTION

Spinal fixations and their relationship to bilateral muscle weakness was first described by Goodheart.¹ Procedures for identifying and correcting fixations have become widely used in the practice of applied kinesiology, and are fundamental procedures used in the treatment of musculoskeletal disorders.² Fixations have been further described in the collected papers of the ICAK by the following: Allen³, Bernzott⁴, Deutsch⁵, Durlacher^{6,7}, Evans⁸, Gleeson⁹, Jackowski¹⁰, Pastore¹¹, Powell¹², Sanna¹³, Schmitt^{14,15,16,17}, Wiczorek¹⁸. Certain observations regarding the nature, interaction of, and treatment of fixations are described here.

The intent of this paper is twofold: 1) to point out some new observations relative to the nature of fixations and how they affect the function of the human body, 2) to present an effective clinical approach to the diagnosis and treatment of reactive fixations.

OBSERVATIONS AND DISCUSSION

It was observed on numerous patients that certain activities would recreate a structural fault. One example was a basketball player with a recurrent AS ilium, posterior ischium, that occurred from playing basketball. Initially, this patient exhibited a bilateral gluteus maximus weakness which had been corrected by treatment to the upper cervical fixation. Adjustment to the sacroiliac joint produced normal

function here. On subsequent visits, there was a recurrence of the AS ilium, and an attempt was made to understand what musculoskeletal weakness allowed this distortion to recur. The gluteus maximus muscles were then strong in the clear, and were even checked with the head and neck in maximum extension, allowing for the fact that a basketball player's head is frequently in this position while grabbing for rebounds under the basket. Even with the head in full extension, the gluteus maximus muscles were strong.

My next consideration was that possibly the arms up, while grabbing for rebounds, also could contribute to the postural distortion. However, the lower trapezius muscles (which would be active in this position) were strong in the clear. It occurred to me that perhaps there was some "reactivity" involved where one set of fixation-related muscles could then weaken another set of fixation-related muscles. Based on this idea, the left gluteus maximus muscle was tested immediately following a test of the lower trapezius muscle, and the gluteus maximus muscle was found to be extremely weak. The same was the case for the right lower trapezius muscle and then the right gluteus maximus muscle tested in sequence. Since the gluteus maximus weakness was only apparent following contraction of the lower trapezius muscles, it seemed that the problem was inherent in activating the lower trapezius muscles. In an attempt to change this "reactive" pattern, intuition said to adjust the thoraco-lumbar area as if there was a usual fixation, which would normally produce weak lower trapezius muscles. After adjustment to this area, the sequence was now abolished such that gluteus maximus were strong following contraction of the lower trapezius muscles.

The idea that perhaps there is a reactivity among fixations seemed to make sense. Proceeding to test many patients for reactive sequences in the fixation associated muscles, a wide variety of combinations were found. The reactive weakness of one set of fixation muscles is consistently corrected by adjusting for a fixation at the spinal level associated with the first set of muscles which was contracted. This continues to

be an effective office procedure, which enhances the correction of fixations and greatly decreases recidivism of fixations.

A practical way to utilize this information is to consider the most probable weakness a patient might have for a particular structural distortion or problem that develops during activity. If these muscles are not weak in the clear, test other fixation-related muscles first, and then test these muscles much as you would if you were looking for "reactive muscle" combination.¹⁹

A second set of observations involved placing lead over different fixation levels on the body. In the example mentioned above with the basketball player having an "upper cervical fixation" reactive to a lower thoracic fixation, it has been observed that placing a piece of lead over the lower thoracic area will also reveal a bilateral gluteus maximus weakness in the clear without first contracting the lower trapezius muscles. It is also interesting to note that placing the lead over the upper cervical vertebrae in this situation reveals a bilateral lower trapezius muscle weakness in the clear. However, correction to a suspected upper cervical fixation does not abolish this pattern, whereas adjustment to the lower thoracic fixation area does abolish the pattern.

It is interesting to note that placing lead over a "primary fixation area", as defined here, (the lower thoracic area in the example above) causes all gait points on the feet to be active. In the example above, if you simply lie the patient supine with a piece of lead over the 11th, 12th thoracic first lumbar area and test the patient for gaits²⁰, all gaits will be active and test weak in the clear. With the lead over the upper cervical area, in this example, the gait muscles are strong. This demonstrates a rather interesting relationship between fixations and gait, and is in conjunction with Dr. Goodheart's observation, reported in 1981²¹, that gait points on the feet are often corrected by eliminating fixations that showed up with eyes into distortion. After correction of the lower thoracic fixation (same example), lead placed here no longer causes a weakness of the gait related muscle groups.

Another set of observations supports the idea of testing a patient in the standing position. In the same example of the basketball player above, if we were to test that patient standing, the lower trapezius muscles would be weak in the clear standing, but not sitting or not lying prone or supine. Therefore, the "primary" fixation, which requires correction, is revealed by a standing test. An interesting correlation is that this is not due to actual "weight bearing", but is in fact due to activation of the gait points with the foot's contact on the floor. If you test this patient's lower trapezius muscles with the patient prone, they will be strong as mentioned above, but they will be weak if another person contacts the gait points on the feet of the patient. So another way to locate an area of "primary" fixation which may be causing other secondary or reactive fixations is either to test a patient standing, or to have a third person contact the gait points on the feet of the patient while you test the fixation-related muscles.

To illustrate another useful procedure for evaluating a patient with recurring fixations, we will use an example of a recurring upper cervical fixation. 1) Test the gluteus maximus muscles. Since they are weak, correct the upper cervical fixation. Gluteus maximus muscles are now strong. 2) Either: a) test deltoids and then gluteus maximus, lower trapezius then gluteus maximus, popliteus then gluteus maximus, etc., to determine if another fixation area is "feeding in" irritation to the upper cervicals which then lead to the fixation here and bilateral gluteus maximus recurrence. Note that it seems to be sufficient to screen for the problem by testing the muscles on one side only. If another fixation-related muscle causes a "reactive" gluteus maximus weakness, correct for a fixation at that spinal level. b) Using a piece of lead, place the lead over the lower cervical area and test a gluteus maximus. Place the lead then cervical-dorsal and test a gluteus maximus. Place the lead at any area through the dorsals where a fixation is suspected. Again test the gluteus maximus. Place the lead over the lower thoracic, test the gluteus maximus. Do the same with the lumbar,

lumbosacral, left and right sacroiliacs, and sacrum. If any weaknesses are found, simply adjust for a fixation at the level of the lead, and recheck by placing the lead over the vertebrae and testing the gluteus maximus. The gluteus maximus should now be strong. Frequently, several other fixation areas are observed to recreate the evidence of the upper cervical fixation. It is also interesting that many lumbo-sacral fixations are found in this manner, which would not otherwise have been exposed.

CONCLUSION

It is the opinion of the author that these observations are valuable on an academic basis, giving information about the relationship of gait points and spinal fixations, as well as the effect of lead placed over spinal fixations. The observations have also contributed to the development of several simple procedures which have greatly enhanced the rapid and effective treatment of fixations. To date, these procedures have been performed on several hundred patients, with excellent results.

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A BOOK AND PROCEDURE REVIEW
OF
FURDA BIO-CHEMICAL BIOPSY
BY

JON R. BLOSSOM, D.C.

ABSTRACT: Experience indicates that the subtle molecular changes illuminated by the Biochemical Biopsy method provides extremely valuable information related to the presence and staging of the disease process. As such it can be used for early detection and as an indicator of therapeutic effect. The application in Applied Kinesiology is obvious as it can give us an additional tool to verify and compare our findings. This can be done both at the outset and during the progress of the disease or therapeutic effect.

Changes in molecular patterns are the fingerprints of all disease process be they preclinical or advanced. The various tests used to achieve the interpretive observations are explained to the best of their ability. I hope this information will stimulate further thought by physicians and the result will be improved care for their patients.

At the present time the Biochemical Biopsy procedure makes use of carefully standardized electrophoretic methods, colorimetric studies, atomic absorption spectroscopy and hematologic studies. The total method is devised so that it provides its own system of checks and balances against both interpretive and technical error.

No evaluation is made on the basis of a single test. All test results are confirmed or refuted by at least one other lab procedure. Interpretation relies heavily upon patterns of change in molecular characteristics rather than upon absolute values, although these quantitative results are computed and taken into consideration.

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"Furda Bio-Chemical Biopsy"
Jon R. Blossom, D.C.

A simple example of this interpretive technique is in the use of the serum protein electrophoresis and CPK isoenzymes in the discovery of early and non-symptomatic heart disease, at a time when the electro-cardio-gram may be essentially within normal limits.

With this knowledge the physician can design a therapeutic program for the patient aimed at the aversion of further heart muscle tissue destruction. The effect of the therapy can be monitored by doing serial rechecks. In addition, the other parts of the Biochemical Biopsy, which have been completed concurrently, will very often illuminate a more primary cause of the heart problem, such as lipid metabolism, inflammatory processes, etc.

Conclusion: We have used the Furda Blood Biopsy test over the past 3 months with a variety of cases. These cases ranged from post chemotherapy, neoplastic disease, arthritis, thyroid and liver disease and for routine screening of vague objective and subjective findings. We have found Furda Bio-Chemical Biopsy to be of the most significant and accurate analysis I've used. I recommend it highly to all whole health kinesiological practitioners. You may obtain copies of the full Furda report and explanation by writing the address enclosed on page 12.

Biochemical Biopsy (TM) provides valuable information in many pathological problems. A high degree of accuracy and reliability has been established in areas listed below.

1. NEOPLASTIC DISEASE:

- a. Early identification (before clinical evidence is seen).
- b. Continued neoplastic activity (post treatment).
- c. Presence and location of metastatic lesions.
- d. Presence of secondary tissue necrosis.
- e. Specific identification of: Sarcoidosis, Multiple Myeloma, Waldenstroms Macroglobulinemia, Lymphosarcoma, and Lymphatic Leukemia.

2. HEPATO-BILIARY AND PANCREATIC DISEASES:

- a. Staging of liver disease (acute, subacute, chronic).
- b. Fatty metamorphosis of the liver.
- c. Liver necrosis.
- d. Metastatic liver neoplasia.
- e. Allergic and toxic cholestasis.
- f. Infectious mononucleosis.
- g. Biliary tract disease (primary, cholecystic, and hepatic).
- h. Hepatic hypogammaglobulinemia.
- i. Pancreatitis, staging (acute, subacute, chronic)..

3. AUTOIMMUNE DISEASES:

- a. Staging as active, in remission, and preclinical.
- b. Latent auto immune cases which may be activated by estrogenic compounds or other chemical "triggers".
- c. Rheumatoid arthritis (independent of the R.A. test results).
- d. Disseminated Lupus Erythematosus.
- e. Dermatomyositis.

4. CARDIOVASCULAR DISEASE:

- a. Acute myocadial infarction.
- b. Extensions of Myocardial Infarction.

c. Neuromusculoskeletal problems which mimic cardiac pain (disease).

d. High output cardiac decompensation.

e. Secondary passive congestion of the liver.

f. Early coronary insufficiency and/or myocardial depolarization.

5. DISEASES OF THE NERVOUS SYSTEM:

a. Cerebrovascular thromboembolic phenomena.

b. Intracranial hemorrhage.

c. Brain abscess.

d. Brain neoplasm (differentiated as primary or secondary).

e. Cord neoplasm (differentiated as primary or secondary).

f. Amyotrophic lateral sclerosis (ALS).

6. RESPIRATORY DISEASES:

a. Etiology of Chronic Bronchitis as:

(1) Bacterial.

(2) Viral.

(3) Allergic.

(4) Toxic

b. Emphysema.

c. Black lung disease.

d. Pulmonary embolic phenomena.

f. Tuberculosis, lung.

g. Histoplasmosis, lung.

7. TISSUE NECROSIS AND INFLAMATION:

a. Presence of necrosis with identification of the organ system involved.

b. Abscess (silent, chronic, subacute and acute).

c. Differentiate inflammatory etiology as:

- (1) Bacterial.
 - (2) Macroviral.
 - (3) Parasitic infestation.
 - d. Tuberculosis (extra pulmonary).
 - e. Histoplasmosis (extra pulmonary).
8. GASTROINTESTINAL DISEASE:
- a. Peptic ulcer.
 - b. Ulcerative colitis.
 - c. Irritated bowel syndrome.
 - d. Regional enteritis.
 - e. Intestinal parasites (general dx, specific dx not identified by Biochemical Biopsy).
 - f. Protein-losing enteropathies.
 - g. Functional versus organic enteropathies.
9. AMYLOIDOSIS:
- a. Liver.
 - b. Kidney.
 - c. Stage of involvement.
 - d. Degree of organ dysfunction.
10. GENITO-URINARY DISEASE:
- a. Nephrotic syndrome to include stage of involvement and degree of dysfunction.
 - b. Prostatitis.
 - c. Bladder infection.
 - d. Pelvic infection.
 - e. Salpingitis.
 - f. Cervicitis.
11. SYSTEMIC HYPERSENSITIVITY REACTIONS:

- a. Positive identification of the process.
- b. Specific identification of:
 - (1) Penicillin reaction.
 - (2) Hydrocarbon toxicity.
 - (3) Alcoholic toxicity.

12. ENDOCRINOPATHIES:

- a. Thyroid dysfunction, disease and/or tumor.
- b. Adrenal dysfunction, disease and/or tumor.
- c. Pituitary dysfunction, disease and/or tumor.
- d. Propensity toward vasculitis which may be precipitated by:
 - (1) Estrogenic compounds.
 - (2) Contraceptive pills.
 - (3) Pregnancy.
- e. Prediabetic condition.

13. HEMOLYTIC DISORDERS AND ANEMIAS:

- a. Pernicious anemia.
- b. Megoblastic anemia due to Folic Acid insufficiency.
- c. Anemia due to iron insufficiency.

14. DISEASES OF LIPID METABOLISM:

- a. Lipid phenotyping for genetic lipid disorders.
- b. Hyperlipidemia due to:
 - (1) Liver dysfunction and fatty metamorphosis.
 - (2) Pancreatitis.
 - (3) Hypothyroidism.
- c. Lipoid nephrosis.
- d. Gaucher's disease.
- e. Glycogen storage diseases.

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DEVELOPER



ORIGINATOR

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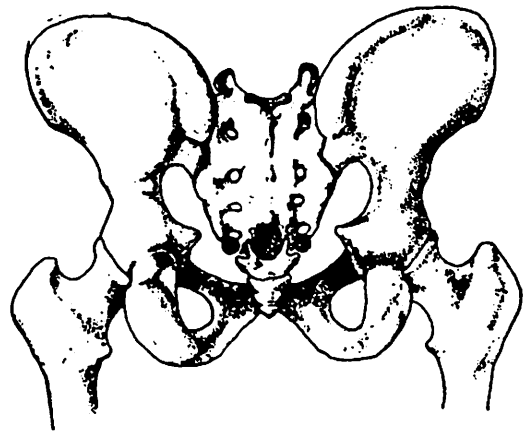
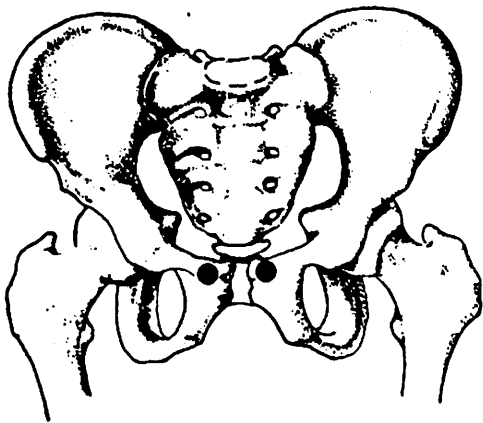
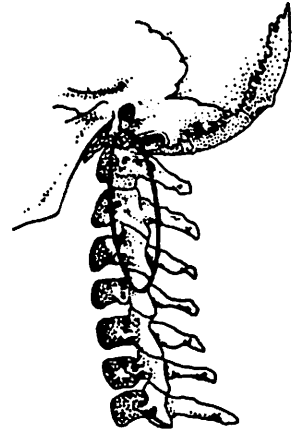
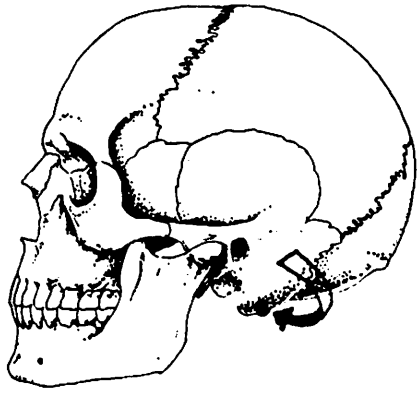
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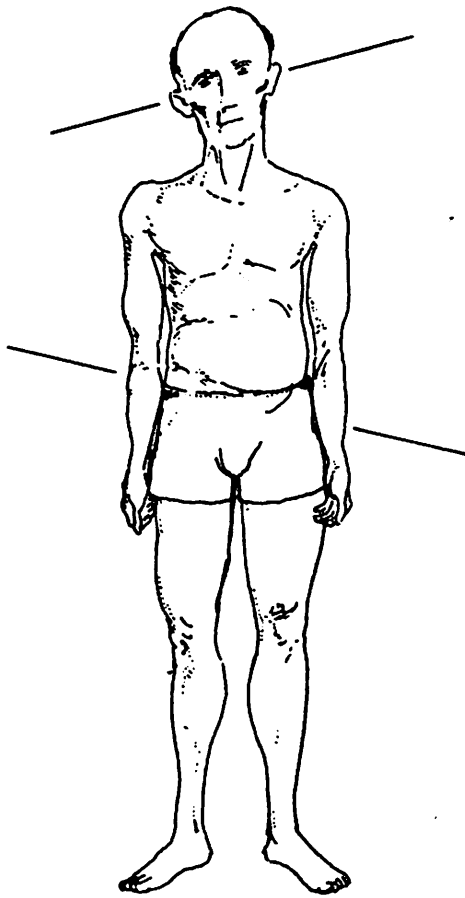
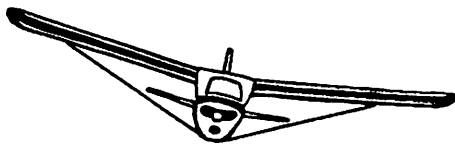
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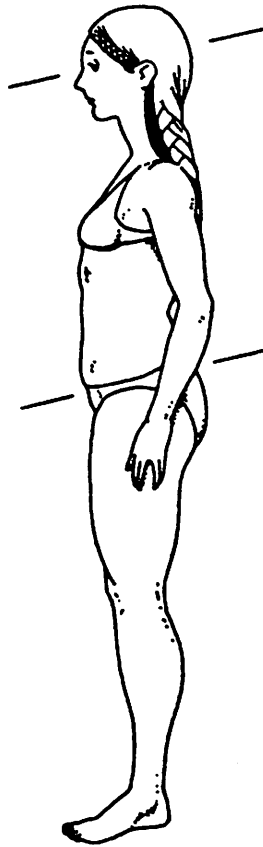
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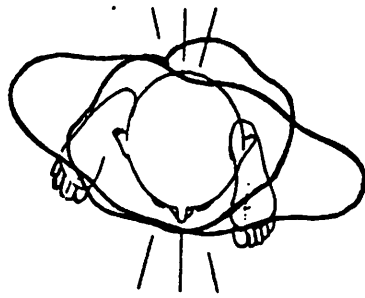
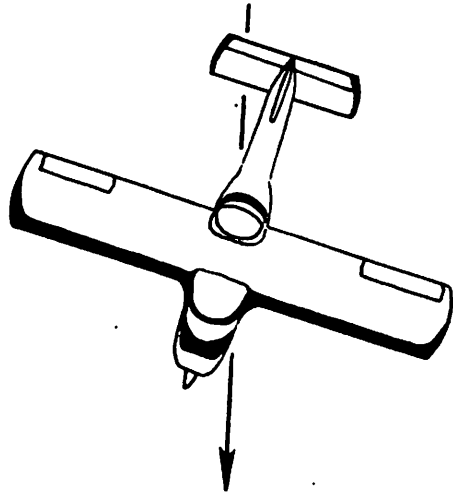
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Information concerning Bio-Chemical Biopsy cost, transportation
of samples, etc., can be obtained by telephoning the above tele-
phone number weekdays between 8 and 10:00 AM.









SERIAL TESTS AND EXAMS ARE CRUCIAL
TO CASE DECISIONS AND RECOMMENDATIONS

By

Jon R. Blossom, D.C.

SUBJECT: The necessity for case preparation, the presentation and meaningful recommendation, based on all findings.

In the form of the Wu-Li Masters - the knowing is in the oneness of it all. All life processes are a constant movement - a constant kinetic flowing. Any meaningful contribution to the clinical environment must produce an awareness of the day to day changes in the flow of life in our patients. The concept this paper addresses is recommending, Test-Record & Compare, Test-Record & Compare, Test-Record & Compare, Test-Record & Compare, Test-Record & Compare sequential in any series of therapy. This procedure is followed until the patient reaches Maximum Medical Response or atleast until Maximum Medical Improvement is reached.

In Applied Kinesiology we have so often seen others do a demonstration of a procedure. At the end of the demonstration, with a positive kinetic neuro-my response, we pronounced this condition "fixed" proving our proposition. The body can and does heal is self evident. The question we are addressing is when has the body healed itself, is the healing processing normally, etc.

In todays Applied Kinesiology private office or clinical environment, the AK clinical physician is well advised to develop a routine in his/her clinical setting of STEP BY STEP routines of procedure. i.e. The workshop procedure, 1980 AK. The following example:

The usual and customary routine following a physical examination is carried out. Tests were then selected. All results having been obtained and recorded, suggest several further tests or further recommendations, if necessary, to confirm causal relationship. Tests are performed until a comprehensive conclusion is obtained. At that time present a case evaluation, it can be short and to the point. It includes all findings in a language that the patient can understand. The conclusion is related to the patients desires and needs,

as Dr. G. Goodhart has stated so often in seminar forum. The patient gives his/her approval and acceptance of treatment recommendations. At that time the Doctor proceeds with the usual and routine as outlined in the AK literature, until some 10-12 visits have passed by and again repeats re-evaluation, tests and findings.

This type of office routine keeps the patient and the Doctor informed as to the need for additional information and/or history of the exam. This also clarifies the effectiveness of the chiropractic procedure if the patient is re-tested on periodic intervals. The following could be a more awareness producing office or clinic "workshop" procedure.

- . Introduction
- . Information, name, address, insurance coverage, etc.
- . Doctor introduction and questions. Chief reason for appointment.
- . History - ancillary staff or Doctor
- . Doctor evaluates problem & recommends tests and exams to discover all the causes, considering the triade of health.
- . Examination completed, all information recorded and placed in the patients file by the staff. All information kept for future comparison.
- .. Doctor studies all findings, makes decision on appropriate case procedure to achieve objectives and goals of patient.
 - . a. Presentation of findings to the patient.
 - . b. Relates findings to the patients condition.
 - . c. Present steps of treatment & therapy plan.
 - . d. Considerations: 1st relief, 2nd correction of causes, 3rd prevention of reoccurrence, including brochures, educational material, exercise, nutritional guidance, future tests and exams to determine stability.

- . Begin Treatment
- . 5-10 visits later - re-examination. Repeat serially all positive findings and indicator tests to establish proof of treatment effectiveness. Comparative spinal stress x-rays and a re-evaluation report will be made to determine, understand and correlate the treatment administration and/or further treatment recommendations will be made.
- . Re-report and re-recommend, based on changes if any. (why an advantage*)
- . Repeat the entire above procedure every 10-12 visits until the patient reaches MMI or MMR. Whether the patient has reached this should be determined by your tests not by the patient symptoms. Imperical results are so subjective and unreliable.
- * WHY? This above procedure will do many things for the patient and for your awareness of the relationships of many conditions. This will help point to the various stages of pathological deterioration and degeneration co-existing and probably masked by preoccupation of the symptom picture. The true professional will readily understand the significance.

Most of the cases we see have had a problem that was physically undermining their health since an early age, birth to age 4. The presenting complaint is usually the final episode in a long series in the general adaptative syndrome.

Conclusion: The Doctor asks how am I going to have the time to do all this? Ancillary personnel has been the solution to the success of physicians everywhere. How do I pay for all this? Third party payers are generally well tuned to receive and pay for tests and exams (medicare is an exception). As Doctors we must insist on Insurance Industry cooperation to protect their own funds from the drain of over utilization of tests and comparative retests with conclusions of the need to

continue or dismiss the patient. This must be apart of our usual and customary procedure until each patient reaches MMI or the patient self dismisses.

Doctors desiring the appreciation and respect of their clientel and the personal benefits of their accomplishments must do adequate tests and exams routinely for their patients. The Doctor who is not ready to accept this responsibility should be reduced to the status of ancillary personnel under the supervision of those of us who will.

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G. Hirschberg, M.D., F.A.C.P., Leon Lewis, M.D., F.A.C.P., Dorothy Thomas, R.N.,
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F.R.C.P. - Published by - Charles C. Thomas
- . All My Children - Jacqui Lee Schiff with Beth Day - Published by - M. Evans
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LONG LIVE APPLIED KINESIOLOGY

HOW ?

Bruce A. Born, D.C.

Without popular support a specific discipline cannot survive. AK has the support of the members of the I.C.A.K. as well as non-member Chiropractors who use it in their practices. But what about growth? It is always difficult and sometimes impossible for a student or recent graduate to attend and pay for the seminars given by the Diplomates of the I.C.A.K. It is very possible that once the time and money are available, motivation has waned. Surely recent graduates would have training and practice in college! That's what I thought, until I tried to hire an associate with Applied Kinesiology experience. Advertisements placed with the College Administrators brought many applicants, unfortunately very few knew much about AK. Most of the doctors applying for the position were willing to learn AK, some very anxious to do so. This prompted a visit to National College of Chiropractic where students and faculty members explained "the facts of life". The College Bulletin lists BM 4501 (Biomechanics) Kinesiology, and therefore "Kinesiology" is taught, but not APPLIED KINESIOLOGY! Interns are forbidden to use it in the clinics. Some interns indicated to me that they do use it, but must be careful not to get caught. This was my alma mater, the school I was recommending future Chiropractors attend. I thought perhaps I should recommend a different school. The question "which one?" indicated the need for a survey.

A letter was sent to seventeen Chiropractic Colleges asking for information and a college bulletin. Imagine the shock of learning that only five of the fifteen colleges responding teach AK. And five others discourage its use. A complete listing of the responses is attached. When a college responded by letter, rather than just marking my original letter or as in the case of Palmer whose response came by phone, those letters are also enclosed. There is some doubt as to whether the responses are entirely factual. Many think "Kinesiology" and "Applied Kinesiology" are one and the same, and if you had "a course" in one, you know the other.

The question is of course; what can be done? Perhaps very little, but that doesn't mean that we shouldn't try. Colleges function to please the alumni; more specifically the alumni who support the college financially. My small effort is to make a donation to the college, providing the college lift its ban on Applied Kinesiology. A copy of my offer is included. If you support your alma mater, and of course, you should, perhaps your support should have some strings. Or maybe you should be supporting a different school, one that supports you!



DR. BRUCE A. BORN
 15831 TWELVE MILE ROAD
 SOUTHFIELD, MI 48076
 TELEPHONE (313) 559-6763

SOUTHFIELD CHIROPRACTIC CLINIC

October 29, 1982

Academic Dean
 Adio Institute of Straight Chiropractic
 4401 Sunset Avenue
 Levittown, PA 19056

Dear Sir,

It is frequently my privilege to council future Chiropractic Students concerning preliminary courses of study, as well as which of the many Chiropractic Colleges to attend. Because of admission requirements, relatives living in certain areas, climate, and a myriad of other reasons it is not always possible to recommend one's Alma Mater. Also, because I run my practice with extensive use of Applied Kinesiology, the questions are often directed toward the availability of learning this technique while in school.

I realize you are probably extremely busy with the varied duties of your position, if you are too busy perhaps you could have some other knowledgeable person answer my questions.

Does the Adio Institute of Straight Chiropractic have any formal courses of instruction in Applied Kinesiology?

Is the official position of the Adio Institute of Straight Chiropractic to encourage, permit, tolerate, discourage, or prohibit the use of Applied Kinesiology in the college clinics?

Does the Adio Institute of Straight Chiropractic allow outside instructors (not connected with the college) to teach Applied Kinesiology on campus?

Is the official position of the Adio Institute of Straight Chiropractic to encourage, permit, tolerate, discourage, or prohibit the attendance of these seminars?

To your knowledge, are there any Applied Kinesiology seminars regularly held in the Levittown area?

Is the official position of the Adio Institute of Straight Chiropractic to encourage, permit, tolerate, discourage, or prohibit the attendance of these seminars?

SOUTHFIELD CHIROPRACTIC CLINIC**DR. BRUCE A. BORN**

Academic Dean
Adio Institute of Straight Chiropractic
October 29, 1982
Page 2

Naturally all the students planning to attend Chiropractic College are not interested in taking on the additional, and difficult, studies of Applied Kinesiology. Those who are, however, are usually adamant about it and the answers could help them make the correct decision.

Your cooperation in seeing that I get the correct answers to these questions, and any other information you feel would be helpful, is most appreciated. In addition, would you please send me a Adio Institute of Straight Chiropractic catalog?

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Bruce A. Born', with a stylized flourish at the end.

Bruce A. Born, D.C.

BAB/mrg

SURVEY RESULTS
* *
REGARDING CHIROPRACTIC COLLEGES TEACHING AK

College	Teaching AK Course	Allows AK in Clinic	AK Course on Campus	AK Course Locally	Discourages AK
Adio Institute	No Response				
Canadian Memorial CC	No Response				
Cleveland, Kansas City	Yes	Yes	No	Yes	No
Cleveland, Los Angeles	Yes	Yes	Yes	Yes	No
Los Angeles CC	Yes	Yes	Yes	Yes	No
Life CC	No	No	No	No	Yes
Life CC, West	No	No	No	Yes	No
Logan CC	Yes	Yes	Yes	Yes	No
National CC	No	No	No	Yes	Yes
Northwestern CC	No	Unknown	Yes	Yes	No
New York CC	Yes	Yes	Yes	Yes	No
Palmer CC	No	No	No	No	Yes
Palmer CC, West	No	No	No	No	No
Pasadena CC	No	No	No	Yes	No
Sherman CSC	No	No	No	No	Yes
Texas CC	No	No	Yes	Yes	No
Western States CC	No	Parts of it	No	Unknown	Parts of it

CLEVELAND CHIROPRACTIC COLLEGE

590 NORTH VERMONT AVENUE • LOS ANGELES, CALIFORNIA 90004 • 213/660-6166

November 9, 1982

Bruce A. Born, D.C.
15831 Twelve Mile Road
Southfield, MI 48076

RECEIVED NOV 12 1982

Dear Dr. Born:

In response to your letter of October 29, 1982, I offer the following:

1. Cleveland Chiropractic College, Los Angeles, teaches Applied Kinesiology during the 9th trimester of a 10 trimester curriculum.
2. Cleveland Chiropractic College, Los Angeles, permits the use of Applied Kinesiology in the clinic.
3. Cleveland Chiropractic College, Los Angeles, does not disallow, categorically, outside instructors in Applied Kinesiology or any of a wide range of topics on campus.
4. When Cleveland Chiropractic College, Los Angeles, permits or promotes a special purpose seminar, we encourage attendance.
5. I am not familiar with the availability of Applied Kinesiology Seminars in the Los Angeles area. Given the large number of seminars being offered on any given weekend, I suspect there are some involving Applied Kinesiology.
6. Cleveland Chiropractic College, Los Angeles, takes no position regarding most seminars being offered in the area as we have little knowledge of their merits.

I hope this information is helpful to you.

Sincerely,



Keith Asplin, Ph.D.
Dean of Academic Affairs

enc: Current Catalog

RECEIVED NOV 8 1982

Los Angeles
College of
Chiropractic
Founded 1911



Campus Address: 16200 East Amber Valley Drive • Whittier, CA
Mailing Address: P.O. Box 1166 • Whittier, CA 90609 • (213) 947-8755

November 2, 1982

Dr. Bruce A. Born
Southfield Chiropractic Clinic
15831 Twelve Mile Road
Southfield, Michigan 48076

Dear Dr. Born:

Thank you for considering the Los Angeles College of Chiropractic as a college of choice for students wishing to come to the West Coast.

Please find enclosed an excerpt from the self-study of the Principles and Practice Department. Under the classification of SPECIAL CHIROPRACTIC PROCEDURES I and II, a formal instruction in the sacro-occipital technique, as well as in Applied Kinesiology, is achieved.

In the Los Angeles area, numerous seminars in Applied Kinesiology are available from various I.C.A.K. diplomates, but no private entrepreneurs are holding any courses on campus without previous approval from our Postgraduate Division.

I hope that your continued interest in our college will benefit future professionals.

Sincerely yours,

B.H. FAUCRET D.C.

B.H. Faucret, D.C.
Professor and Chairman,
Principles & Practice Department

BHF:dh

Enclosure

SURVEY OF LOS ANGELES COLLEGE OF CHIROPRACTIC
DEPARTMENT OF CHIROPRACTIC PRINCIPLES AND PRACTICE

I. DEPARTMENT CURRICULUM

<u>Number</u>	<u>Course</u>	<u>Term</u>	<u>Units</u>	<u>Lecture Hours</u>	<u>Lab Hours</u>	<u>Total Hours</u>
3701	Palpation & Biom. I	1	4	30	30	60
3702	Chiropractic Prin. I	1	1	15	-	15
3703	Palpation & Biom. II/ Spinal Diagnosis	2	4	30	30	60
4701	Technique I	3	5	25	50	75
4702	Technique II	4	7	35	70	105
4703	Chiropractic Prin. II	4	2	30	-	30
5701	Technique III	5	4	20	40	60
5702L	Physical Therapy I	5	3	30	30	60
5703L	Physical Therapy II	6	3	30	30	60
5704	Technique IV	6	6	25	65	90
6701	Technique V	7	2	10	20	30
6702	Special Chiropractic Procedures I	7	3	15	30	45
6703L	Minor Surgery & Emergency Care	8	3	45	15	60
6704	Office Management/ Jurisprudence	8	2	30	-	30
6705	Special Chiropractic Procedures II	8	<u>3</u>	<u>15</u>	<u>30</u>	<u>45</u>
			53	385	440	825



Life Chiropractic College-West

2005 Via Barrett, San Lorenzo, California 94580 (415) 276-9013

November 12, 1982

RECEIVED NOV 17 1982

Dr. Bruce A. Born
15631 Twelve Mile Road
Southfield, MI 48076

Dear Dr. Born:

Thank you for your letter of October 29, 1982, requesting information about our College with respect to kinesiology. I apologize for not responding sooner; we have been intensely involved in our accreditation process.

Life Chiropractic College does not have any formal courses in Applied Kinesiology. We can only practice what we teach in order to retain malpractice insurance. The College does not allow outside instructors to teach Applied Kinesiology on campus. It is the official position of Life-West to permit the attendance of these seminars. We are not privileged to information with respect to Applied Kinesiology seminars held in our area.

I hope we have answered your questions and concerns regarding your counsel to future Chiropractic students. If you have need further assistance, please do not hesitate to contact me.

Yours in Life,

Agnello Braganza, Ph.D.
Academic Dean

AB:cf

cc: Dr. Gerard Clum

Enclosure: College Catalog



DR. BRUCE A. BORN
15831 TWELVE MILE ROAD
SOUTHFIELD, MI 48076
TELEPHONE (313) 559-6763

SOUTHFIELD CHIROPRACTIC CLINIC

RECEIVED
OCT 2 1982

October 29, 1982

Academic Dean
Logan College of Chiropractic
1851 Schoettler Road
Chesterfield, MO 63017

RECEIVED NOV 12 1982

Dear Sir,

It is frequently my privilege to council future Chiropractic Students concerning preliminary courses of study, as well as which of the many Chiropractic Colleges to attend. Because of admission requirements, relatives living in certain areas, climate, and a myriad of other reasons it is not always possible to recommend one's Alma Mater. Also, because I run my practice with extensive use of Applied Kinesiology, the questions are often directed toward the availability of learning this technique while in school.

I realize you are probably extremely busy with the varied duties of your position, if you are too busy perhaps you could have some other knowledgeable person answer my questions.

Does the Logan College of Chiropractic have any formal courses of instruction in Applied Kinesiology? 2 courses - 75 hrs. each

Is the official position of the Logan College of Chiropractic to encourage, permit, tolerate, discourage, or prohibit the use of Applied Kinesiology in the college clinics? by International College of Applied Kinesiology Diplomate

Does the Logan College of Chiropractic allow outside instructors (not connected with the college) to teach Applied Kinesiology on campus? NO

Is the official position of the Logan College of Chiropractic to encourage, permit, tolerate, discourage, or prohibit the attendance of these seminars?

To your knowledge, are there any Applied Kinesiology seminars regularly held in the Chesterfield area? yes, 5-6 times year by ICAK Diplomate

Is the official position of the Logan College of Chiropractic to encourage, permit, tolerate, discourage, or prohibit the attendance of these seminars?

THE NATIONAL COLLEGE

RECEIVED NOV 17 1982

November 12, 1982

Dr. Bruce A. Born
15831 Twelve Mile Road
Southfield, MI 48076

Dear Dr. Born:

In response to your letter dated October 29, 1982, the following information should prove helpful.

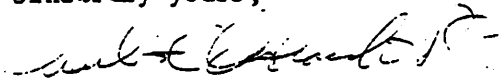
Kinesiology, manual muscle testing, and the clinical application of these disciplines are formally taught in specific courses under the auspices of the Department of Biomechanics and Chiropractic Technique.

In addition, the College Postgraduate Division offers kinesiology education courses approved by the Council on Chiropractic Education. Additional information concerning this aspect may be obtained directly from their office.

Only those techniques and their applications which are formally taught in the undergraduate course of instruction are permitted to be utilized in connection with the clinical experience.

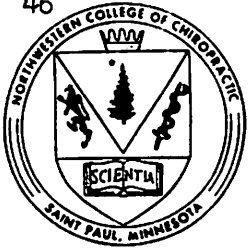
All formal courses under the auspices of the Department of Biomechanics and Chiropractic Technique are taught by faculty personnel of National College. However, guest lecturers have been and are currently utilized and welcomed in appropriate situations.

Sincerely yours,



Charles C. Tasharski, D.C.
Chairman, Dept. of Biomechanics
and Chiropractic Technique

CCT/lh



NORTHWESTERN COLLEGE of CHIROPRACTIC

1834 SOUTH MISSISSIPPI RIVER BOULEVARD • ST. PAUL, MN. 55116 • TELEPHONE (612) 690-1735

November 1, 1982

Dr. Bruce A. Born
15831 Twelve Mile Road
Southfield, MI 48076

RECEIVED NOV 4 1982

Dear Dr. Born:

Thank you for your letter requesting information relative to the training provided at Northwestern College of Chiropractic in applied kinesiology.

The college does not presently provide, either in the required or elective curriculum, a specific course in applied kinesiology. Our chiropractic division has developed and teaches an integrated approach to chiropractic patient care which attempts to incorporate the truths and values which can be identified in either traditional or contemporary treatment and evaluative procedures. Within this context, elements of applied kinesiology are included.

Separate and apart from the curriculum are senior seminars which often include guest presentations, often multi-session presentations, in applied kinesiology. Dr. Terry Franks, who formerly was associated with Dr. Goodheart, has been a frequent lecturer at the college, and, in addition, teaches a highly regarded seminar series in the area which many students attend to supplement their on-campus training.

As you may know, the college has been very involved in AK research, working in cooperation with Dr. Terry Franks and utilizing patients seen in the college's three off-campus public clinics.

I hope that I have been able to answer your questions. Do not hesitate to get in touch with me if you wish. Enclosed is the present college catalog.

Very truly yours,

John F. Allenburg

John F. Allenburg, D.C.
Dean of Chiropractic Studies

JFA/sch

RECEIVED NOV 3 1982



NEW YORK CHIROPRACTIC COLLEGE

255 Valentine's Lane
Old Brookville, New York

MAILING ADDRESS
Post Office Box 167
Glen Head, New York 11545
Founded 1919

(516) 626-2700

November 1, 1982

Dr. Bruce A. Born
15831 Twelve Mile Road
Southfield, Mississippi 48076

Dear Dr. Born:

In the interest of a speedy response, may I personally answer your questions, not necessarily in the order that you have asked them.

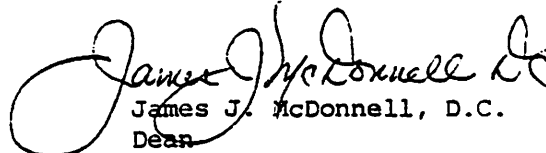
The New York Chiropractic College does have a formal course in Applied Kinesiology, involving two separate courses in two consecutive trimesters. I have enclosed, as you requested, a copy of our catalogue for your reference.

Our students are permitted to use any technique in the Clinic, as long as they have successfully completed the course of instruction within the program.

I feel that I can answer all of your other questions as a unit. It is the philosophy of the New York Chiropractic College that private seminars conducted outside the chiropractic educational institutions should be reserved for post-graduate work. Because of that, we attempt to discourage attendance of these outside seminars of all types, however, the students private life is his own, and we feel there is no possible way that we can actually prevent them from attending if they so desire. The only post-graduate seminars that are conducted on the New York Chiropractic campus are those that are conducted by the College. It is not our practice to rent facilities to others for this, since we are critical of their operation with the attending student.

I hope that I have answered all of your questions. If you have any others, please feel free to communicate with me.

Very truly yours,


James J. McDonnell, D.C.
Dean

JJM/ljs
Encl.

CATALOGUE SENT UNDER SEPARATE COVER



Palmer College - West of Chiropractic

1095 Dunford Way, Sunnyvale, California 94087
(408) 244-8907

December 27, 1982

Bruce A. Born, D.C.
15831 Twelve Mile Road
Southfield, MI 48076

RECEIVED JAN 3 1983

Dear Dr. Born:

Thank you for your recent inquiry regarding the curriculum at Palmer College of Chiropractic-West. I apologize for my delayed response. I am using the Christmas holidays to catch up on my correspondence.

By separate letter, David S. Walther, D.C., has made a similar inquiry. For purposes of efficiency, I hope you don't mind my forwarding a copy of the response to his office.

PCC-W is attempting to create a "generic chiropractic technique" as opposed to one consisting of "name brands". Following the principle that students must learn how to efficiently master the fundamentals before pursuing the more esoteric applications, our technique program is based on biomechanical and neurological principles that are common to many techniques. To date, it seems to be working well although I must admit all of the details that plague a new program have not been resolved.

In specific response to your questions, I can offer the following:

1. The College does not offer an Applied Kinesiology program in its current curriculum. It is my understanding that Northern California College of Chiropractic, at one time, did so but aside from the two or three quarters that are still awaiting graduation, there are no students formally educated in the AK procedure.
2. PCC-W, as is common to other Colleges, cannot offer formal education in all of the techniques available to the field. In accordance with the above described decision, only those procedures that are taught in the classroom are utilized in the Campus Clinic. Hence, AK is not included in these authorized procedures, and will not be authorized until such time that an adequate course of study sufficient to master the work is included in the pre-clinical experience.
3. PCC-W does not endorse the practice of allowing "outside" instructors (not connected with the College) to teach any projects on campus. To do so would allow our students to be exposed to entrepreneurial efforts from a number of quarters, some of which are not in their best interest.

Bruce A. Born, D.C.
December 27, 1982
Page 2

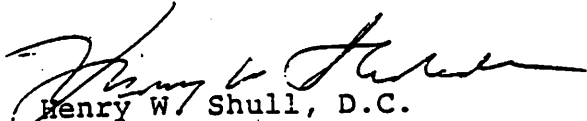
4. As per above, it is our position to discourage such week-end entrepreneurial efforts of any kind.
5. To my knowledge, the only AK seminars regularly held in California is that presented by Dr. Walther in the L.A. area. The AK Council may be offering a series in North California of which I am not currently aware.
6. Presuming that there were a series of week-end seminars offered off-campus, and in keeping with the above described positions, PCC-W would not encourage students to attend them. However, the College imposes constraints only upon what is taught in the classroom and practiced in the Campus Clinic. Students may attend any offering that they so desire on their own time, with or without College sanction. In reality, I would imagine that many students on all campuses pursue extracurricular interests on their own initiative. To prohibit this pursuit is to create an "educational underground" that provides a platform even for those procedures with little or no validity.
7. Although your letter did not specify this question, Dr. Walther asked if AK education was available through a post-graduate program. We do not currently offer a post-graduate program in AK.

I would presume that the information explained above will be sufficient to your inquiry. Should you, however, require further information, please don't hesitate to contact my office.

Belated wishes for a pleasant holiday. .

I am,

Sincerely,


Henry W. Shull, D.C.
Dean of Academic Affairs

CC: David S. Walther, D.C.

HWS:sjt



PASADENA COLLEGE OF CHIROPRACTIC

RECEIVED NOV 22 1982

November 15, 1982

Dr. Bruce A. Born
15831 Twelve Mile Road
Southfield, Michigan 48076

Dear Dr. Born:

Thank you for your inquiry of Oct. 29, 1982. We currently do not include A.K. in our program. We teach S.O.T., Constead, and Diversified techniques. Our attitude is one of neutrality with regards to students taking A.K. seminars. Dr. John Thie of 1192 N. Lake, Pasadena, Calif., holds A.K. seminars regularly.

Enclosed, you will find our School Brochure. If I can be of any assistance to either you or an interested student, please feel free to write or phone.

Respectfully yours,


Michael Rangel
Communications Officer

MR/sl


SHERMAN COLLEGE of STRAIGHT CHIROPRACTIC

November 10, 1982

RECEIVED NOV 17 1982

T. A. GELARDI, D.C., F.I.C.A.
PRESIDENT

Dr. Bruce A. Born
15831 12 Mile Road
Southfield, MI 48076

Dear Dr. Born:

I am in receipt of your letter of October 29, 1982 regarding Sherman College's position on applied kinesiology. Sherman College teaches that chiropractic has a single practice objective based on two facts. First, all living things have an innate striving to maintain their own health, and second, that among the many things which can interfere with this striving is the condition known as subluxation.

Subluxation is a condition in which a vertebra loses its normal articulating relationship with an adjacent segment in such a way as to interfere with a transmission of mental impulses from the brain. While many things may be beneficial to maintaining or enhancing life, the chiropractors unique and singular objective is to locate and correct subluxation.

Sherman College encourages applications for admission from only those who wish to pursue, perfect and advance the professional objective of correcting subluxations. We are proud of our indepth commitment to researching, teaching and practicing the correction of subluxations and not wandering eclectically all over the therapeutic puddle.

Sherman College has a very suitable course in the locating and correcting of vertebral subluxations, but also recognizes that there are other good means of analyzing and adjusting subluxation. It is impossible for any educational institution to teach all of the nuances of technic that various chiropractors may have developed, nor would it be advantageous for any practitioner attempt to learn all of the methods. We encourage students while in school to get all of their technic education through the school and upon graduation, when they are better qualified to make sophisticated judgments concerning technic, to expose themselves to certain other technics that lead specifically to the locating and correcting of subluxations. We hope this answers your questions.

Sincerely,

T.A. Gelardi, D.C.

TAG:vg



Executive Office

Texas Chiropractic College

November 9, 1982

RECEIVED NOV 12 1982

Dr. Bruce A. Born
15831 Twelve Mile Road
Southfield, MI 48076

Dear Dr. Born:

Thank you for your inquiry about the availability of Applied Kinesiology at T.C.C.

The T.C.C. curriculum is designed to teach the student the basic fundamentals of chiropractic. Due to the limitations of the four year curriculum, the college has not included A.K. as a basic procedure, but does offer it on weekends through our postgraduate department for those students and doctors who wish to broaden their knowledge in the field of kinesiology. Students are allowed to use only those techniques and procedures taught in the basic curriculum in the clinic.

Attendance at off-campus seminars is not regulated.

If any further information is needed, please let us know.

Sincerely,

David P. Mohle, D.C.
Vice President of Academic Affairs

DPM/lb



WESTERN STATES CHIROPRACTIC COLLEGE

December 15, 1982

RECEIVED JAN 31 1983

Dr. Bruce A. Born
15831 Twelve Mile Rd.
Southfield MI 48076

Dear Dr. Born:

In response to your request on aspects of applied kinesiology taught at Western States Chiropractic College, please review the following:

We do not presently teach a formal core course in applied kinesiology. The official position of Western States is to encourage certain aspects of applied kinesiology and to discourage or prohibit other aspects. Western States emphasizes and devotes 240 hours to biomechanics and kinesiology of the spine and extremities, including a significant portion devoted to manual muscle testing. Therapeutic techniques including origin and insertion work, muscle spindle techniques and gogi tendon techniques are presently taught on a limited basis but will be expanded in a course being developed to cover soft tissue manipulative techniques. The use of therapy localization as a diagnostic technique is discouraged and prohibited at the college clinic.

Joint challenging is permitted at the college and the clinic, but is not emphasized. There are presently a number of seminars available in the Portland area but they many only be taught on campus as a research project and with curriculum committee approval. Western States does not prohibit the attendance of students to outside seminars, but encourages them not to attend until they have completed six quarters.

If you have any further questions, please feel free to contact me.

Sincerely yours,

David H. Peterson D.C.

David H. Peterson D.C.

Chairperson, Chiropractic Science Division

2900 N.E. 132nd Avenue, Portland, Oregon 97230

(503) 256-3180



DR. BRUCE A. BORN
 15831 TWELVE MILE ROAD
 SOUTHFIELD, MI 48076
 TELEPHONE (313) 559-6763

SOUTHFIELD CHIROPRACTIC CLINIC

February 10, 1982

Doctor J. Janse
 National College of Chiropractic
 200 East Roosevelt Road
 Lombard, Illinois 60148

Dear Dr. Janse,

In 1961 when I had made the determination to become a Chiropractor I was told to spend the extra time and money required and attend National College rather than go to the local school in New York City. It was explained that National was a progressive school where I would learn all the most modern and up to date techniques and procedures. Then upon graduation it would be my prerogative use the techniques I felt best for my practice. I took this advice, and have never been sorry that I went to a school that taught Physical Therapy, Laboratory Diagnosis, and Extremity Manipulation even though the State of Michigan does not allow me the use of these skills.

Recently I found my practice had grown to the extent that I could use the assistance of another Chiropractor and I placed advertisements with the various Colleges around the country. There were many applicants from several colleges. What surprised me was that not one National Graduate was qualified to assist using Applied Kinesiology. Perhaps you can understand how upset I was when I discovered National College's Ban on Applied Kinesiology! The avant-garde of Chiropractic Colleges, the "progressive" school that I traveled eight hundred miles to attend, forbids its students to practice and become proficient in Applied Kinesiology in its clinics!

I feel it is my duty to attempt to cause a change in this situation. Enclosed you will find a check for One Thousand Dollars. I believe this is amount requested for the President's Cabinet Internationale, and that all monies donated can be used in any way that will benefit the College. In other words I do not want to put strings on how this money is to be used. However, I also do not feel that I can support the College with its present policy on Applied Kinesiology. Ergo, the check is unsigned. When the school can change its policy regarding AK please return this check with a note stating the ban on Applied Kinesiology has been lifted, that students can use it in the clinics. It will indeed be my pleasure to sign the check and return it to you.

I sincerely hope I can hear from you in the near future.

Respectfully yours,

Bruce A. Born, D.C.

BODY LANGUAGE - APPLIED KINESIOLOGY AND APPLIED BIO-MAGNETICS

DR. WM. R. BORRMANN

ABSTRACT

This paper on Applied Bio-Magnetics is a paper that I wrote several years ago and never presented. I have added several additional aspects that were not in the original papers.

I know many of the members of ICAK have been researching with Applied Bio-Magnetics in one way or another. I hope that the college will find this material of benefit if are still in research or are beginning a research program.

References for material presented:

Magnetic Energies by Dr. R. Broeringmeyer
Health Thru Functional Balance by Dr. Harry L. Pfeiffer
Comprehensive Answers to Nutrition by Dr. Wm. R. Borrmann
Notes, papers and tapes from research of Dr. Tiller
P.D.R. Traditional Herbal Formulas by F. Joseph Montagna

BODY LANGUAGE - APPLIED KINESIOLOGY AND APPLIED BIO-MAGNETICS

RESEARCH INTO THE SCIENCE OF BIO-MAGNETICS APPLIED KINESIOLOGY AND BODY LANGUAGE AS THEY RELATE TO ACID-ALKALINE BODY CHEMISTRY AND NUTRITION.

We cannot investigate the science of Applied Bio-Magnetics (ABM) without reviewing the science of Applied Kinesiology (AK) and Therapy Localization (TL).

The birth of AK began about 21 years ago by my good friend and brother in research, Dr. George J. Goodheart. At that time Dr. Goodheart discovered that the body has a language which said that for every hyperfunctioning muscle there was a hypofunctioning muscle on the opposite side and that not every hypofunctioning muscle (weak on muscle testing for normal tone) is associated with a malfunctioning organ. However, every malfunctioning organ is associated with a hypofunctioning muscle. These abnormal functioning muscles when not associated with a organ malfunction could be corrected by treating specific reflex areas on the body (Neurolymphatic and Neurovascular reflex areas) associated with each muscle. It was also found that nutrition many times played a part in correcting these muscle malfunctions either by dietary means and or supplements (meaning vitamins, minerals raw gland concentrates or chelated raw gland concentrates).

Applied kinesiology (AK) muscle testing or muscle response testing as it is called by some doctors though simple in its principle, requires experience in its analysis. No two patients test the same. Over testing must be avoided so muscle is not fatigued. Experience is necessary to test the muscle response, to determine if the muscle locks on testing or is loose on testing (loss of normal muscle tone). I have found it advantages to have the patient push against the testers hand before resistance of the muscle is tested. Once pressure has been applied to the testers testing hand it is much easier and more accurate to read for muscle locking or looseness.

Dr Goodheart in one of his research projects discovered what he called "Therapy Localization" (TL). TL is simple in its principle and functions under the "Inverse-Square Law", which states that the force acting between two magnetic poles separated from each other is proportional to the magnitude of each of the two poles, divided by the square of the resistance between them (The New Encyclopaedia Britannica Maceropaedia, Volume 11, Knowledge in Depth Page 312). To say it another way. It is a force of repulsion if the poles are of the same sign....It is the force of attraction if they are of opposite poles.

TL combines muscle testing with the laying on of hands on to the patient using the patients hands or the doctors hands palm up or down on the area and or organ being investigated. A muscle that has previously tested strong is retested after the laying on of hands. If it was strong prior to TL and then loses its tone or strength it would indicate too much energy in the area of investigation. If muscle was weak prior to TL and then becomes stronger, it would be the result of increasing the energy in the area under investigation.

These technique's have proven extremely useful. However, they will only indicate the presence of a malfunctioning not what type of malfunction. Further tests are necessary to further evaluate the cause of the energy malfunction.

Another muscle response testing technique that is similar to the science of AK and TL is the "Deerfield" leg test (DLT). The Deerfield method of checking is also based on "Inverse-Square Law". The body in this case a leg will pull away from excess negative energy or from excess positive energy. The greater the shortness the more severe the problem.

In 1914 a chiropractor by the name of D.D. Palmer made this statement in his book "The Chiropractic Aduustor" published in 1914, "Too much or not enough nerve energy is disease." Dr. Palmer also stated in another book "The Science, Art and Philosophy of Chiropractic," published in 1910. "The cause of most disease is an over-supply of nerve force. Most diseases are caused by too much energy and not because the nerve force is shut off."

Research by Dr. Goodheart and members of the International College of Applied Kinesiology (ICAK) which has over 100 founding members who have been given diplomate status and are teaching the principles of AK and TL all over the United States, Canada and Europe have added many more useful and beneficial AK and TL techniques and analysis and are in continued research. To quote my brother in research Dr. Goodheart, "The recovery potential with which man is endowed merely waits for the hand and the heart and the mind of a trained individual to bring it to a potential being and allow the recovery to take place which is man's natural heritage." The ICAK is open to all health professionals who believe in all methods of healing and in continued research into the perspective differences of healing methods and how they can be improved and used for the benefit of mankind.

The science of Applied Bio-Magnetics is as old as man himself and far older than the science of acupuncture. The first writing we have about applied magnetic science and its association with body healing was back in 200 BC., by a Greek physician, Galen, and in 1000 BC., by a Persian physician Ali Abbas. The Russians in 1975 associated a flu epidemic with magnetic sunspots and at dr. Melville, University in Southampton, England it was discovered that red blood cells were attracted to a magnetic field. Sensitivity to the magnetic fields can be demonstrated by placing a 1000 or more gauss, North Pole magnetic to the right ear of a patient and a strong muscle that tested strong before the magnet was applied will now test weak. But, when the South Pole magnet of the same power applied to same ear (right) the strong muscle that tested strong before the magnet was applied will still test strong. However, when the South Pole magnet of the same power applied to left ear, the previously strong muscle will now become weak. The penetrating ability of the magnetic field can be demonstrated by placing a piece of lead over the chest and magnet applied over the lead shield. If a magnetic indicating instrument is then applied to back of the patient a response will be noticed. Indicating that the magnetic energy had penetrated the lead shield as well as the body.

Modern day research by A. Roy Davis and Walter C Raul, Jr. who are co-authors of "Magnetism and its Effects on Living System," and "Magnetic Effect," and "Rainbow in Your Hands." Discovered that when animal and or vegetable substances as well as seeds were exposed to both North and South Pole energies, discovered that they responded better to the South Pole energies.

In these experiments when they referred to the North Pole they were speaking of

the North Pole as the North seeking Pole, and the South Pole as the South seeking Pole.

The science of Bio-Magnetic Energies (BME) is based on the premise that disease conditions in most patients may be associated with a malfunctioning organ and from this malfunction stem toxic factors which create secondary pathologies, such as headaches, skin conditions, joint conditions, muscle conditions, nerve pains, indigestion, constipation, irritability, and many other conditions to numerous to mention.

Research indicates that a normal body seems to present no reaction to magnetic energy or to magnetic fields. However, when an organ, tissue or cell malfunction occurs, an impulse is sent to the brain which in turn sends an impulse back which is electrical in nature. This impulse creates a magnetic field which can be measured. If these impulses from the brain are prolonged they create positive (+) magnetic field which is acid in nature and hyperactive in function. If these impulses from the brain are unanswered they create a negative (-) magnetic field which is alkaline in nature and hypoactive in function. These magnetic fields are measurable using the "Inverse-Square Law," which we discussed on page 1.

Further research indicated that:

North Pole has negative energy (-) and a counter clockwise rotational motion. Has an alkaline reaction on animal and vegetable matter. Has a calming, hypofunctioning, vasoconstriction, and antiseptic effect on tissues and organs. Attracts fluids, and decreases protein use. Increases potassium ions. Has an emulsifying effect on fatty deposits and or calcium mineral deposits

South Pole has positive energy (+) and a clockwise rotational motion. Has an acid reaction on animal and vegetable matter. Has a stimulating effect, hyperfunctioning, expansion effect on tissues and organs. Stimulates growth and development of all forms of life whether they are animal, vegetable, virus, and bacteria, etc. Pushes fluid out of tissues. Increases protein use. Increases sodium ions. Has a vasodilation, softening effect on tissues and organs. Increases production of body cells (RBC - WBC when necessary).

Research and practical application of Applied Bio-Magnetics have been done for several years by Dr. Richard and Dr. Mary Broeringmeyer, of Murray Kentucky, 42701. Who have authored the study manual's "Magnetic Energies", "Nutrition and Bio-Magnetism" as well as others. Also Dr. Harry L. Pfeiffer, Box 519, Kearney, Missouri 64060, who has authored the study manual "Health Thru Functional Balance". These are all excellent manuals and are highly recommended for your library.

Dr. Goodheart, Broeringmeyer, Pfeiffer and Dr. Tiller and Cook whose research we are going to discuss next have proved that the body has a language. A language of the muscles, organs, tissues and body chemistry. It is through Ak, and ABM energies that the brain uses to communicate with its malfunctioning system as well as using these energies to heal.

Research done by Dr. Wm. A. Tiller and Wayne Cook, who are associated with the Department of Materials and Sciences and Engineering at Stanford University have researched the magnetic rotary vibratory energies of the different parts of the body and their relationship to health and disease. In their research they observed that magnetic energy enters the body via the left hand, left eye and left sole and leaves the body via the right hand, right eye and right sole. They discovered that excess energy build up or stress build up could be reduced by using "Eeman's Relaxation Circuit." Patient applies his left hand to the base of the occiput and right hand to the coccyx in a side position that is comfortable. This position should be held for one hour. They also observed that excess energy may be removed from the body by using ones left hand over the excess energy area and the right hand held out from the body. The excess energy seems to be drawn out by the left hand and discharged into the atmosphere by the right. Dr. Tiller explains this response in this statement, "When a current flows thru and object or body the energy stream picks up negative and or positive energy of what ever is in the object or body and moves this energy along with the normal current flow." However, if an individual or doctor is a poor conductor of his or her energy, than the impedance to his energy flow will be high and only a small amount of energy flow will be accomplished. It has been found beneficial to break the energy flow every few minutes when holding a contact to eliminate internal polarization than may be set up.

They also observed the following magnetic rotary vibratory energies in the hands. The left palm being positive, the dorsal surface being negative. The thumb and forefinger both being negative, the middle finger both positive and negative, the ring finger being positive and the little finger being positive.

The right palm side being negative, the dorsal surface being positive. The thumb and forefinger both being positive, the middle finger both positive and negative, the ring finger being negative and the little finger being negative.

This new science of "Applied Bio Magnetism (ABM) reveals that the body has magnetic electrical patterns created by malfunctioning organs which can be interpreted by using applied kinesiology or Deerfield Leg check or muscle response testing. It is advisable to correlate your findings using ABM with other laboratory test we have available to us. It is unwise to make a diagnosis using only one diagnostic test to determine cause.

The testing procedure is simple and may be done with the hands if one is a good conductor of his or her energy or a magnetic indicator using the law we discussed on page one "Inverse-Square Law" meaning the force of repulsion if the poles or magnetic energy or poles are of the same sign or the force of attraction if the magnetic energy or poles are of opposite signs.

We choose a muscle that is strong in the clear (meaning not weak on testing) and than apply either the palm of your hand having North Pole vibratory energy or a magnet having North Pole vibratory energy over the the organ in question and recheck the previously strong muscle for strength. If muscle weakens it would be responding to the "Inverse-Square Law" of repulsion poles are of the same sign. Which in turn would signify that the organ has an excess of negative (-) North Pole energy which as we described on page three indicates a alkaline condition and a hypofunctioning condition of organ being evaluated.

If we apply either the palm of your hand having a South Pole vibratory energy or a magnet having South Pole vibratory energy over the organ in question and recheck the previously strong muscle for strength and if it weakens, it would be responding to the "Inverse -Square Law" of repulsion. Poles being of the same sign. This would indicate a acid condition and hyperfunctioning condition of organ being tested with an excess of South Pole energy (+).

To assist an organ that has excessive North Pole (alkaline reaction) or South Pole (acid reaction) ones diet must be evaluated as to alkalinity-acidity of the foods one is eating as well as supplementation if necessary.

When foods are eaten they are oxidized in the body which results in the formation of ash residue. If the minerals in this ash residue are predominately PHOSPHORUS, SULFUR and CHLORINE they are considered acid ash foods. If the minerals in this ash residue are predominately SODIUM, POTASSIUM, CALCIUM and magnesium they are considered alkaline ash foods.

An organ that shows excess North Pole energy (alkaline reaction) and hypofunctioning requires acid ash foods (SULFUR, PHOSPHORUS and CHLORINE) and acid reacting supplements (listed on page 18).

SULFUR:

Acid ash foods containing sulfur in order of highest sulfur content per 100 grams of edible portion.

Kale, watercress, brussels sprouts, horseradish, common cabbage, cranberry, sorrel (dock), snap bean, turnip, cauliflower, raspberry, spinach, savoy cabbage, red cabbage, kelp, parsnip, leek, kohlrabi, common radish, okra, cucumber, swiss chard, iceberg lettuce, chive, celery, fresh green pea, red currant, Boston Bibb lettuce, asparagus, rutabaga, avocado, ripe tomato, filbert, carrot, eggplant, turnip greens, brazilnut, pineapple, sweet corn, dried Cowpea, fresh peach, fresh lima bean, dried chestnut, potato, dandelion greens, chicory, Jerusalem artichoke, dried fig, dry onion, dried soybean, globe artichoke, dried lima bean, raisin, mushroom, barley, rhubarb, lime, watermelon, strawberry, apple, orange, cherry, pumpkin, gooseberry, dried apricot, grapes, mango, fresh pear, blue berry, dried white bean, lemon, banana, date, dried lentil, dried chickpea, guava, sweet potato, plum, dried pea, grapefruit, almond, fresh apricot, blackberry, sunflower seed, dried prune, beet, watercress, rye grain, English walnut, wheat bran, rice bran, sorghum grain, brown rice, wheat grain, white rice.

HERBS WITH SULFUR CONTENT:

Plantain, eyebright, shepherd's purse, burnet root, broom calamus, coltsfoot, fennel, nettle, horseradish root, meadowsweet.

PROTEIN AND SULFUR CONTENT:

The recommended daily allowance of protein (meat) should provide the body with adequate sulphur. The average proteins contain usually about sixteen percent nitrogen and one per cent sulfur.

VITAMINS:

Sulfur is also found in the B vitamins, thiamine (B1) and biotin and is needed for their function. Many foods containing sulphur also contain the mineral phosphorus in different quantities.

Sulfur plays a very important role in body chemistry, however, not in the form of inorganic substances but in complex organic compounds. It is contained in all all tissues of the body and one of the properties of of blood hemoglobin. Also plays a part in tissue respiration. Other sulfur-containing substances in the body assist in detoxifying and rendering harmless certain poisonous substances in the body. It is found in high concentrations in the skin, hair and nails.

TOXICITY:

Excessive intake of inorganic sulphur may result in toxicity. The optimal daily sulphur requirement is included in the optimal protein intake. The reaction on the tissues of the body is acid forming.

PHOSPHORUS:

Acid ash foods containing phosphorus in order of highest phosphorus content per 100 grams of edible portion.

Rice bran, wheat bran, pumkin seeds, squash seeds, wheat germ, rice polishings, sunflower seeds, brazilnuts, safflower seeds, whole sesame seeds, pinon nuts, black walnuts, dried soybeans, almond, pistachio nut, dried pinto bean, dried white bean, peanuts no skin, dried red beans, peanuts with skin, soft winter wheat, white wheat, dried broadbean, dried lima bean, hard spring wheat, English walnut, dried lentil, rye grain, cashew nut, hickory nut, hard winter wheat, dried mung bean, dried pea, wild rice, dried chickpea, millet, Scotch pearled barley, pecan, sorghum grain, dulse, dry hot red pepper, kelp, fresh soybean, brown rice, garlic, fresh cowpea, dried chestnut, Macadamia nut, Irishmoss, fresh broadbean, fresh lima bean, dried peach, mushroom, fresh green pea, sweet corn, dried apricot, dried prune, dried banana, raisin, white rice, kale leaves, podded pea, fresh chestnut, globe artichoke, brussels sprouts, dried prune, broccoli, Jerusalem artichoke, hot red pepper raw, dried fig, parsnip, kale stems, yam, soybean sprouts, dandelion greens, Chinese waterchestnut, raw horseradish, mung bean sprouts, date, collard leaves and stems, parsley, asparagus, shallot, bamboo shoots, turnip greens, cauliflower, endive watercress, potato with skin, apple dried, kohlrabi, okra, spinach, leek, mustard greens, dried pear, sweet potato, chive, pumpkin, green snap bean, avocado, beet green, chinese cabbage, chicory greens, swiss chard, green onion, rutabaga, winter squash, carrot, dry onion, red cabbage, beet, prepared horseradish, sweet red pepper, turnip, common cabbage, summer squash, elderberry, celery, mustard spinach, cucumber, tomato, common banana, eggplant, Boston bibb lettuce, hot green pepper, nectarine, fresh apricot, kumquat, fresh fig, orange with peel, raspberry, iceberg lettuce, sweet green pepper, orange peel, strawberry, ripe olive, peeled orange, blackberry, cherry, fresh peach, lime, prune, rhubarb, tangerine, loganberry, green olive, orange juice, grapefruit pulp, peeled lemon, cantaloupe, casaba melon, honeydew melon, ripe olive, papaya, gooseberry, grapefruit juice, lemon with peel, tangerine juice,

blueberry, mango, grapes, acerola cherry, lime juice, fresh pear, quince, apple, cranberry, lemon juice, watermelon, acerola juice, apple juice, pineapple.

HERBS WITH PHOSPHORUS CONTENT:

Irish moss, cress, chinese waterchestnut, bamboo shoots, fennel, chive, sorrel, chicory greens, purslane leaves, plantain, agar, chicory, calamus, licorice, caraway seed, marigold flowers, chickweed, meadowsweet, dandelion, dill seed, rhubarb root, sorrel, watercress, horseradish root, garlic.

PROTEIN:

Many foods containing sulphur as we have said previously also contain the mineral phosphorus in different quantities.

VITAMINS:

For the proper assimilation of phosphorous and calcium one needs body reserve of both vitamins A, D, C and calcium. Phytic acid, present in grains, renders some phosphorus and calcium to a state which cannot be assimilated by the body. The phosphorous content in humans is considerable, comprising about 1% of total body weight. Approximately 80% of the body's phosphorous is contained in the bones as calcium phosphate, with the remainder distributed in every living cell. Ideally, the body should be supplied with phosphorous and calcium in a ration of approximately 1:2.5, since this is the Ca/P ration in the bones. Phosphorous has a role in the intermediate metabolism of carbohydrates, bone and tooth formation, and the acid-base balance. It also is a constituent of several physiologically important substances such as phospholipids and nucleic acids.

Like calcium, phosphorous is absorbed in the small intestine. The absorption of phosphorous is favored by and acidic pH and is greatly diminished at alkaline pH. Excretion of phosphorous is chiefly via the kidney. High dietary levels of phosphorous can inhibit the utilization of calcium, aluminum, iron, zinc, and manganese. Excessive levels of antagonistic minerals such as calcium, aluminum and iron may hinder phosphorous utilization and absorption.

Daily requirements (RDA) for a healthy adult is 800 mg.

Hair analysis levels is of moderate clinical significance. Elevated hair phosphorous levels are best confirmed with a serum calcium determination.

Persons over forty should therefore decrease their consumption of meat and other high phosphate foods in order to preserve a healthy calcium-phosphorous ratio and avoid a calcium deficiency.

Diseases associated with elevated systemic phosphorous include hypervitaminosis (vitamin D), hypoparathyroidism and kidney failure.

A depressed hair phosphorous level is best confirmed with a serum phosphorous determination.

Intestinal malabsorption due to insufficient HCL secretion can cause a systemic phosphorous deficiency. The same is true for phosphorous levels are common with the occurrence of rickets (vitamin D deficiency), hyperparathyroidism and pyorrhea. Systemic phosphorous deficiency can cause bone demineralization and deficiency dental caries. Because phosphorous is readily available in today's foods, the most likely cause of a deficiency is malabsorption of the mineral. The use of digestive aides such as HCL and pancreatic enzymes will side in the

absorption of phosphorous.

TOXICITY:

There is no known toxicity of phosphorus. The reaction on the tissues of the body is acid forming.

CHLORINE:

Acid ash foods containing chlorine in order of highest chlorine content per 100 grams of edible portion.

Ripe tomato, celery, iceberg lettuce, kelp, spinach, red cabbage, kale, leaves, common cabbage, parship, radish, turnip, raw horseradish, watercress, swiss chard, snap bean, rhubarb, eggplant, cucumber, avocado, Boston bibb lettuce, sweet potato, asparagus, kohlrabi, date, carrot, cauliflower, leek, reet, red raspberry, brussels sprouts, common banana, pineapple, lime, chive, raisin, Jerusalem artichoke, artichoke, blackberry, guava, mango, potato with skin, dried lentil, fresh green pea, dry onion, sweet corn, strawberry, watermelon, beechnut, rutabaga, dried fig, dried chickpea, sunflower seed, brazilnut, fresh peach, dried white bean, filbert, dried cowpea, mushroom dried pea, fresh lima bean, cherry, grapefruit pulp, dried soybean, grapes, barley, pumpkin, orange, sorghum grain, peanut, gooseberry, fresh apricot, lemon, English walnut, dried prune, black currant, wheat grain, almond, dried lima bean, cranberry, brown rice, white rice, rye grain.

HERBS WITH CHLORINE CONTENT:

Sorrel, dandelion greens, chicory, Chinese waterchestnut, celery seed, dill seed, golden seal, fennel, myrrh, mistletoe, nettle, plantain, uva ursi, wintergreen, dandelion root, horseradish root, rhubarb root.

VITAMINS:

Chlorine is found closely related to sodium. A deficiency of one is usually related to a deficiency of the other. Diets that are sufficient in sodium and potassium are usually sufficient in chlorine.

Chlorine is an essential mineral, found in the body as a compound with sodium or potassium. A common chloride compound sodium chloride, or salt are found primarily in fluids found within the cell. Chlorine is used by the body a general cleanser, removing waste matter from the blood and have the tendency to reduce excessive fat.

TOXICITY:

Excess chlorine is excreted. Additional chlorine may be lost through the process of vomiting. There is no RDA given, since the average persons intake of sodium chloride, (salt) is high providing three to nine grams of chlorine daily. Also since chlorine in the diet is closely related to sodium, a lack of one is related to a lack of the other. The chemical reaction to the tissues is acid forming.

A organ that shows excess South Pole energy (acid reaction) and hyperfunctioning requires alkaline ash foods (calcium, magnesium, sodium and potassium) and alkaline reacting supplements. (listed on page 14).

CALCIUM:

Alkaline ash foods containing calcium in order of highest calcium content per 100 grams of edible portion.

Whole sesame seed, kale leaves and stems, turnip greens, almond, dried soybean, filbert, collared leaves and stems, brazilnuts, orange peels, dried chickpea, dried white bean, raw horseradish, dried pinto bean, pistachio nut, dry hot red pepper, dried fig, sunflower seeds, beet greens, wheat bran, dried mung bean, hulled sesame seed, dried red bean, ripe olives, broccoli, dried broadbean, Englishwalnut, rhubarb, spinach, okra, dehydrated prunes, Swiss chard, dried lentil, rice bran, dried cow pea, pecan, dried lima bean, orange with peel, peanut with skin, rice polish, loose leaf lettuce, dried apricot, savory cabbage, fresh soybean, rutabaga, dried pea, kumquat, raisin, edible pea pod, lemon with peel, green olive, prepared horseradish, black current, date, peanut with no skin, green snap bean, yellow snap bean, dried chestnut, leek, fresh lima bean, dried prune, pumpkin seed, squash seed, globe artichoke, green onion, parsnip, common cabbage, dried peach, macadamia nut, hard winter wheat, chinese cabbage, celeriac, soft winter wheat, peeled orange, kohlrabi, tangerine, celery, turnip, elderberry, cashew nut, rye grain, carrot, shallot, Durim wheat, brussels sprouts, hard spring wheat, white wheat, fresh fig, loganberry, dried pear, Boston Bibb lettuce, oriental radish, pearled Scotch barley, breadfruit, lime, dried lychee nut, dried banana, blackberry, red currant, white currant, sweet potato, brown rice, dried apple, black raspberry, common radish, garlick hot red raw pepper, summer squash, sorghum grain, persimmon, fresh chetnut, dry onion, fresh broadbean, fresh cowpea, peeled lemon, fresh green pea, cauliflower, cucumber, white rice, guava, sour red cherry, sweet cherry, red raspberry, asparagus, winter squash, strawberry, pumpkin, papaya, iceberg lettuce, yam, millet, mung bean sprouts, gooseberry, tangerine juice, Welsh onion, fresh apricot, pineapple, grapefruit pulp, grapes, beet, blueberry, cranberry, cantaloupe, casaba melon, honeydewmelon, Jerusalem artichoke, sweet red pepper, tomato, acerola cherry, Japanese plum, pinon nut, eggplant, quince, orange juice, avocado, red banana, mango, hot green pepper, grapefruit juice, lime juice, fresh peach, sweet green pepper, common banana, fresh lychee nut, fresh pear, apple not pared, lemon juice, watermelon, potato with skin, apple pared, apple juice, crabapple, mushroom, nectarine, sweet corn.

HERBS WITH CALCIUM CONTENT:

Kelp, Irish moss, agar, dulse, parsley, dandelion greens, mustard green, watercress, fennel, chicory greens, purslane leaves, chive, dock (sorrel), salsify, wild rice, chicory, bamboo shoots, plantain, Chinese waterchestnut, shave grass, cleavers, meadowsweet, coltsfoot, burnet root, chamomile, rest harrow, mistletoe, shepherd's purse, dandelion root, dill seed, caraway seed, nettle, poppy seed, rhubarb root, horseradish root.

PROTEIN (BONE MEAL):

The common supplementary source of calcium is bone meal. Veal bone rather than

older beef bone because of higher content of lead that is found on occasion.

VITAMINS:

Calcium absorption depends upon adequate amounts of vitamin D, phosphorus (in the same amount as calcium), and vitamins A and C.

The average adult body contains about 1200 grams of calcium, by far the heaviest mineral. Over 99% of the calcium reservoir is in the bones with much of the remainder circulating in the blood stream. Many bodily functions are facilitated by calcium. It is essential for adequate formation, growth and stability of the bones and teeth. Calcium ions found in body fluids affect cell membrane permeability, neuromuscular activity, transmission of nerve impulses, blood coagulation and enzyme secretions.

Calcium absorption takes place in the small intestine. Vitamin-D is necessary for absorption, with the process enhanced at acid pH and significantly diminished at alkaline pH. Since HCL secretions diminish with age, the ability to absorb dietary calcium is also reduced. Parathyroid hormone will also affect calcium absorption. Excessive intake of dietary fat, phosphates, phytates and oxalates inhibit calcium absorption. Excess calcium is eliminated primarily through the kidneys, with lesser amounts lost in perspiration.

A high intake of calcium may impair the body's utilization of zinc, magnesium and manganese. While, magnesium is effective in lowering excessive levels of inorganic cellular calcium. Diets high in phosphorous may also inhibit calcium utilization. Suboptimal dietary calcium is associated with increased lead and cadmium retention.

Daily requirements (RDA) for a healthy adult is 200 milligrams. Calcium levels can be accurately determined in the hair and, together with serum calcium data offers a clearer interpretation of the individual's status than either can alone. A systemic deficiency is indicated by low hair calcium and either high or low serum values. A highly elevated hair calcium may indicate a systemic deficiency with the occurrence of bone resorption.

Bleaching or cold waving treatments can falsely elevate hair calcium levels. Serum phosphorous and urine analysis tests are desirable if the parathyroids are suspected of being overactive. Hyperactive parathyroid glands, by themselves, or resulting from a low calcium, phosphorous rich diet, can cause loss of bone calcium, a tendency for kidney stone formation and increased hair calcium levels.

Therefore, it is important to consider that a high hair calcium may be associated with a systemic deficiency. Intoxication by vitamin-D can induce a calcium elevation.

Very high calcium and magnesium levels may be a sign of functional hypoglycemia with symptoms of anorexia, nausea, vomiting, polyuria, constipation and dehydration.

The best approach to reduce excessive calcium levels is to first reduce the dietary and supplement source of calcium and phosphorous. Then, add more grains and vegetables to the diet high in magnesium. Lastly, add chelated magnesium supplements to the diet. They act as an antagonist to calcium.

Misleading low levels of hair calcium may result from the frequent use of hair rinses containing EDTA or similar strong chelating agents. A serum calcium determination will help confirm a systemic calcium deficiency identified through hair analysis. Hypoactive parathyroids may well be the cause of a calcium deficiency. Inadequate amounts of vitamin-D or insufficient HCL secretions may also retard intestinal calcium absorption.

Diets deficient in calcium and high in phytates, alcohol, fat, and protein are additional factors to consider. Chronic kidney failure, parathyroid removal, the abnormal loss of calcium through excessive perspiration, vomiting and diarrhea are all potential causes of a deficiency state. Also, excessive ingestion of magnesium can reduce the body stores of calcium.

Other symptoms that are related to low stores of calcium are tingling sensations in the extremities and mouth, muscle spasms, neuromuscular irritability, convulsions, low back pain. Both lead and cadmium retention, along with their toxic effects are enhanced with suboptimal calcium intake.

Diet adjustments should be to increase calcium intake and eliminating foods which inhibit proper calcium utilization. A supplement regimen of calcium, vitamin-D and digestive aids such as HCL and pancreatic enzymes are also useful.

TOXICITY:

Excess amounts of calcium are excreted by the body. However, there are certain substances that interfere with the absorption of calcium. Dietary fats combine with calcium and form an insoluble calcium substance which is not absorbed. Oxalic acid which is found in chocolate, spinach, and rhubarb combines with calcium to form into a non absorbable calcium substance. Phytic acid which is found in grains, cereals combines with calcium to also form into a non absorbable calcium substance. The reaction on the tissues of the body is alkaline forming.

MAGNESIUM:

Alkaline ash foods containing magnesium in order of highest magnesium content per 100 grams of edible portion.

Wheat bran, wheat germ, almond, cashew, dried soybean, dried cowpea, brazilnut, peanut, black walnut, filbert, whole sesame seed, dried lima bean, dried pea, dried white bean, dried red bean, millet, hickory nut, wheat grain, pistachio nut, pecan, dried banana, English walnut, rye grain, beet greens, spinach, brown rice, dried lentil, dried fig, fresh lima bean, Swiss chard, dried apricot, date, turnip greens, fresh cowpea, dried peach, sweet corn, avocado, fresh chestnut, okra, dried prune, sunflower seed, kale, kohlrabi, pearled Scotch barley, garlic, raisin, fresh pea, raw horseradish, potato with skin, common banana, red banana, parsnip, snap bean, dried pear, sweet potato, black raspberry, brussels sprouts, white rice, loganberry, beet, broccoli, cauliflower, carrot, leek, dried apple, green olive, celery, fresh fig, red raspberry, asparagus, turnip, water cress, mango, sweet green pepper, winter squash, cantaloupe, eggplant, rhubarb, summer squash, black currant, red current, white currant, radish, rutabaga, sour red cherry, Chinese cabbage, tomato, grapes, guava, nectarine, pineapple, common cabbage, mushroom fresh apricot, grapefruit pulp, grapefruit juice, strawberry, dry onion, pumpkin, peeled orange, Jerusalem artichoke, iceberg lettuce, fresh peach, endive, gooseberry, plum, apple, cranberry, lemon juice, watermelon, fresh pear, blueberry, apple juice.

HERBS WITH MAGNESIUM CONTENT:

Kelp, dulse, wild rice, parsley, dandelion greens, chive, mustard greens, watercress, chicory, Chinese waterchestnut.

VITAMINS:

Magnesium content in the adult varies between 20 to 30 milligrams. More than 50% of the magnesium is present in bone, with the remainder in soft tissue and body fluids. The intracellular magnesium content is 10 times greater than that outside the cell. Magnesium has many metabolic roles. It is associated with approximately 3/4 of the body's enzyme systems and is essential to carbohydrate and protein metabolism. Involvement in the growth and maintenance of tissues is another magnesium function. Bone density and resistance to dental decay are strongly dependent on magnesium availability. Magnesium is also a natural tranquilizer.

Absorption of magnesium occurs in the upper portion of the small intestine. Between 30 % and 45 % of the dietary intake is absorbed, with most of the remainder excreted in the feces. Urinary excretion is low since the kidney conserves magnesium very efficiently, however, losses are greatly increased with the use of diuretics and alcohol. Parathyroid hormone increases magnesium absorption from the intestine. Magnesium absorption will be hindered by and excessive dietary intake of phosphates, calcium, fats and phytates. Magnesium supplements may also lower body levels of zinc, copper, iron, manganese and calcium. The RDA for magnesium for a healthy adult is 350 milligrams.

Magnesium can be accurately determined in the hair and may provide a more sensitive indication of systemic magnesium levels than blood determinations. Because the kidney maintains blood magnesium levels within very narrow limits, blood levels are often a poor gauge of total magnesium stores. When the hair calcium level is elevated, the hair magnesium level is generally also elevated. Magnesium supplements given to reduce the calcium level, will usually cause an optimization of the magnesium level itself, strongly suggesting not a systemic magnesium elevation but rather a magnesium deficiency. Elevated calcium and magnesium hair levels often occur with individuals on a low calcium and phosphorous rich diet. Magnesium levels tend to rise with age in the female, but not in the male. Elevated magnesium levels are seen during chronic or acute kidney failure, adrenal insufficiency, respiratory paralysis and other diseases. Very high calcium and magnesium hair levels may be a sign of functional hypoglycemia.

Urine assessment of magnesium content may be useful in confirming a depressed hair level. Since magnesium is plentiful in several foods, a deficiency is unlikely except during extreme weight reduction, starvation or prolonged intravenous therapy. A deficiency can occur with decreased intestinal assimilation due to malabsorption, surgical resection of the small intestine or excessive consumption of phosphorous, calcium, fats and phytates. Excessive loss of body fluids due to severe diarrhea, excessive urinary losses caused by diuretic therapy, chronic alcoholism, diabetes or chronic kidney failure can also deplete body magnesium. Very sizable changes in hair magnesium content are often found in women using oral contraceptives containing estrogen.

Deficiency symptoms include weakness, tremors, hyperexcitability of muscles, vertigo, convulsive seizures, personality changes, delirium and psychosis. A systemic deficiency requires magnesium supplementation along with a diet modification if excessive phosphorous, calcium, fats or phytates are consumed. Liming soils and the use of chemical fertilizers containing potassium prevent magnesium from being absorbed by plant, hence many of our foods are low in magnesium. Magnesium is one of the nutrients needed to lose weight.

The reaction on the tissues of the body is alkaline forming. No known toxic levels yet determined.

SODIUM:

Alaline ash foods containing sodium in order of highest sodium content per 100 grams of edible portion.

Green olive, ripe olive, hot dry red pepper, Swiss chard, beet greens, celery, prepared horseradish, kale, spinach, beet, whole sesame seed, turnip, carrot, globe artichoke, collard leaves and stems, dried cowpea, dried pea, dried fig, dried lentil, sunflower seed, raisin, dried apricot, red cabbage, dried chickpea, chinese cabbage, common cabbage, garlic, dried white bean, radish, dried peach, breadfruit, cashew nut, broccoli, mushroom, brussel sprouts, endive, cauliflower, sweet green pepper, cantaloupe, honeydew melon, dried chestnut, parnsip, shallot, dried prune, dried pinto bean, dried red bean, dry onion, sweet potato, lettuce, brown rice, wheat bran, acerola cherry, raw horseradish, kohlrabi, kumquat, mango, dried pear, snap bean, nectarine, fresh chestnut, dried mung bean, cucumber, mung bean sprouts, dried apple, leek, green onion, rutabaga, peanut, dried soybean, white rice, avocado, dried banana, guava, quince, almond, fresh broadbean, dried lima bean, okra, potato with skin, tomato, acerola juice, black currant, grapes, lemon with peel, lychee nut, orange peel, papaya, pomegranate pulp, black walnut, wheat grain, wheat germ, cherry, cranberry, red currant, white currant, fresh fig, peeled lemon, lime, orange with peel, fresh pear, damson plum, pricklypear, tangerine, filbert, English walnut, asparagus, eggplant, rhubarb, fresh lima bean, fresh cowpea, fresh green pea, fresh apple, apple juice, fresh apricot, banana, red banana, blackberry, blueberry, crabapple, date, gooseberry, grapefruit pulp, grapefruit ljuice, lemon juice, loganberry, orange peeled, orange juice, fresh peach, pineapple, Japanese plum, prune, black raspberry, red raspberry, strawberry, tangerine juice, watermelon, Brazilnut, pumkin, summer squash, winter squash, rye grain.

HERBS WITH SODIUM CONTENT:

Kelp, Irishmoss, dulse, dandelion greens, watercress, parsley, mustard greens, Chinese waterchestnut, chicory, wild rice, planain, dock (sorrel), meadow sweet, mistletoe, nettle, cleavers, rest harrow, fennel, alfalfa, dill, apple tree bark, anise seed, celery seed, huckeberry leaves, shepherd's purse, dandelion root, rhubarb root,

VITAMINS:

Sodium is found in various food stuffs, and a well-balanced diet will supply the basic daily requirement of most individuals. The best means of supplying the sodium requirements of most individuals is through the use of different vegetables rich in sodium.

The body of a 150 pound person contains about 100 grams of sodium. Approximately two thirds is found in the extracellular fluids while the remaining third resides in the skeleton. Sodium is crucial to many metabolic functions. A propoer fluid-electrolyte balance between extracellular sodium and intracellular potassium is essential to normal body functioning. Sodium is necessary in transporting other nutrient materials through cell membranes and therefore affects cell permeability. Normal muscle excitability and nerve impulse transmissions are influenced by sodium ions.

Sodium is readily absorbed in the small intestine. Renal excretion of sodium is controlled lby aldosterone hormone from the adrenal glands. Normal daily sodium

output is about 95% through the urine with small amounts in the feces, although significant losses may occur by perspiration. RDA is about 1/2 gram (500 milligrams) is required of the body daily; about one twentieth the average American's salt consumption.

Hair analysis of itself may be considered to be of moderate clinical significance, with considerable diagnostic insensitivity below elevated ranges. The ratio of sodium to potassium in the hair may be of greater importance than either mineral level separately. As hair potassium levels change the sodium tends to follow, unless the hair sodium level is very low.

Highly elevated hair sodium levels have occurred in individuals who have soaked in a hot bath with water softeners such as Calgon or similar substances. It is also possible, but not likely, that daily swimming in salt water could also elevate hair sodium levels. However, laboratory washing procedures should remove any exogenous sodium. It is worthwhile to ascertain if one's diet includes excessive amounts of table salt and processed foods containing sodium preservatives. An elevation in hair potassium is often followed by an increase in hair sodium. Gastro-intestinal and kidney disorders common in the elderly may upset the electrolyte balance. Reduction from the "normal" 10 gram per day salt diet is good common sense, and is especially crucial for those suffering from or with a family history of hypertension.

Serum sodium level may be helpful in establishing or confirming a sodium imbalance. Conditions that can cause systemic sodium deficiencies include diarrhea, vomiting, excessive sweating, diuretic agents, extreme urine loss, high fever, environmental heat, renal disease and diabetes mellitus. The use of diuretics can readily disrupt the electrolyte balance. A general indicator of adrenal stress is low sodium and potassium hair values. The same may be true for low hair sodium and elevated blood alkaline phosphatase. Systemic sodium deficiency can cause weakness, mental confusion, apathy, nausea, muscle cramps and reduced appetite. A high potassium diet and/or potassium supplementation may be useful, provided systemic potassium is not elevated. Since the adrenal glands affect sodium elimination, treatment of a glandular imbalance with adrenal gland and vitamin C supplements may correct depressed sodium levels.

Like chloride, potassium and bicarbonate, sodium is one of the electrolytes (carrying electrical charges). These electrolytes are important in fluid balance and movement of substances across cell membranes.

The best means of satisfying the sodium requirements of our body is the use of different vegetables rich sodium. The optimal RDA of sodium is about 8 to 10 grams (1000 milligrams to a gram). When the heart or kidney are functioning normally, the sodium concentration within the cells rises. The cell cannot pump fast enough to eliminate this excess and water is retained. This results in edema (swelling of body tissues). It is a constituent of body secretions such as saliva, the digestive juice in the mouth, as well as in enzymes which help chemical reactions take place in the body.

TOXICITY:

Excess amounts of sodium may aggravate high blood pressure. The chemical reaction of sodium on body tissues is alkaline.

POTASSIUM:

Alkaline ash foods containing potassium in order of highest potassium content per 100 grams of edible portion.

Dried soybean, dried lima bean, rice bran, dried banana, dry hot red pepper, dried white bean, wheat bran, dried lychee nut, dried mung bean, dried cowpea, dried pea, dried pinto bean, dried red bean, dried pigeonpea, dried apricot, pistachio nut, dried peach, dried prune, sunflower seed, dried chestnut, dried chickpea, dried lentil, almond raisin, whole sesame see, brazilnut, rice polishings, filberts, peanut, fresh lima bean, date, dried fig, avocado, pecan, tuber yam, dried pear, beet greens, dried apple, raw horseradish, fresh pigeonpea, swiss chard, parsnip, fresh cowpea, garlic, taro corms and tubers, fresh broadbean, spinach, rye grain, cashew nut, fresh chestnut, English walnut, breadfruit, durim wheat, globe artichoke, millet, mushroom potato with skin, collard leaves and stems, brussels sprouts, white wheat, broccoli, kale, soft winter wheat, black currant, kohlrabi, banana, hard summer wheat, hard winter wheat, winter squash, sorghum grain, leek, carrot, celery, pumpkin, beet, shallot, radish, fresh green pea, elderberry, celeriac, damson plum, Scotch pearled barley, cauliflower, nectarine, endive, prepared horseradish, guava, fresh apricot, sweet corn, asparagus, red cabbage, turnip, macadamia nut, Boston bibb lettuce, looseleaf lettuce, red currant, white currant, Chinese cabbage, cantaloupe, casaba melon, rhubarb, okra, tomato, sweet potato, snap bean, rutabaga, kumquat, papaya, cabbage, green onion, mung bean sprouts, eggplant, brown rice, sweet green pepper, orange peel, fresh peach, summer squash, orange peeled, black raspberry, quince, orange with peel, fresh fig, cherry, mango, tangerine juice, iceberg lettuce, grapes, edible pea pod, blackberry, loganberry, fresh lychee nut, Japanese plum, red raspberry, pricklypear, strawberry, grapefruit juice, cucumber, dry onion, gooseberry, pineapple, lemon with peel, lemon juice, lemon peeled, grapefruit pulp, fresh pear, tangerine, apple, crabapple, lime juice, lime, apple juice, watermelon, white rice, acerola cherry, cranberry, blueberry, green olive, ripe olive.

HERBS WITH POTASSIUM CONTENT:

Dulse, kelp, Irishmoss, parsley, bamboo shoots, Chinese waterchestnut, chicory greens, dandelion greens, fennel, plantain, salsify, mustard greens, dock, chive, wild rice, chicory, swamp cabbage, walnut leaves, mistletoe, chamomile, summer savory, birch bark, nettles, borage, couch grass, primrose flowers, calamus, coltsfoot, centaury, eyebright, carrot leaves, oak bark, sanicle, comfrey, mullein, yarrow, alfalfa, mint.

VITAMINS:

Potassium is found in various food stuffs, and a well-balanced diet will supply the basic daily requirement of most individuals. Considering that the majority of vegetables and fruits contain good quantity of potassium, potassium deficiency is rare.

The body of a 150 pound man contains about 250 grams of calcium. Women have somewhat less potassium and it declines with age. Almost 98% of the body's potassium is intracellularly located. Nerve fibers are rich in potassium. Potassium plays a central role in the body's fluid-electrolyte, and acid-base balance, and also is essential in muscle contractions (notably the heart muscle). Potassium may be required during the formation of new tissues following burns or injuries. In addition to being involved in carbohydrate metabolism and protein synthesis, potassium also serves as a conductor of nerve impulses, and participates in a number of enzyme reactions. Potassium is

readily absorbed in the small intestine. Normally, up to 90% of potassium intake is excreted in the urine, with about 5% in the feces and another 5% in perspiration. Potassium regulation is provided mainly by the kidneys, since it is continually being lost in the urine, potassium must be replenished regularly.

The daily need for potassium of 2 to 4 grams may in most instances be met with a normal diet.

The ratio of sodium to potassium in the hair is clinically more significant than the individual levels of either mineral. If a systemic imbalance is suggested by the hair data, a serum level confirmation should be obtained.

Potassium sparing diuretics have a tendency to raise hair potassium levels. Children with cystic fibrosis also exhibit elevated hair potassium. Athletes have been found to have elevated sodium and potassium levels. This may be attributable to either increased perspiration or hyperactive adrenal glands. Symptoms of a systemic elevated potassium level include irritability, diarrhea, nausea, dizziness, weakness, muscle cramps and pain. Since high serum potassium levels may bring on cardiac depression, arrhythmias, or arrest, potassium supplementation must be cautiously used with cardiac patients. For known or suspected systemic potassium elevations, a potassium rich diet and supplements must be moderated.

Because of possible deceptive values associated with serum potassium tests, systemic potassium status is best determined by evaluating the sodium-potassium and the magnesium potassium ratios. About 50 known conditions and diseases may cause decreased serum potassium levels, including, dieter's deficiency (rare), gastrointestinal losses, kidney losses (from diuretics, adrenal disease, acidosis, alkalosis and antibiotics), and cellular shifts from alkalosis and insulin therapy.

A general indicator of adrenal stress is low potassium and sodium hair values. Deficiency symptoms include malfunction of the skeletal muscle, cardiac muscle, gastrointestinal tract and kidneys. Other possibilities include cramps, general lethargy, slow wound healing, partial paralysis of the hands and legs and interference with the heartbeat. Potassium deficiency may lead to abnormal glucose tolerance. Hair potassium has been found to be the second most deficient mineral in periodontal patients.

Potassium supplementation, together with the monitoring of potassium serum levels, is common among patients receiving diuretic treatment. Potassium supplementation must be carefully monitored in cardiac patients. In general, a diet rich in potassium content is desirable.

Potassium can be considered generally as the mineral foundation of the muscular tissues, assuring their elasticity. Aids in balancing the acids in the organism and helps to maintain different elements in their proper solution. Important substance in the brain matter and in red blood cells.

TOXICITY:

No known toxicity of potassium. Chemical reaction of potassium is alkaline to tissues.

ACID REACTING SUPPLEMENTS:

Acid reacting supplements meaning those vitamins ending with the word acid. Para-aminobenzoic acid (PABA), pantothenic acid, vitamin c complex (hesperin, rutin, vitamin P (bioflavionoids), nicotinic acid, folic acid. Minerals phosphorous, chlorine, sulfur. Protein supplements tablets, powder. The purpose of acid nutrients is to hydrogenate foods, assist storage, relax muscles, constrict blood vessels, attract fluids to membranes, and increase nervous system energy.

FAT SOLUBLE VITAMINS:

The fat soluble vitamins are divided into two groups A, D, K which are antioxidants which assist in controlling pH. These can be used in either case of excess North Pole (-) negative energy or excess South Pole (+) positive energy. The other group E, F (unsaturated fatty acids) and T, assist the formation of enzymes and hormones. They can also be used in either case of excess North Pole energy or excess South Pole energy.

RNA-DNA FACTORS: Raw Gland Concentrates:

These factors are supplied by the raw whole gland concentrates or in separate supplements.

The basic raw gland concentrate is useful in balancing the excess South Pole (+) energy causing a hyperfunctioning organ.

The raw gland chelate concentrate is useful in balancing the excess North Pole (-) energy causing a hypofunctioning organ.

The RNA-DNA supplement may be used in either excess North Pole energy or excess South Pole energy with alkaline minerals for excess South Pole energy and acid minerals with excess North Pole energy.

ADJUSTIVE PROCEDURES: Neurolymphatic - Neurovascular.

Adjustive procedures are also assisted by ABM analysis. If a strong muscle in the clear weakens when South Pole energy is applied to an organ it indicates that the neurolymphatics or neurovascular associated with organ in question should be investigated. This is done by laying hand with South Pole energy over the neurolymphatic or neurovascular reflex area and if the previously strong muscle weakness it indicates that either the neurolymphatic or the neurovascular reflex area needs stimulation. After this correction has been made both hands with South Pole energies are again laid over neurolymphatic or neurovascular areas and strong muscle again is tested. If it again weakens than diet needs investigation and alkaline foods are to be added to the diet and alkaline supplements and or raw gland concentrates may also be added to supplement and assist correction of excess South Pole energy.

ADJUSTIVE PROCEDURES: Vertebrae.

If muscle weakens when North Pole energy is applied (by hand or magnetic indicator) to an organ it indicates that the associated vertebrae of the organ should be challenged for adjustment direction, than adjusted. After this is done North Pole energy is again applied to organ an strong muscle again tested. If it again weakens diet should be investigated and acid foods are to be added to the diet and acid supplements and or chelated raw gland concentrates may also be added to supplement and assist correction of excess North Pole energy.

Alkaline reacting supplements:

Alkaline reacting supplements meaning those vitamins ending with ine and minerals Calcium, phosphorus, zinc, magnesium, manganese, sodium, potassium, chloride, iron, and iodine. The purpose of alkaline nutrients is to assist proper oxygenation of food for utilization, and to assist membrane lubrication. Aid in contracting muscles, dilates blood vessels, and calms the nervous system.

The fat soluble vitamins: Refer to page 8.

RNA-DNA Factors - Raw Gland Concentrates: Refer to page 8.

Adjustive procedures Neurolymphatic-Neurovascular: Refer to page 8.

Adjustive procedures vertebrae: Refer to page 8.

There is always one questions that seems to be ask. How much of a vitamin and or mineral do I need?

Dr. Kenneth G. Brockman, D.C. in his research with blood serum and nutritional interpretations breaks down nutrient needs according to body weight.

B-vitamins (acid reacting)	1 milligram per each pound of body weight.
B-vitamins (alkaline reacting)	1 3/4 milligrams per pound of body weight.
Minerals	4 to 7 milligrams per pound of body weight.
Trace minerals	1/10 microgram per pound of body weight.
Vitamin C	4 to 7 milligrams per pound of body weight.
Vitamin P	2 1/2 milligrams per pound of body weight.
Vitamin A	250 I.U. per pound of body weight.
Vitamin D	25 I.U. per pound of body weight.
Vitamin E	4 I.U. per pound of body weight.
Vitamin K	under research.
Vitamin F	under research.
Vitamin T	under research.
Lecithin	1/3 milligram per pound of body weight assists antirancidity.
Protein	1/4 gram per pound of body weight.

RNA-DNA These factors are supplied by the whole raw gland concentrate. The basic raw gland concentrate is useful in rebuilding a hyper-functioning organ. While the raw gland chelate (with minerals) is useful in activating the hypofunctioning organ.

COMPREHENSIVE ANSWERS TO NUTRITION

BASIC NUTRITIONAL FACTS

(c) Wm. R. Borrmann, N.D., D.C.
Diplomate, ICAK

BASIC NUTRITIONAL FACTS

COMPLETE PROTEINS

Complete proteins are those containing all eight essential amino acids along with the other 14 called non-essential.

Eggs, all meats (cooked rare), fresh raw whole milk, cheese (made from raw whole milk), fish, poultry, wild game, sya beans, germ of whole grains. These contain all essential amino acids.

The proteins in dried beans, peas, lentils, nuts, grains, whole grain flours (with the germ removed) and other vegetables do not contain the complete protein factors unless they are mixed together to supply all ~~the~~ protein the other lacks. This type of eating requires knowledge of all vegetables, nuts, beans and their protein content. More knowledge than is common to maintain the proper protein balance.

VEGETABLES (complex carbohydrates)

Supply the many of the minerals that protein foods do not. Fifty percent of food intake should be raw vegetables. They are classified as the body builders.

FRUITS (simple complex carbohydrates)

Also supply many of minerals that protein foods do not. They are the body cleansers and supply vitamin C which is destroyed in cooking in most foods. They also supply sugar with all its synergists (vitamins and minerals), rather than the processed simple sugars (candy cake, ect) which supplies no vitamins or minerals.

FATS AND OILS

The best fats are those found in whole grains and SEEDS, CORN, SUNFLOWER, SAFFLOWER, WHEAT GERM and FISH LIVER OILS.

Avoid all fats solid at room temperatures as much as possible. Avoid all animal fats or fats that are suspected to be rancid, re-used or redereed overheated. Avoid all oils in cooking (do not use oils in frying, cooking ect).

Note: Males require more unsaturated fatty acids then females. Assists the absorbtion of vitamin A and carotene. The older a person becomes, the more resorption is reduced, i.e., the small intestine of a 60-year old for instance can only resorb about 40 percent of an oil-soluble vitamin 60 percent is excreted unutilized. Research in the last several years points to the lack of vitamin A in a diet that may be responsible for cancer and that a diet high in vitamin A may be a deterrent to cancer growth.

Dr. Franklin Bicknell in 1960 stressed that unsaturated fatty acids enter into the formation of the myelin sheath in the fourth month of conception. Therefore it is advised that in the first six months of conception it would be wise for all pregnant women to avoid all foods containing hard fats. Substitute unsaturated fatty acids. However, when using increased amounts of unsaturated fatty acids increase your vitamin E intake.

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Earl Mindell, Pharm. B., R.Ph.

Warner Books (Paper Back) 75 Rockefeller Plaza, New York, N.Y. 10019

Your Health Under Siege using nutrition to fight back

Jeffrey Bland PH.D.

The Stephen Greene Press, Fessenden Road, Brattleboro, Vermont 05301

Comprehensive Answers to Nutrition

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2506 S. Greenview St. Appleton Wi. 54911

VitaChart Vitamins-Minerals

Vita Chart, Inc. 3130 Arlington Ave. Bronx, New York 10463

COMPREHENSIVE ANSWERS TO NUTRITION

PERCENT OF FOOD GROUPS THAT SHOULD BE IN DAILY DIET

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PERCENT OF FOOD GROUPS THAT SHOULD BE IN A DAILY DIET

PROTEIN - PERCENT THAT SHOULD BE IN DAILY DIET

Ten to fifteen percent should be in daily diet.

Ounces of protein in daily diet can be determined by dividing your ideal weight by 15. Answer would be amount of protein in ounces you should eat per day.

Grams of protein in daily diet can be determined by multiplying 2.2 (represents 2.2 pounds of body weight times the weight you wish to weigh. The answer would be the grams of protein per should eat per day to maintain that weight. Note: one needs one gram of protein for each 2.2 pounds of body weight. The average male needs 25 to 70 grams of protein per day. The average woman needs 15 to 60 grams of protein per day.

PROTEIN NEEDED IN GRAMS FOR DIFFERENT AGE GROUPS

Ages	1-3	4-6	7-10	11-14	15-18	19 and over	
	0.82	0.68	0.55	0.45	0.40	0.36	pound code.

To use this gram chart one must take pound code found under his or her age group and multiply that number times your weight you wish to weigh. This would represent your daily protein intake in grams. As an example: if you are over 19 years of age and you wish to weigh 110 pounds multiply 0.36 times 110, total would be your daily protein need in grams 39.6 of protein per day.

Note: In terms of calories on ounce of protein equals 80 calories.

In terms of percent of fat. 20 % of a T-bone steak is protein and 80 % fat.
 25 % of cheddar cheese is protein and 75 % fat.
 90 % of fillet of sole is protein and 10 % fat.
 40 % of skim milk is protein and 60 % fat.

PROTEIN IN TERMS OF CALORIES

Using the information we gave you that one ounce of protein equals 80 calories can assist you in determining your calorie needs per day.

For example: If you weigh 150 pounds you need 2700 calories per day to maintain that weight. If you wish to maintain that weight you want to know what percentage or portion of your total calories should be protein and what portion or percentage should be complex carbohydrates. You first use the rules we have given you above to determine the percentage of protein needed per day. You divide your 150 pounds by 15 answer equals protein in ounces which in this case would be 10 ounces per day.

You multiply this by 80 which equals 800 calories, 800 protein calories. This figure (800) is subtracted from your total daily calories 2700. This leaves 1900 calories that should be composed of complex carbohydrates (vegetables (raw if possible) steamed otherwise - at least 50 percent should be raw).

If you must limit your carbohydrate intake pick out the vegetables that are low in carbohydrates limiting daily intake to 35 to 65 grams per day. A small carbohydrate booklet may be obtained from any drug store or supermarket. Remember there are 4 calories in each gram of protein.

CARBOHYDRATE - PERCENT THAT SHOULD BE IN DAILY DIET

Fifty five to eighty percent should be in daily diet. These should be complex type carbohydrates. Vegetables, fruits, and grains. These should be eaten raw if at all possible if not steamed. At least 50 percent of ones daily diet should be in complex carbohydrates. Remember there are 4 calories in each gram of carbohydrate.

Remember as we stated under protein in terms of calories that if you must limit your carbohydrate as in a modified fast diet pick out vegetables that are low in carbohydrates to 35 to 65 grams per day.

In terms of percent of carbohydrate and protein. 25 % of kidney beans are protein and 70 % carbohydrate.

16 % of whole wheat bread is protein and 80 % carbohydrate.

15 % of oat meal is protein and 70 % carbohydrate.

FAT - PERCENT THAT SHOULD BE IN DAILY DIET

Ten to thirty percent should be in daily diet. Remember there are 9 calories in each gram of fat.

NUTRIENT NOTES

1. In order to regulate your daily diet, you must balance your daily intake.
2. Most people feed their bodies the least when they expect their bodies to do the most, and they feed their bodies the most when they expect their bodies to do the least.
3. Ounce for ounce, chicken, turkey and fish have more protein than steak. Steak having 2 1/2 times more calories and twice the fat.
4. Carbohydrates place a immediate demand upon the body to do something. Either to exercise to burn up excess or to will convert it to fat for future use in time of need.
5. Their are 499 calories in 4 ounces of pork.
Their are approximately 401 calories in 4 ounces of beef steak.
Their are approximately 199 calories in 4 ounces of fish. turkey or chicken.
6. Avoid white flour and white sugar and foods made from white flour and white sugar.
7. Avoid all processed foods if possible.

COMPREHENSIVE ANSWERS TO NUTRITION

CAFFEINE AND IT'S RELATIONSHIP TO DISEASE

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CAFFEINE AND IT'S RELATIONSHIP TO HEALTH

There is no doubt that a great controversy exists surrounding drinking coffee and other caffeine containing products with regard to their effects on the health of the human body.

From what we know, the typical American citizen consumes an average of nine pounds, or 450, six ounce cups of coffee per year. Each average six ounce cup of brewed coffee contains 83 mgs of caffeine giving the average coffee drinking American a coffee-caffeine related intake of 41,350 mgs, of caffeine per year.

The following chart supplied by the Coffee Information Institute, Consumer's Union and Chocolate Manufacturers Association gives an idea of the amounts of caffeine one is consuming when the following products are ingested:

SOURCE	AMOUNT	CAFFEINE (mgs)
Chocolate	1 oz.	5 - 10 mgs
Cocoa	6 oz.	10 mgs.
Coffee - brewed	6 oz.	83 mgs.
Coffee - decaffeinated	6 oz.	3 mgs.
Coffee - grain blends	6 oz.	14 - 72 mgs.
Coffee - instant	6 oz.	60 mgs.
Cola	12 oz.	40 - 72 mgs.
Tea - instant	6 oz.	28 mgs.
Tea - leaf	6 oz.	41 mgs.

The coffee plant was first grown in Arabia and is noted by the red berries which grow from its green shrub. The Muslims first ate the red berries and began to note many stimulating effects caused by eating the coffee berries. As time passed the Muslims began boiling the coffee berries (beans) and drinking the coffee. Man then carried coffee to Europe and then to the North American Continent in the seventeenth century.

Tea, on the other hand, was used as a stimulant in Asia by the Chinese long before coffee was discovered by the Muslims. Like coffee, the types of tea vary in the amount of caffeine they contain. Tea also contains xanthine compounds, theophylline and theobromine, which are also stimulants.

Following is a list of over-the-counter drugs and their caffeine content.

PRODUCT	CAFFEINE (methylxanthine)
Anacin	32 mgs
appedrine	100 mgs
Dexatrim	200 mgs
Dristan	16 mgs
Emprin	32 mgs
Excedrin	65 mgs
Midol	32 mgs
Nodoz	100 mgs
Vanquish	33 mgs
Vivarin	200 mgs

Another substance found in caffeine containing products is Methylxanthines. Methylxanthines are not stimulants but have been found to be related to fibrocyclic breast disease. Fibrocyclic breast disease is essentially characterized by benign

or non-cancerous cysts in the female breasts. These cysts are most common in females during their menstrual years and are often found in women whose diets are low in Vitamins E and C and high in caffeine or methylxanthines.

Two medical research physicians, Drs. Robert London, director of reproductive endocrinology of Mt. Sinai Hospital in Baltimore, Md., School of Medicine, have seen fibrocystic breast disease problems reduced in women who eliminate caffeine containing products from their diets while increasing vitamin E in their diets.

In our whole person health practice we have also seen similar results in patients with fibrocystic breast problems. We have found that not only do the fibrocystic breast tumors stop developing but most disappear when caffeine is removed from the patient's diet. We have also found that the daily ingestion of 1000 mgs of Vitamin C and 1000 IU of Vit. E and male glandular food supplement assists the body in the healing of the fibrocystic breast disease problems.

Like Drs. London and Minton, we encourage most women to attempt the natural caffeine-free regime of diet and vitamin supplementation before mastectomy is performed.

Although no one knows why caffeine containing products may cause fibrocystic breast disease we, at this point, must assume that the stimulating effects of caffeine, especially on the female body and reproductive system, are related to the breast problems.

We also know that caffeine stimulates the activity of the brain, respiration, insulin production, heart rate, increased urination, etc.

Many people are allergic to caffeine and common symptoms of caffeine allergy are headaches, nervousness, diarrhea, mental lapses, kidney problems, high blood pressure, fast heart beat, irregular heart rate, fibrocystic breast disease, birth defects, miscarriage, still birth, acid stomach, stomach ulcers, fevers, anxiety, and other health problems.

For persons wishing to remove caffeine from their diet, the best way is to begin gradually reducing the substances that contain caffeine from your diet. Some people who go cold turkey have caffeine withdrawal reactions and it often is best to begin by cutting in half the normal caffeine containing substances and over a week or so totally eliminate all caffeine from one's diet.

Many former coffee drinkers switch to products such as Postum, Pero or steam processed decaffeinated coffee. Other persons find that Herbal teas are good caffeine free substitutes.

For some time now a controversy has been evident with regards to the use of chemically processed decaffeinated coffee. The often used decaffeinating chemicals trichmethylene and methylene chloride have shown to be carcinogenic agents in mice. Much controversy continues to surround these chemicals.

The fact is that caffeine can have both good and bad effects on the human body and it behooves each person to be cautious in the use of caffeine containing substances interfere with the body's ability to absorb Vitamin C and the B complex vitamins. This being the case one is well advised not to ingest any caffeine containing substances with their meals or for at least four hours before or after they have taken Vitamin C or B complex vitamins.

COMPREHENSIVE ANSWERS TO NUTRITION

CARBOHYDRATE DYSFUNCTION

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CARBOHYDRATE DYSFUNCTIONHYPOGLYCEMIA

It is a condition of low blood sugar, and, like diabetes, presents a situation where the body is unable to metabolize carbohydrates normally. People with hypoglycemia have a tendency to produce too much insulin when they eat sugar (simple carbohydrates) as well as complex carbohydrates (grains, vegetables and fruit).

Even though public awareness of hypoglycemia has increased greatly in the past several years, it is still one of the most frequently undiagnosed diseases in the world today. It has been estimated that 20 to 40 million Americans have it.

Many people confuse diabetes and hypoglycemia and assume that diabetes is the opposite of hypoglycemia that is to say diabetes being a condition with high blood sugar and hypoglycemia a condition with low blood sugar. While in reality the opposite of diabetes is normal. Hypoglycemia in reality is the opposite end of the spectrum of diabetes, meaning it is possible to have both hypoglycemia and diabetes at the same time, with hypoglycemia being just one stage on the way to diabetes.

They both represent an inability of the body to metabolize carbohydrates normally. With the to maintaining proper blood sugar levels being to eating avoiding those carbohydrates that metabolize rapidly (processed sugars, natural sugars, fruits, foods made with white flour and sugar ect) replacing these foods with more protein and fat (both types saturated and unsaturated) along with proper food supplement and glandular concentrates. In other words a balanced diet designed to reduce the excessive production of insulin due to excessive simple carbohydrates in the diet and nutritional supplements as well.

HYPOGLYCEMIA IS INDICATED OR SUSPECTED:

1. When specific muscle test is positive (applied kinesiology muscle testing).
2. When the blood sugar, in the course of a six-hour glucose tolerance test fails to raise more than 50% above the fasting level.
3. When the glucose curve which falls during a six-hour glucose tolerance test falls to 20% mg. below the fasting level.
4. If the blood sugar level falls 50% mg. or more during any 1 hour of the test.
5. If the blood sugar level falls in the range of 50% mg or anything lower than 65% mg one can suspect hypoglycemia.
6. If one suffers from the symptoms of (a) dizziness (b) headaches (especially morning headaches that are relieve by eating (c) confusion (d) palpitations (e) depression during the course of the six-hour glucose tolerance test, regardless of what the blood sugar readings may be.

HYPOGLYCEMIA

METABOLIC PROCESS: PHYSIOLOGY

In functional hypoglycemia blood sugar will rise after eating sugar or a carbohydrate. This will usually make one feel better but relief will be temporary. When a sugar enters the bloodstream, the insulin-producing glands of the pancreas are activated. This insulin is responsible for storing this sugar into the liver. However, when this is done it makes the sugar unavailable to the central nervous system as well as the brain (the brain cells rely heavily on blood sugar (glucose) for their metabolism. Also, brain cells, unlike other tissue cells of the body are not able to store glucose. Which makes the blood sugar level all the more important to the central nervous system. If this level is thrown off, the entire chemistry of the nerve cell as well as brain function is interfered with, resulting in marked emotional symptoms).

What really occurs in those who suffer from functional hypoglycemia is that they over-react to stimulation by sugar, which results in an over production of insulin, which in turn drives blood sugar levels down too far and too fast.

There may be other factors or causes that are involved in functional hypoglycemia for instances:

1. A hypo thyroid may be present. (may be determined by simple temperature testing place a thermometer below the armpit before getting out of bed in the morning for 10 minutes (do not get out of bed however, have thermometer at the bed side) if reading is 97.8 or lower than hypothyroid may be suspected and thyroid concentrate tablets should be added to the diet.
If in the six-hour glucose tolerance test the blood sugar line fails to rise 50% mg. above the fasting level. May indicate either an excessive or very rapid insulin production or that one cannot absorb the sugar.
2. One may be allergic to sugar giving rise to an allergic response that will imitate the lowering of blood sugar with all its symptoms.
3. One may be allergic to other foods as well creating severe blood sugar drops. (Almost all people with hypoglycemia also have food allergies).
4. When specific muscle test is positive (applied kinesiology muscle testing).

SIMPLE HOME TESTING (GLUCOSE TOLERANCE TEST)

It must be remembered that the only sure way to test the level of the sugar in the blood is through a blood test (Six-hour glucose tolerance test). However, it is possible to get indication of your own reaction to sugar by deliberately ingesting enough sugar

HYPOGLYCEMIA

to create a drastic blood sugar drop and wait for the appearance of psysical or emotional symptoms. However, it must be unerstood that if thet do appear it doesnt prove anything in a scientific sense. But it is a valuable indicator. It is even of more value when combined with CARBOHYDRATE QUESTIONNAIRE (PAGE 3) and SPECIFIC APPLIED KINESIOLOGY MUSCLE TESTING.

SIMPLE HOME TESTING (MAY ALSO BE USED TO TEST FOR DIABETES)

1. Eat nothing after 10 P.M.
2. At 8 A.M. the next morning eat two candy bars or take 2 tablespoons of honey. DO NOT HAVE ANY WATER, ALCOHOL, COFFEE OR CIGARETTES FOR THE NEXT 6 HOURS IF POSSIBLE.
It is advisable to have some one with you for these 6 hours to write down any and all symptoms you might have (they could be any or all of those listed under the CARBOHYDRATE QUESTIONNAIRE ON PAGE 4).
3. Than if you like, you can have some sugar strips to test the amount of sugar in the urine. These may be purchased from any drug store. Simple test for diabetes.

DIETARY SUGGESTIONS FOR THOSE WITH FUNCTIONAL HYPOGLYCEMIA

Be aware that different foods are absorbed by the body at different rates and therefore, will affect blood sugar at a different rate. As an example. Wnen sugar is absorbed it will cause a rapid raise in blood sugar as well as a rapid fall. One with functional hypoglycemia will reproduce too much insulin, and therefore, will lower blood sugar levels rapidly and many times lower than what it was before the sugar was eaten which causes the many and variable symptoms associated with low blood sugar.

Vegetables, grains are also carbohydrates as is sugar, however, they are absobed more slowy then sugar. However, in some functional hypoglycemic persons this to happens to quickly, and fades quickly, also lowering blood sugar levels many times to lower than what they were before they were eaten.

Proteins and fats, however, are digested slowy, absorbed slowy and maintain blood sugar levels for longer periods of time before blood sugar falls again.

Stimulants should be avoided such as COFFEE, TEA AND TOBACCO (any substance that is high in caffeine). They stimulate the adrenal gland to produce adrenalin which in turn raises blood sugar which in turn raises the insulin production which in turn lowers blood sugar level with resulting symptoms of HYPOGLEYCEMIA. Swithch to HERB TEAS (those that are caffine free).

CARBOHYDRATE DYSFUNCTION QUESTIONNAIRE

CODE: Carbohydrate dysfunction by a minimum of 15 question response.

1. ___ FEEL TENSE OFTEN.
2. ___ FEEL DEPRESSED OFTEN.
3. ___ FEEL SLEEPY OFTEN.
4. ___ FEEL RESTLESS OFTEN.
5. ___ FEEL ANGRY FOR NO REASON AT TIMES.
6. ___ FEEL IRRITABLE OFTEN.
7. ___ FEEL EXHAUSTED AT TIMES.
8. ___ HAVE FAINTING SPELLS OR FEEL LIKE FAINTING AT TIMES.
9. ___ FEEL DIZZY OFTEN.
10. ___ FEEL TREMORS INSIDE.
11. ___ HAVE COLD SWEATES OFTEN.
12. ___ HAVE WEAK SPELLS OFTEN.
13. ___ HAVE MORNING HEADACKES THAT ARE RELEIVED BY EATING.
14. ___ BOUTHERED WITH INDIGESTION.
15. ___ BOUTHERED BY FORGETFULNESS.
16. ___ BOUTHERED BY INSOMNIA (WAKE UP THAN CAN'T GET BACK TO SLEEP).
17. ___ I CONSTANTLY WORRY.
18. ___ FEEL ANZIOUS (WORRY FOR NO REASON).
19. ___ BOUTHERED WITH MENTAL CONFUSION.
20. ___ BOUTHERED WITH PALPITATIONS OF THE HEART (IRREGULAR HEAT BEAT).
21. ___ BOUTHERED WITH RAPID PULSE BEAT.
22. ___ BOUTHERED WITH SLOW PULSE BEAT.
23. ___ HAVE MUSCLE PAINS FOR NO REASON.
24. ___ BOUTHERED WITH NUMBNESS IN MY ARMS AND LEGS.
25. ___ BOUTHERED WITH NUMBNESS IN MY BODY (WHERE? _____).
26. ___ FEEL UNSOCIAL AT TIMES.
27. ___ FEEL THAT EVERYONE IS AGAINST ME AT TIMES.
28. ___ SEEM TO HAVE TROUBLE IN MAKING DECISIONS.
29. ___ HAVE CRYING SPELLS FOR NO REASON.
30. ___ HAVE A LACK OF SEX DRIVE.
31. ___ BOUTHERED WITH PAINFUL MENSES (MENSTRAUTION).
32. ___ BOUTHERED WITH ALLERGIES.
33. ___ FEEL UNCOORDINATED AT TIMES.
34. ___ BOUTHERED WITH LEG CRAMPS.
35. ___ BOUTHERED WITH CRAMPS ELSE WHERE (WHERE? _____).
36. ___ BOUTHERED WITH LACK OF CONCENTRATION.
37. ___ BOUTHERED WITH BLURRED VISION.
38. ___ BOUTHERED WITH TWITCHING, JERKING OF MUSCLES (WHERE? _____).
39. ___ BOUTHERED WITH COLD HANDS AND FEET.
40. ___ BOUTHERED WITH POOR CIRCULATION THOUGHOUT THE ENTIRE BODY.
41. ___ SKIN ITCHES OFTEN.
42. ___ FEEL LIKE I CAN'T GET MY AIR AT TIMES.
43. ___ FEEL LIKE I AM SMOTHERING AT TIMES.
44. ___ BOUTHERED WITH MUCH THROAT MUCOUS (CLEARING MY THROAT OFTEN).
45. ___ FEEL OFF BALANCE AT TIMES.
46. ___ SIGN AND YAWN WHEN I AM NOT TIRED ESPECIALLY AFTER MEALS.
47. ___ IMPOTENCE.
48. ___ HAVE FEELINGS OF IMPENDING DOOM.
49. ___ HAVE FEARS: NIGHT FEARS - PHOBIAS- UNEXPLAINED FEARS.
50. ___ SUICIDAL TENDENCIES
51. ___ HAVE HAD A NERVOUS BREAKDOWN (TAKING TRANQUILLIZERS NOW _____).

CARBOHYDRATE DYSFUNCTION QUESTIONNAIRE

QUESTIONNAIRE CONTINUED:

52. HAVE HAD OR DO HAVE CONVULSIONS.
53. HAVE EPILEPSEY.
54. I HAVE A CRAVING FOR SWEETS - OR EAT EXCESS AMOUNTS.
55. I HAVE A CRAVING FOR COFFEE - OR EAT EXCESS AMOUNTS.
56. I HAVE A CRAVING FOR SOFT DRINKS - OR EAT EXCESS AMOUNTS.
57. I DRINK MORE THAN TWO DRINKS OF ALCOHOL PER DAY.
58. I AM OVERWEIGHT FOR MY HEIGHT.
59. I HAVE A CRAVING FOR FOOD- OR OVER EAT AT MEALS.
60. WHEN I EAT SWEETS I FEEL BETTER.
61. WHEN I EAT OTHER CARBOHYDRATES I FEEL BETTER.
62. WHEN I DRINK COFFEE I FEEL BETTER.
63. WHEN I DRINK SOFT DRINKS I FEEL BETTER.
64. WHEN I DRINK ALCOHOL I FEEL BETTER.
65. I FEEL SHAKY ON A EMPTY STOMACH FEEL BETTER AFTER EATING.

HYPOGLYCEMIA DIETARY REGIMENFIRST WEEKCARBOHYDRATES

Select from those carbohydrates listed below. Fresh preferred, may be frozen or canned however.

3% CARBOHYDATE GROUP

Beet greens, celery, chicory, chinese cabbare, chives, cucmbers, endive, escarole, fennel, lettuce, olives, parsley, dill and sour pickles, radishes, rhubard (raw), water cress, herbs.

5% CARBOHYDRATE GROUP (JUICES - PER 1/2 CUP)

Sauerkraut juice, tomato juice, V-8 juice, vegetable juice, milk (whole).

6% CARBOHYDRATE GROUP

Asparagus, bamboo shoots, bean sprouts, broccoli, raw cabbage, cauliflower, chard, collard greens (raw), dandelion greens, egg plant, kale, leeks, mustard greens, mushrooms, okra, green onions, peppers, pimentos, edible pea pod, cooked rhubarb, sauerkraut, spinach, summer squash, tomato, turnip, turnip greens, water chestnuts, zucchini, avocado, artichokes, string beans, beet greens, eggplant, cucumbers, green peppers, pumpkin.

GREAD AND CEREAL GROUP

NONE OF ANY KIND. POSITIVELY.

DAIRY PRODUCTS

Milk (whole) and buttermilk, sweet and sour cream, plain yogurt, and butter.

Natural cheeses only. Cottage cheese.

Eggs unlimited.

NO MARGARINE.

FRUITS

Avocado, cantaloupe, casaba, carnshaw, honey dew milon, watermelon.

Lemons, limes.

NO CANNED, SWEETENED OR DRIED FRUITS OF ANY KIND.

PROTEIN - MEATS

All fresh fish (ocean fish - fresh water fish). May be broiled or baked or boiled.

AVOID SCAVENGERS SUCH AS CRABS, SHRIMP, SCALLOPS, LOBSTER AND CLAMS. DO NOT USE BREAD CRUMS OR FLOUR. DO NOT EAT FRIED FOODS.

Lean beef, lamb, veal, all poultry. Organ meats allowed.

TRIM AWAY VISIBLE, EXCESS FAT FROM MEAT. BAKE, BROIL OR BOIL OR SAUTE IN VEGETABLE OIL OR BUTTER. AVOID ALL FOOD PRODUCTS CONTAINING PORK OR LARD.

HYPOGLYCEMIA DIETARY REGIMENFIRST WEEK CONTINUEDBEVERAGES

NO COFFEE, COLAS, CANNED, CONDENSED, EVAPORATED OR SWEETENED MILK, ALCOHOL IN ANY FORM OR SUGAR FREE SOFT DRINKS.

Use herb teas unsweetened, buttermilk, milk (whole), tomato juice, V-8 juice.

SPICES

Mayonnaise, salad dressings made from cider vinegar, bouillion cubes, olives (ripe or green), pickles (dill or sour only), mustard (fresh or dry), salt, pepper.

SEEDS - NUTS

Sunflower, pumpkin and sesame. NO CASHEWS, fresh nuts (walnuts, pecans and almonds).

OILS

Safflower or sesame

AVOID

ALL FOODS MADE WITH OR CONTAINING SUGAR OR STARCH.

NO CEREALS, CEREAL PRODUCTS.

NO BREAD STUFFINGS OR OTHER MEAT COATINGS CONTAINING FLOUR, CRACKERS ECT.

NO CAKES, COOKIES, PIES, ICE CREAM, CANDY, HONEY, ECT.

NOTE

You may take 1 or 2 tablespoons of corn, safflower, sesame or soybean oil depending on you tolerance for fats or allergies, before meals in a small amount of milk or tomato or V-8 juice. Polyunsaturated fats act as an appetite depressent, speeds up burning of stored body fat for energy provides carbohydrate-free calories for additional energy and effectively lowers cholesterol levels.

HOWEVER, Increased intakes of polyunsaturated fats requires increased intake of Vitamin E (400 IU of vitamin per day add 100 IU at a time. Begin with 100 IU daily for one week than add an additional 100 IU the next week until 400 IU per day is reached).

SECOND WEEK

These carbohydrates may be added to FIRST WEEK DIETARY REGIMEN ONLY AFTER THE PATIENT IS ASYMPTOMATIC WHICH MAY TAKE LONGER THAN ON WEEK.

Artichoke, green or wax beans, carrots, celeriac, cooked cabbage, brussel spouts, beets, cooked collard greens, garden cress, kohlrabi, raw onion, rutabago, tomato puree, winter squash, leek, parsley, turnips.
Boysenberries, canberries, frsh coconut, gooseberries, strawberries, peach, grapefruit, (note cranberries and grapefruit juice must be unsweetened).

HYPOGLYCEMIA DIETARY REGIMEN

SECOND WEEK CONTINUED

JUICES 10% - PER 1/2 CUP

Blackberry juice, carrot juice, lemon juice, lime juice, pomegranate juice.

MAINTENANCE LOW CARBOHYDRATE REGIMEN

These foods may be added to the LIST OF FOODS FOR THE FIRST WEEK AND SECOND WEEK, BUT, WITH CAUTION AND APPEARANCE OF SYMPTOMS THAN THEY MUST BE ELIMINATED FORM THE DIET AND ONE MUST USE ONLY THOSE FOODS UNDER THE FIRST AND SECOND WEEK.

BREADS AND CEREALS (Only one serving per day except for bread)

Fresh stone ground whole grain breads. (limit to one slice per meal)
Whole grain frsh cracked wheat cereal.
Other whole grains (bran, millet, oatmeal, rye, buchweat, seven grain, soy, dark rye ect)
Either as cereal or made into bread, muffins ect.

VEGETABLES (Only one serving per day)

Corn, lima beans, peas and potatoes.

FRUIT (Only one serving per day)

Blackberries, blueberries, apples, apricots, goodeberries, oranges, papaya, peaches, pears, pineapple, plums, raspberries, tangerines. (Preferred fresh in season or frozen unsweetened).

BEVERAGES (Only one serving per day)

Orange juice

SWEETS (Only one serving per day)

Custard, yeast, raw honey, black strap molasses.

OTHER FOODS THAT MAY BE INCLUDED

Again we caution you that if any of these foods a recurrence of hypoglycemia please discontinue use. ALSC USE ONLY ONE SERVING PER DAY.

9615% CARBOHYDRATE GROUP

Apples, apricots, blackberries, cherries, dewberries, elderberries, grapefruit, loganberries, oranges, peaches, pears, pineapple, plums, raspberries, tangerines, youngberries.

JUICES: Apricot, grapefruit, orange, pineapple, raspberry, tangerine, loganberry, (15% per 1/2 cup).

25% CARBOHYDRATE GROUP

Bananas

HYPOGLYCEMIA DIETARY REGIMEN

SPECIAL INSTRUCTIONS

For maximum results it is recommended that you follow this diet as closely as possible along with any nutritional support that is recommended.

The most desirable carbohydrates come from the whole grains and starchy vegetables not fruit or fruit juice.

It is of vital importance that you not only eat the correct foods but also that you eat regularly as directed.

Rotation of foods is important. Those which you eat frequently may become allergic to you or you may become addicted to. Therefore, rotate your proteins, beef one day, lamb another day, chicken another, fish another etc. Also do not have eggs or dairy products every day.

For desserts use an anti hypoglycemic cookbook as a guide. These may be purchased from any health food store and in some christian book stores.

Pure cream is allowed for topping desserts

Fruits canned in water are permissible. However fresh is preferred.

Eat as much as you wish at each meal, and between meals choosing from allowable foods

Try to eat 5 or 6 times per day if at all possible.

Try to eat a variety of foods each day from the allowable list.

Try to eat at least 50% of your food raw from the allowable list.

SAMPLE DIET FOR LOW BLOOD SUGAR

SPECIAL INSTRUCTION: - For maximum results it is recommended that you follow this diet as closely as possible, along with the nutritional support that is recommended. You may choose one or more of the foods listed below at any meal.

On arising, or if awake during the nightn, you may eat any of the following, apples, pears, melons, berries, (fresh or water packed canned,) and avocado, Eat oranges and grapefruit in MODERATION.

AVOID CANDIED DRIED FRUITS.

BREAKFAST:

Fresh fruit or 4-6 ounces of juice (unsweetened.)
 1 poached egg or 3 oz. of broiled ground round or seving of fish.
 One slice of whole wheat bread toasted. (No prescrvatives or additives)
 Beverage - water, herb tea, Sanka or Decaf coffee (no sugar) percolated skim milk, (limit coffee or tea to one cup.)

TWO HOURS AFTER BREAKFAST (mid-morning snack:)

4-6 ounces of unsweetened juice, (fresh fruit, tomato juice.)
 Farmers, pot, imported Swiss or cheddar cheese. (Hard Cheese)
 Water, one cup Herb tea (no sugar), skim milk.

LUNCH:

Meat, fish, poultry, cheese, eggs, egg salad served with lettuce
 Waldorf salad with mayonnaise.
 Vegetables (allowed from list).
 One slice of whole wheat bread toasted. (No preservatives or additives).
 One-half cup drained canned salmon, sardines, tuna.

THREE HOURS AFTER LUNCH:

8 ounces of milk (skim milk if over weight).
 choose from mid-morning snack.

DINNER: - Evening Meal

Soup (not thickened with flour).
 Allowable vegetables.
 Liberal portions of meat, fish or poultry.
 Fruit or juice.

TWO-THREE HOURS AFTER THE EVENING MEAL:

6-8 ounces of milk or unsweetened juice.
 Small handful of nuts, cottage cheese.
 Fresh fruit, NO GRAPES OR PRUNE JUICE.

ALLOWABLE VEGETABLES: - Asparagus, avocado, beets, broccoli, brussel sprouts, cabbage, cauliflower, carrots, celery, cucumbers, eggplant lima beans, onions, peas, radishes, sauerkraut, squash, string bean tomatoes, turnips, spinach, chard, kale, lettuce, green peppers.

ALLOWABLE FRUITS: Apples, apricots, berries, grapefruit, melon, oranges, peaches, pears, pineapple, tangerines, blackberries, blueberries, cantaloupe, cherries, cranberries.

AVOID THE FOLLOWING

All colas, soda pop, root beer, alcohol, strong tea or coffee, wines, cordials, cocktails, beer, any beverage that has been sweetened with sugar, or has caffiene in it.

FOODS NOT ALLOWED: - Corn syrup, white rice, precooked frozen food, T-V dinnes, artificial sweetners, white sugar, ice cream, canned milk, potatoes, grapes, raisens, spaghetti, macarone, nookles, any kind of candy, cakes, pie, pastries, sweet custards, puddings, all types of canned fruit, all jams and jellies, molasses, honey, popcorn, ptato chips, all starch-sugar snack foods, corn, pizza, Chinese sweet and sour dishes, maple syrups.

SPECIAL INSTRUCTIONS:

1. Eat as much as you wish at each meal, and between meals choosing from allowable foods.
2. Try to eat 5 or 6 times a day.
3. Try to eat a variety of food each day from the allowable list.

NOTE: MANY OF THE COMMON ALLERGY FOODS ARE IN THIS GROUP SUCH AS CORN, SUGAR, PEANUTS, CAFFEINE, COFFEE, CHOCOLATE, CIGARETTES, GRAINS, BEANS, NUTS, CITRUS FRUITS, MILK, POTATOES, EGGS.

- BEVERAGES:** Alcoholic beverages, caffeine foods and or drinks containing caffeine, grape juice, apple juice, cranberry juice. All nectars, Ovaltine, papaya juice, postum, prune juice, strong chinese tea, sweetened orange and grapefruit juice or drink.
- VEGETABLES:** Barley, corn and corn products, wheat and wheat products, dried beans, dried peas, hominy, white potatoes, sweet potatoes, rice, shell beans (lima and others), sweet pickles, relishes, yams. Russian wish bone dressing 30% sugar-whole kernal corn canned 11% sugar.
- FRUIT:** Blueberries, bananas, dried fruits, raisins, dates, figs, and or any product with these included, fruits canned in syrup, grapes, guava, huckleberries, mango. HC orange 12%-Tang 13% sugar.
- MEAT:** Canned meat, cold cuts, hot dogs, salami, sausages, scrapple, (these are usually packed with some form of suar preservatives). By all your meat waw and cook it your self. Shake+Bake 51% sugar. Hamburgar helper 23% sugar.
- BREADS:** White bread, cereal, crackers, grits, matzph, pancakes, pizza, rolls, waffles. Anything made with white flour or procesed flour.
- DESSERTS:** Cake, cashews, peanuts, peanut butter, chestnuts, chewing gum, chocolate, cookies, custards, dessert tippings, ice cream, jello, pastry, pie, potato chips, pretzels, puddings. Anything made with sugar or white flour.
- SWEETS:** Candy, caramel, honey, jam, jello, jelly, malt, marmalade, molasses, sugar, syrup. Any foods make with sugar or has sugar added to it. Check labels on everything you eat. Jello contains 83% sugar-Kool Aid 11% sugar.
- Dextrose, fructose, (primary use is in soft drinks), glucose, hexitol, lactose, maltose, manitol, sorbitol, sucrose are all forms of sugar and are not allowed when used in the form of artificial sweetener. Powdered sweet and low is 90 percent carbohydrate. Frutose + snorose contain 4 cal per gram.
- DRUGS:** Alcohol containing drugs, Anacin, APC, Aspirin B.C., caffergot, cold tablets, 4 way depressants, Empirin, Midol, Narcotics, Stimulants, Salfayne, Stanback, Trigesic.

TOBACCO:

Cigarettes, pipe, cigars, chewing.

MISCELLANEOUS:

Most canned soups and juices, Birds Eye Awake 11% sugar, ketchups, (contains 29% sugar), mayonnaise, mustard, Coffee mate 65% sugar, salad dressing and those canned vegetables containing sugar or starch. LEARN TO READ LABELS ON EVERYTHING YOU BUY. Sandwiches, ALL snack foods, sherbets, sweetened yogurt, instant breakfast foods and or squares, kool-aid, tang and all fruit drinks, popsicles, beer, wine, hard liquor, brandy, cordials, bran muffins, sweet and sour sauce, maple syrup, cough drops, salad dressings containing sugar.
 One tsb of honey has about 64 Calories.
 One tsb of molasses has about 50 Calories.
 One tsb of vefmed sugar has about 46 Calories.

SUPPLEMENT SUGGESTIONS - GENERIC SUPPLEMENT SUGGESTIONS

GENERIC SUPPLEMENTS:

VITAMINS A, B-COMPLEX, C, D, E, UNSTURATED FATTY ACIDS MULTIMINERAL TABLET, PANTOTHENIC ACID, LECITHIN, DIGESTIVE ENZYMES (if necessary) ACIDOPHILUS CAPSULES (if necessary)

VITAMIN A:

5,000 to 10,000 daily assists liver function.

VITAMIN B-COMPLEX:

Mega vitamin dosages 100 mg dosages. B1, B6, B12, Pantothenic acid assist in increasing tolerance to sugars and carbohydrates and help to normalize sugar metabolism. Also assist the adrenals which often are exhausted in persons with functional hypoglycemia.

VITAMIN C:

1000 mg at least four times per day. (Powered form of ascorbic acid suggested). Assists in lowering blood cholesterol.

VITAMIN D:

400 IU daily. Assists mineral metabolism.

VITAMIN E:

100 to 300 Iu daily. Assists tissue oxygen levels.

UNSATURATED FATTY ACIDS:

Three capsules per day. Assists in blood cholesterol level (cholesterol antagonist)

MULTIMINERAL TABLET:
(with chromium and zinc)

One tablet morning and evening on a empty stomach. Assists in normalizing mineral balace and supplies essential trace elements which are involved in sugar metabolism.

LECITHIN:

1,200 mg three times per day. Cholesterol antagonist assists in maintaining blood vessel elasticity.

DIGESTIVE ENZYMES:

One tablet per meal if necessary. Sometimes necessary to assists protein digestion. Because of the increase of protein and fat in the diet.

ACIDOPHILUS CAPSULES:

One to two capsules before bedtime to assist in 101 constipation that may be brought on with the increase of protein in the diet also to maintain proper bacterial culture in the lower bowel by restoring normal pH.

RAW LIVER CONCENTRATE:

6 per day. Assists in the control of glycogen release.

RAW ADRENAL CONCENTRATE:

3 per day. Natural hormone precursor.

RAW PANCREAS CONCENTRATE:

3 per day. Assists in regulating insulin.

RAW THYROID CONCENTRATE:

3 per day. If hypothyroid is suspected (temperature test).

COMPREHENSIVE ANSWERS TO NUTRITION

COMMON ALLERGY FOODS TO AVOID FOR ALLERGY HEADACHES

(c) Wm. R. Borrmann, N.D., D.C.
Diplomate, ICAK

BASIC COMMON ALLERGY FOODS TO AVOID FOR ALLERGY HEADACHESFOODS CONTAINING TYRAMINE:

RIPENED CHEESES SUCH AS GRUYERE, BRIE, CAMEMBERT, CHEDDAR. MEAT/FISH: SMOKED FISH, FERMENTED SAUSAGE (BOLOGNA, SALAMI, PEPPERONI, SUMMER), HOT DOGS, CHICKEN LIVERS, PORK (EAT NO MORE THAN 2 TO 3 TIMES PER WEEK), FERMENTED FOODS IN GENERAL SUCH AS PICKLED OR MARINATED.

ANY FOODS CONTAINING LARGE AMOUNTS OF MONOSODIUM GLUTAMATE, SUCH AS CHINESE FOODS.

VEGETABLES: ONIONS, PODS OF BROAD BEANS SUCH AS LIMA, NAVY, AND PEA PODS, AVOCADO.

VINEGAR (EXCEPT WHITE VINEGAR).

PIZZA.

FRUIT: BANANAS (NO MORE THAN 1/2 PER DAY, CITRUS FOODS (NO MORE THAN 1 ORANGE PER DAY), CANNED FIGS.

SOUR CREAM, YOGURT.

CHOCOLATE, NUTS, PEANUT BUTTER.

HOT FRESH BREADS, RAISED COFFEESCAKES AND DOUGHNUTS.

EXCESSIVE TEA, COFFEE, COLA BEVERAGES (NO MORE THAN 4 CUPS PER DAY).

AVOID ALL ALCOHOLIC BEVERAGES IF POSSIBLE. IF YOU MUST DRINK, DRINK NO MORE THAN TWO NORMAL SIZE DRINKS PER DAY. SUGGESTED DRINKS: HAUTE SAUTERNE, RIESLING, SEAGRAM'S VO, CUTTY SARK (SCOTCH), VODKA.

FOODS CONTAINING PHENYLETHYLAMINE:

CHOCOLATE, AGED CHEESE, RED WINES.

FOODS CONTAINING HISTAMINE:

ALCOHOL, PORT, CHIANTI, AND OTHER RED WINES.

FOODS CONTAINING OCTOPAMINE, DOPAMINE:

PODS OF BROAD BEANS, LIMA, NAVY, AND PEA PODS.

THOSE FOODS CONTAINING AMINES:

DEEP FRIED FOODS, AGED OR MARINATED FOODS, BANANAS, CITRUS FRUITS, CHOCOLATE, CHEESE, TEA, COFFEE, AND ALCOHOL.

SPINACH BREAKS DOWNS AMINES:

AMINES PRODUCES A LOWERING OF BLOOD PRESURE, POOLING OF BLOOD IN CAPILLARY BEDS WHICH INCREASES THE INTRA CRANIAL PRESSURE WHICH RESULTS IN HEADACHES. SPINACH BREAKS DOWN THESE AMINES AND PREVENTS HEADACHES AS A RESULT OF INGESTING THOSE FOODS LISTED UNER AMINES.

COMPREHENSIVE ANSWERS TO NUTRITION

GLUTEN - FREE DIET

(c) Wm. R. Borrmann, N.D., D.C.
Diplomate, ICAK

GLUTEN - FREE DIET

It must be understood that gluten-free flour has no therapeutic value, it in no way heals. To exclude all gluten from the diet, begin by learning which grains contain gluten such as WHEAT, BARLEY, OATS and RYE. At the present there is no alternative. You can not even have one bite of a gluten containing food. Research has shown that as little as one gram (1/28th of one ounce) can create a allergy problem.

Most gluten free flour is produced from 70 percent milled, bleached white flour. This produces a flour which has its vitamin, minerals, proteins, and fats reduced drastically. Some of the B-complex vitamins are replaced (especially B-1 and B3 (niacin) and one mineral iron. But there is no replacement for vitamin E or the unsaturated fatty acids which also have been removed.

FOODS FORBIDDEN ON A GLUTEN-FREE DIET

HIGH CARBOHYDRATE FOODS

- Bread:** All commercial breads, cakes, cookies, crackers, crumpets, doughnuts, meringues, muffins, pancakes, pastries, waffles, bagels, breadcrumbs, breadrolls, crisp-bread, matzoth pretzels, rusks.
- Cereals:** All cereals containing WHEAT, BARLEY, RYE, OATS, or BUCHWHEAT. When buying other grains, e.g., corn, it is advisable to confirm with the manufacturers that these are uncontaminated. All patent cereals, including baby cereals, are forbidden unless guaranteed gluten-free. Dumplings, groats, macaroni, noodles, spaghetti, canned corn, vermicelli, semolina.
- Dairy:** Synthetic cream, malted milk, cheese spreads.
- Desserts:** All pies, prepared mixes (unless guaranteed), blancmange powders, caramels, custard powders, instant desserts, rennet powder or tablets, mallow, lemon-pie fillings, lemon/orange curds, lemon powders, trifle.
- Commercial Beverages and Fruit Juices:** Ale, beer, gin, whisky, coffee essences, instant coffee, cocoa, hot or cold chocolate drinks, Horlick's malted beverages, Cocomalt, Milo, Ovaltine, Postum, tomato juice.
- Fats:** Commercial salad dressings, mayonnaise.
- Fish:** Pickled fish, frozen fish in sticks, or crumbed or caked or in fish fingers. Fish canned in sauce, Fishpaste.
- Flours:** All flours containing the grains of WHEAT, BARLEY, RYE, OATS, BUCHWHEAT (kasha).
- Fruit:** Baby preparation, Glace' fruit.
- Gravies:** Gravy thickeners and mixes (unless guaranteed gluten-free).

- Ice cream: All cones, wafers, crumbs, powders. Health ice cream.
- Meats: All commercial preparations containing fillings, e.g. sauges, stews, luncheon meats, meat patties, meat pies, meatloaf, mincemeat, weiners, croquettes, meat pastes. Canned meat. Cold cuts (unless guaranteed pure meat).
- Sauces and condiments: Thickened sauces, bottled sauces, chutney, pickles, chow-show, piccalili. Shef sauce, anchovy sauce, ketchup, horseradish sauce.
- Snacks: Potato chips and French-fried potatoes (unless guaranteed gluten-free).
- Soups: All canned and dried soups, all thickened soups, all cream soups, soup powders.
- Spices: Celery salt, chutney, curry powder, mustard.
- Spreads: Fishpaste, meatspread, chocolate spread, cheese spreads, peanut butter (unless guaranteed gluten-free), sandwich spreads.
- Vegetables: Vegetables in sauces, mayonnaise, cream, boby preparations (unless guaranteed gluten-free). Vegetable mixes.

NOTE: Exceptions to the above list of forbidden foods are any commercial products bearing the special symbol which denotes that they are gluten free or a statement to that effect on the package.

Read all labels carefully. If in doubt if gluten-free (meaning no WHEAT, RYE, OATS, BARLEY or BUCHWHEAT) omit item from the diet. So many processed foods are adulterated with WHEAT FLOUR or MONO-SODIUM GLUTAMATE which contains gluten, and can be added without declaration to salad dressings.

Many instant coffees may contain a certain amount of gluten containing flour. Nescafe is guaranteed gluten-free. Coffee and strong tea act as stressors and therefore, can increase blood fats and cholesterol.

FOODS RECOMMENDED ON GLUTEN FREE DIET

UNREFINED-COMPLEX CARBOHYDRATES

- Grains: Brown rice, whole millet, whole corn.
- Vegetables: Whole lentils, potatoes, parships, string beans, butter beans, dried peas, pumpkins.
- Fruits: Raisins, dates, figs, bananas, coconuts.
- Nuts: Cashews.
- Spreads: Honey, molasses.
- NOTE: Suggested reading FOOD FOOD, GLUTEN FREE by Hilda Cherry Hills, 1976 Keats Publishing, Inc.

COMPREHENSIVE ANSWERS TO NUTRITION

VITAMINS - MINERALS

(c) Wm. R. Borrmann, N.D., D.C.
Diplomate, ICAK

VITAMINS - MINERALS

WHAT IS A VITAMIN?

Vitamins are molecules. These molecules can be broken down into elements of hydrogen, oxygen, nitrogen and carbon.

They serve as microscopic molecules or compounds that become essential links in the trillion or so chemical that go on in our bodies every second. Without vitamins these reactions either would not occur or they would occur improperly.

They also assist all molecules in the body to work together such as Vitamin A and E who assist the body as antioxidants, meaning that they keep oxygen molecules from becoming involved in chemical reactions that they shouldnt.

Vitamins to say it simply are the substances that make food work or do the work that they are supposed to do, and are essential to life. That is to say our basic food groups protein, fat and carbohydrates cannot function or would not know what do do without vitamins. As an example back in the 16th century British sailors existed on 4000 calories per day yet they would die with out the vitamin C in their diet of scurvy despite the 4000 calories.

WHAT IS A MINERAL?

Minerals are atoms. As we said above vitamins are molecules and can be broken down into basic elements. Minerals cannot. It is an element. They are less fragil but much less active. They assist vitamins by providing a chemical atmosphere that vitamins work best in. As examples: Our skeleton structure depends entirely on calcim and phosphorus. Our blood oxygen carrying capacity depends on hemoglobin which in turn depends on iron. Iodine assists in the manufacturing of hormones which are necessary to regulate our body's metabolism. Magnesium assists the vitamins B1, B2, and B6 to do the job that they are designed to do. To assist in preventing muscle spasms and in muscle relaxation potassium is necessary. Manganese and the trace element chromium assist the body in using carobhydrates. Without zinc vitamin A could not function. Without copper the use of vitamin C would be limited. The trace element selenium increases the activity of vitamin E in its control of free radicles and as a antioxidant.

They are classified as one of the six vital nutrients we need for total physical health. Each minute, their are three billion cells that die within our bodies and three billion cells that are created.

WHAT ARE TRACE ELEMENTS

Trace elements are those elements in our system which are imperative to our good health, but which occur in very minute quantities. It has been reported that their are 43 trace elements in tooth enamel.

At one time they where sought to be non essential but it seems the job now is to find which of the trace minerals can be toxic to the body and in what dosage this can occur. To find out enough about trace elements so that they can be used to maintain total health. Trace elements now include cobalt, lithium, selenium, chromium, germanium, vadium and iodine.

NUTRITION

Nutrition is classified not in what we eat but what we absorb. It is not merely a matter of getting a good balance of the major food groups (proteins, fats and carbohydrates),

but it is also necessary to include a proper balance of vitamins, minerals, and trace elements to make those basic food groups do the work that they were designed to do.

This also involves bio-chemical individuality. Each body is different, calling for different calorie needs, as well as vitamin, mineral and trace element needs. Also included is our way of life. That is to say does one smoke (which robs the body of vitamin C), does one drink caffeinated drinks (which robs the body of B-complex vitamins), does one work or live in a polluted environment (air - food ect which robs the body of A,C,E, Selenium), does one suffer undue stress (robs body of vitamin B-complex, C and calcium), does one take drugs such as birth control pills (which robs the body of E, decreases the body's use for A, robs body of 36).

As there does not seem to be any such thing as a perfectly average individual when it comes to vitamin, mineral, trace element requirements. Each individual seems to have his or her own specific needs. The dosage that will help on individual may be too low for another individual or too high for another individual.

Heinz handbook of nutrition states that the average person is not one who has average requirements with respect to vitamins, minerals, etc., but seems to be one who not only has average needs to nutrients but also exhibits requirements for some nutrients which are far above average. Therefore not only will we have special needs for all vitamins but many of us will have specific needs for specific vitamins.

It must be emphasized, however, that all nutrients work together. If for instance a person would be limited to only seven or eight vitamins he would certainly die, for this is an incomplete mixture and not balanced. Also if a deficiency were to exist of only one nutrient assuming that it was an essential nutrient to life, serious tissue damage may result comparable to the same tissue damage that could result from ten simultaneous deficiencies. If the metabolic machinery in the whole person weakens or breaks down, the result may be disease, whether the impairment is due to the defectiveness of one nutrient or ten nutrients.

Research by nutritional authorities seem to indicate that everyone has different nutrient needs, different size tissue cells, different size organs. One may need megavitamin dosages or one may need microvitamin dosages. No two persons have the same hereditary of characteristics carried in his or her body estimated 100,000 genes. Therefore, no two people have the same nutrient needs. Each person's bio-chemical individuality for proper nutrients should be investigated. For any uncorrected nutrient need may result in a chemical imbalance resulting in a tissue cell nutrient disorientation. The degree of the nutrient disorientation determines the degree of health, illness, or resistance to disease

The lesson to be learned is not to take vitamins, minerals, trace elements when you are feeling sick, bad or ill, but to learn if nutritional deficiencies are responsible, then use the nutrient to correct the deficiency or correct the diet and continue use of diet or nutrient or both to prevent deficiency re-occurrence.

VITAMINS AND MINERALS MOST DEFICIENT IN AMERICAN DIET

Vitamins A, C, B12 and Folic Acid

Minerals Calcium, Iron, Manganese, Iodine, Copper, Zinc, Potassium, Manganese, Chromium and selenium.

HOW EFFECTIVE ARE VITAMINS?

At this time there does not seem to be solid answers to that question.

WHAT VITAMINS ARE BEST FOR DISEASE?

There are none suggested for any specific disease. The basic idea is not to supply nutrients for the disease but to supply to the diet nutrients in order that the whole person's chemistry is brought back to normal, in order that the body may heal itself.

HOW CAN WE DETERMINE WHAT WE NEED?

There are health appraisal questionnaires, blood tests, hair analysis and other laboratory and physical test (applied kinesiology) that can assist you in determining your nutritional needs. Find a nutritional orientated doctor in your area to assist you.

BASIC OR MEGA DOSAGE

Dr. Harold Rosenberg and A.N. Feldzamen, Ph.D. state in their book, The Doctor's Book of Vitamin Therapy. To improve our chances of obtaining optimum amounts of any vitamin, mineral etc., we should provide quantities of nutrients far above average whenever this is possible and definitely known to be safe. They recommend these mega amounts to be supplied daily for age groups 21 to 70 for those under weight, overweight and of normal weight. The higher advised for those underweight and the lower amounts overweight and of normal weight. Children are excluded from mega dosages because of their rapid growth and greater biochemical individuality.

WHAT SHOULD ONE EXPECT FROM VITAMINS - MINERALS?

The proper balance of nutrients should leave your feeling strong, full of vigor with all body functions functioning at their optimum level. Normally as you follow a properly balanced nutrient program your body will begin to change (give supplementation at least 14 to 30 days to function), you will begin to feel different. Often this can be alarming, for many times the changes are unpleasant or not what you thought or expected. Generally, vitamins, minerals as well as other nutrients are taken into the body under normal conditions and are usually without any toxic or side reactions providing that (1) we do not have a high rejection mechanism (usually involves a allergy) and (2) that we have a body system or organs or digestive system that is impaired.

Under ideal conditions we should feel:

1. better or to gradually develop a feeling or sense of improvement or well being.
2. energy will increase or sense that you are not as tired as you were or don't tire as easily.
3. feel more rested at end of the day or you have more ambition at the end of the day.
4. You wake with more ambition and not cranky.
5. Little things do not annoy you less anxious.
6. You feel better and happier.

Under adverse reactions such as allergic or toxic reactions we should feel.

1. Allergic reactions such as itching or skin rashes, nauseated, short of breath, indigestion, heartburn, regurgitation of nutrients taken or hives.
2. Migrating aches and pains in the muscles and or joints.
3. Dripping nose.
4. Excessive gas.
5. Insomnia (trouble in staying asleep and or getting to sleep). Nightmares.
6. Increased thirst.
7. Loss of appetite.
8. Feel weak.
9. Diarrhea for no reason, fever blisters, canker sores, dry mouth, constipation.
10. Dizziness.
11. Irritability, nervousness.
12. Dislike for certain foods, craving for certain foods. These usually begin to occur in the first or second week of your nutritional program. If it occurs sooner suspect allergy.

An excellent book to assist you in determining whether or not an allergy exists is the Pulse Test, easy allergy detection by Arthur F. Coca, M.D. in paper back ARCO Publishing Company Inc., New York. Another excellent book is Dr. Mandell's 5-Day Allergy Relief System, Paper Back A Nutri Book.

TOXIC REACTIONS

If, however these symptoms occur two, three or four weeks later and you have ruled out an allergy, you may be experiencing a toxic reaction. In these cases we should feel.

1. Headaches are prevalent as well as swelling of the lymph glands.

When these reactions occur one should (1) discontinue all supplements or any other nutrient program you are on. (2) coffee enemas may be taken to assist the excretion of toxic material (brew one pot of strong coffee let cool to body temperature and use in a knee chest position taking a little at a time. Stopping occasionally to lie on back work to massage injected coffee upward and around colon), (3) at the end of 7 days begin nutritional program with one nutrient at a time for 4 days observe for any symptoms we have listed if symptoms occur discontinue that nutrient or change brands, if no symptoms add another nutrient for 4 days and again observe for symptoms. Continue this system until all nutrients can be investigated.

Note: When any reactions occur you can be assured that your nutritional program is bringing about readjustments in your body chemistry and it must be investigated for either a allergy or toxic reaction.

NATURAL - ORGANIC - CRYSTALLINE -SYNTHETIC VITAMINS

Natural or organic vitamins: Obtained from natural sources and supplying vitamins, minerals, enzymes, amino acids, salts, trace minerals as well as UNKNOWN FACTORS in their natural organic form, and containing natural synergistic which all work

work together.

Crystalline natural vitamins or extracts: Crystalline vitamin is a natural nutrient processed by various means in order to get a single substance or vitamin or mineral in a high concentration, resulting in a highly refined, concentrated, natural crystalline vitamin without any of the unknown factors it was associated with in its natural state. These vitamins are usually sold as vitamins from natural sources, but in nature high potency is never found. There seems to be a meeting of minds so to speak for crystalline vitamins are being put into natural bases, thus achieving the benefits of natural content synergistic activity.

Synthetic vitamins: The chemist today can produce in the laboratory perfect chemical replicas of most any natural vitamin. They are usually made from coal tar or other petroleum derivatives and never compare favorably with natural nutrients.

JUST HOW NATURAL ARE NATURAL VITAMINS?

Many times the so-called natural vitamins are not as natural as they seem. When you see the word standardized as in rose hips concentrate it means that the vitamin C level has been brought up to this level by the addition of ascorbic acid which is a synthetic. This is legal since the FDA does not require a company to state the source of vitamin C on the label or the amount of rose hips powder the rose hips concentrate contains. It seems that the FDA is only concerned with the label stating that the potency of the label is correct, not the source it comes from. This has always seemed strange to me and allows the natural food vitamin distributors an extremely wide leeway in their production of nutrients and the price they charge. As a cup of rose hips powder only contains 25 milligrams of vitamin C you can see that the 100 milligram tablet would contain a high content of inexpensive ascorbic (synthetic) acid and should be rather inexpensive, which sad to say, many times is not the case. This same procedure is carried out with other natural products as well.

The public needs to be aware of this practice of using synthetic vitamins along with natural ingredients and then sold as an all natural product at a higher price. Also that many times a synthetic product manufactured in a laboratory will be built on exactly the same specific pattern and cannot be told apart by any means even by biochemists who are the experts in chemical analysis.

HOW CAN I CHECK ON THE VITAMINS I AM TAKING?

If you wish to verify the product you are now taking for its natural nutrient content write to the company and ask how many milligrams, etc., of rose hips (or what ever substance you have a question about) does the product in question contain, and how much of the vitamin and or nutrient substance in question is accounted for by the addition of a synthetic in other words how much is natural how much is synthetic. These facts may well make a difference in your budget. It makes no sense in paying for a natural product when it contains mostly inexpensive synthetic nutrients.

ARE NATURAL VITAMINS MORE POTENT THAN SYNTHETIC NUTRIENTS?

In the Journal of the Canadian Medical Association Vo. 46, No 413. It states that naturally occurring B-complex are more beneficial since all of the various B-complex factors must be present in proper balanced amounts such as found in yeast.

In the Journal of the American Medical Association Dr. M. Verstraete, M.D., states that the natural oil soluble vitamin K is capable of acting as an antidote against side effects, while synthetic K seems to exert little or no influence on increasing blood clotting induced by anticoagulant drugs.

In the Hippocrates European Medical Journal Dr. H. A. Schweigart, M.D., states that gum, disease responded to treatment using natural vitamins whereas synthetic vitamins failed to clear up gum problems.

In the Journal of Experimental Medicine Dr. Claus W. Jungeblut states that natural vitamin C gave greater assistance to poliomyelitis than did synthetic vitamin C.

In the Journal of Chemical Environment Dr. Threon G. Randolph, M.D., who is one the outstanding allergist in the nation states that synthetic compounds can cause a reaction in a susceptible person when the same substance in the natural state will not, even when both substances have identical chemical structure.

In the Journal of Organic Revolution in Medicine Dr. Raymond Bernard tells of an experiment wherein he placed a fish in synthetic sea water which was chemically identical to natural sea water. Yet ocean fish placed in it died. When natural sea water was added the fish placed in it did not die and the ones who were not dead in the chemically manufactured sea water revived.

In the U.S. Army Nutritional Manual it states that whenever possible any nutrients are needed they should be obtained from natural sources rather than synthetic.

In the American Journal of Digestive Diseases (1:40) states in patients with digestive problems, when they were given synthetic B-Complex, they had uncomfortable reactions with no relief. When natural B-complex was used no uncomfortable reactions occurred and all digestive symptoms left.

This list can go on and on. It points out the fact that there is no such thing as a single vitamin or mineral deficiency. Therefore it is futile to attempt to use a single vitamin for multiple vitamin or mineral deficiencies. It also points out the fact that the treatment of a single symptom is futile.

NOTE

The isolated and or synthetic vitamins and minerals in large doses do have a place in our nutritional evaluation. Their place is in the short term treatment of acute conditions or in severe deficiency conditions, or in cases where only a isolated fraction of a vitamin complex is need for a specific purpose.

In those interested in maintenance nutritional care, that is to say if one wants to protect their health and to prevent disease and or premature aging the use of natural vitamins in the form of brewers yeast, cereal grasses, rose hip concentrates, kelp raw bone concentrate, fish liver oil, vegetable oils are the choices one should consider. In these natural nutrients are found all the vitamins and other nutritional substances which are present in their natural, balanced combinations which are so essential for better assimilation, synergistic action and maximum biological effect on the whole person.

Remember there are 24 different factors in vitamin C complex, 22 known B-complex factors, at least 9 known factors in E complex. Man has yet to improve upon what God has created.

SYNTHETIC AND NATURAL VITAMINS

<u>VITAMIN IS</u>	<u>NATURAL SOURCES</u>	<u>SYNTHETIC IF SOURCE NOT GIVEN</u>
Vitamin A	Fish oils or lemon grass	Acetate or Palmitate
Vitamin B1 (Thiamine)	Yeast or Rice Bran	Thiamine Hydrochloride or Thiamine Chloride Thiamine Mononitrate
Vitamin B2 (Riboflavin)	Yeast or Rice Bran	Riboflavin
Vitamin B3 (Niacin)	Yeast or Rice Bran	Niacin or Niacinamide
Vitamin B6 (Pyridoxine)	Yeast or Rice Bran	Pyridoxine Hydrochloride
Vitamin B12	Yeast, Cobalamin or Cyanocobalamin, Liver	If source not given synthetic
B-Complex	Brewer's Yeast	If source not given synthetic
Biotin	Yeast	d-biotin
Choline	Soy beans or Yeast	Choline Bitartrate
Inositol	Soy beans, Corn or Yeast	If source not given synthetic
Folic Acid	Yeast	Pteroylglutamic acid or if source not given synthetic
Pantothenic Acid	Yeast	Calcium Pantothenate
PABA (Para Amino Benzoic Acid)	Yeast	If source not given synthetic
Vitamin C	Rose Hips, Acerola, Citrus Fruits, Green Peppers	Ascorbic acid or if source not given synthetic
Vitamin D or D3	Fish oils	Irradiated Ergosterol or Calciferol (Vitamin D or D2)
Vitamin E	Vegetable Oils, Wheat Germ Mixed Tocopherols d-alpha tocopherol or tocophyeyl acetate Succinate	Alpha tocopherol acetate or dl-alpha tocopherol (or tocopheryl) acetate Succinate can be natural or synthetic.
Vitamin K	Alfalfa	Menadione
Vitamin P or Bioflavonoids	Citrus Bioflavonoids Rutin, Hesperidin, Citrin	

COMPREHENSIVE ANSWERS TO NUTRITION

WEIGHT LOSS AND IT'S ROLE IN HEALTH AND DISEASE

(c) Wm. R. Borrmann, N.D., D.C.
Diplomate, ICAK

WEIGHT LOSSFORMULA FOR BODY FRAME MEASUREMENTS

1. Determine skeletal size by measuring height to nearest quarter inch.
2. Measure distance around shoulders at their widest part.
3. Add both of these figures together.
4. If total less than 99" you have a small frame.
If total 99.1" to 106" you have a medium frame.
If total 106" or more you have a large frame.

BODY WEIGHT ESTIMATE

Female: Ideal weight for a woman with a small frame is 100 pounds plus 3 pounds per inch above 5' plus 11 pounds. This will give you minimum and maximum weight for your frame.

Ideal weight for a woman with a medium frame is 100 pounds plus 4 pounds per inch above 5' plus 11 pounds. This will give you a minimum and maximum weight for your frame.

Ideal weight for a woman with a large frame is 100 pounds plus 5 pounds per inch above 5' plus 11 pounds. This will give you minimum and maximum weight for your frame.

Male: Ideal weight for a man with a small frame is 100 pounds plus 4 pounds per inch above 5' plus 11 pounds. This will give you minimum and maximum weight for your frame.

Ideal weight for a man with medium frame is 100 pounds plus 5 pounds per inch above 5' plus 11 pounds. This will give you minimum and maximum weight for your frame.

Ideal weight for a man with a large frame is 100 pounds plus 6 pounds per inch above 5' plus 11 pounds. This will give you minimum and maximum weight for your frame.

CALORIC FORMULA TO LOSE WEIGHT

1. Multiply your weight by 15 if male, 12 if female and then subtract 500. This equals the total amount of calories you need per day to lose 1 pound per week more or less.
2. Or take weight you want to weigh and multiply by 15 if male, 12 if female. This equals the total amount of calories you need per day to arrive at that weight.

WEIGHT LOSS CONTINUED

CALORIES AND WEIGHT LOSS

1. When of if you decrease 1000 calories from your weekly diet this will result in a 2 pound loss per week.
2. If you decrease 4000 calories from your weekly diet this will result in a 8 pound more or less loss per week.
3. It must be remmembered that there are 3500 calories in 1 pound of fat. Therefore, if you want to lose 2 pounds per week you have to reduce from your weekly calories at least 7000 calories per week or 1000 calories per day.
4. It is considered by most dietary experts that a 2 pound week loss is considered safe.

CALORIES AND DAILY NEED

1. A person with a moderately active life needs approximately 15 calories if male and 12 calories if female, per pound, per day.
2. A person leading a sedentary life use 12 calories if male and 9 calories if female, per pound, per day.

WEIGHT LOSS NUTRITIONAL FACTS

1. You should not go below 1000-1200 calories per day or you will not get enough vitamins-minerals-carobhydrates-protein and fat from the 3 three major food groups. This is a malnutrition type of diet (modified fast). However, these may be supplemented through the use of nutritional supplements.
2. A ten pound lost per week usually represents only a 2 to 3 pound loss of fat. The rest is lost water-usually occurs only in the first week. After that the usual loss is 2 to 4 pounds per week.
3. Even on a starvation diet.....virtually impossible to lose 10 pounds of fat in a week since each pound of lost fat requires a loss of 3,500 calories per pound.

HOW DOES BODY ACCUMULATE FAT? - WHY ARE SOME PEOPLE FAT AND OTHER'S THIN?

1. The basic rule is; body will gain weight when the total energy factor derived from food ingested, exceeds the amount of energy expended in daily living.
2. There are 3 basic body types I - II - and III.
 - a. body type I is able to consume large amounts of food which is immediately used as energy. Usually the result of a hyper-active gland system.
 - b. body type II is the type that consumes moderata amounts of food, but always fighting weight. Usual the result of a hypogland system (thyroid) or lack of exercise.

- c. body type III has a different bio-chemical system. The average person has 21 feet of intestine, type III usually have 23 feet of intestine. This results in absorption of 10 percent more with each meal eaten. There are others who have only 19 of intestine which would result in less absorption.
3. Some of the physical reasons for these types of people seems to center around constipation. Constipation slows down intestinal tract elimination time which allows food to be more efficiently absorbed. In these cases one should assist peristaltic action through the use of fiber and or bulk laxatives.
 4. The craving for food these types have seems to center around two reasons.
 - (a) Low blood sugar (hypoglycemia) increases appetite and sometimes builds up to a addiction to certain food groups or to certain foods.
 - (b) A malnutrition problem - faulty diet, that results in one missing basic nutrients such as a certain vitamin or mineral or missing basic nutrients such as those that are furnished from the major food groups as, fats, proteins, carohydrates, and simple sugars.

WHAT ABOUT OBESITY?

1. The red blood cells of obese people use 22 percent less energy than those of average weight. Therefore, obese people may gain weight while not eating more than the average person.
2. You don't lose fat cells when you shed weight, they just get smaller.
3. Types of fat people contain: Essential fat which is vital to health and storage fat which contributes to illness.
 - (a) The average college man has 15 percent body fat, 12 percent storage fat and 3 percent essential.
 - (b) The average college women has 25 percent body fat, 12 percent storage and 13 percent essential.
4. It has been estimated that 18 million people in the United States are overweight.
5. It is believed by many authorities that fatness is inherited. You are born with a certain number of fat cells and the more you have the greater the odds you will be fat. Fat cells serve as storage tanks for fat. When you lose weight they grow smaller, the number doen't decrease, but sex drive is lost however.

WHAT ARE BASIC RULES TO LOSE WEIGHT?

1. Change eating habits/patterns.
2. Change food selections.
3. Exercise

WHAT ABOUT EATING PATTERS/HABITS

These are the one's most people condition themselves to.

EATING PATTERNS/HABITS CONTINUED

1. You eat when you want to eat.
2. You eat where you want to eat.
3. You eat as much as you want to eat.
4. You eat what you want to eat.
5. You eat 4 to 6 different foods per meal.

EATING PATTERN QUESTIONNAIRE

Answering any of these questions yes indicates a conditioned eating habit.

1. Do you eat before bedtime?
2. Do you eat more on weekends?
3. Do you eat after meals/
4. Do you eat more at night than during the day?
5. Do you skip any meals?
6. Do you eat more when you eat alone?
7. Do you eat while preparing meals?
8. Do you eat left overs as you put them away.
9. Do you eat when anxious, nervous, upset, emotional, angry, depressed?
10. Do you eat snacks while driving, shopping, reading, studying, watching TV, listening to the radio, doing house work, while working ect?
11. Do you get up at night to eat?
12. Do you drink with each meal?
13. Do you have desert with each meal?
14. Do you eat desserts instead of regular meals?
15. Do you have any craving for a food?

Note: the more questions you answer yes the greater the conditioned eating habit. Also it is wise to remember that if alcohol is taken with a meal it is burned immediately rather than stored thereby allowing solid foods in meal to be converted to fat rather than being burned as fuel and used for energy.

CALORIES - PROTEINS - CARBOHYDRATES and FATS-NUTRITIONAL FACTS

1. There are 4 calories in each gram of protein.
2. There are 4 calories in each gram of carbohydrate/sugar.
3. There are 9 calories in each gram of fat.
4. 10 to 15 percent of one's daily diet should consist of protein.
5. 10 to 30 percent of one's daily diet should consist of fat.

CALORIES - PROTEINS - CARBOHYDRATES CONTINUED

6. 55 to 80 percent of one's daily diet should consist of carbohydrate.
7. 25 to 70 grams of protein are needed daily by male.
8. 15 to 60 grams of protein are needed daily by female
 - (a) one gram of protein for each 2.2 pounds of body weight needed daily male or female.
9. To obtain protein in ounces. Divide ideal weight by 15 for male and 12 for female. Answer equals amount of protein in ounces per day.
10. The body is far more able to utilize the energy from gram of fat than from a gram of carbohydrate, because absorption-conversion cycle of fat is about 15 times longer than that of sugar. Because of this time factor fat is more efficiently used for energy and not stored as fat.
11. Carbohydrates place immediate demand upon the body to do something-either
 - (a) convert it to fat for future use (energy) in time of need.
 - (b) exercise to burn off excessive carbohydrate intake.
12. Body will always burn stored fat first because stored fat converts to fuel easier and provides more energy (calories) than does protein, therefore, making fat the better storage fuel.
13. If you don't eat carbohydrates the body will convert your muscle tissue and other protein tissue into glucose in order to maintain the blood sugar level. This only occurs if you don't have any fat on the body.

MEASUREMENT INFORMATION

1. Gram is basic unit in the metric system 0.035 equals one ounce. There are about 28.35 grams to 1 ounce.
2. 1/5 teaspoon equals 1 gram
3. 2 tsfb equals 1 ounce.
4. 60 grams equals 4 tsfb plus 1 teaspoon equals 2 1/2 ounces.
5. 70 grams equals 5 tsfb equals 2 1/2 ounces.
6. 100 mg. equals 1 gram.
7. 1000 mg. equals 1 mg.
8. 3 1/2 ounces equals 100 grams equals 7 tsfb.
9. 1 tsfb equals 3 teaspoons
10. 2 tsfb equals 1 ounce equals 1/8 cup.
11. 16 tsfb equals 8 ounces equals 1 cup.
12. 60 drops equals 1 teaspoon.

BALANCED DIET FACT OR FICTION?

Dr. John M. Ellis a Texas physician has arrive at this conclusion. Man, Dr. Ellis states will never receive enough nutrients from a ordinary balanced diet. Therefore,

BALANCED DIET FACT OR FICTION? CONTINUED

it is probable that mankind during his or her life time will always need supplements to balance their diet. It has also been stated by other nutritional experts that selecting food from the basic food groups does not protect one from results of malnutrition or related metabolism malfunctioning as the result of bad selection of food, eating habits, fad diets, drugs, foods grown on depleted soil, dyes, pollutants, food additives, (in excess), artificial foods, flavoring agents ect. One should not only eat from the basic food groups but also investigate one's own bio-chemical individuality. What are its needs for vitamins, minerals, protein, enzymes ect, for they play an integral part of any balanced diet with some vitamins, minerals, protein and enzymes being more involved than others. However, we should warn you that you should seek professional assistance from a nutritionally orientated doctor to assist you in determining you bio-chemical individuality.

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COMPREHENSIVE ANSWERS TO NUTRITION

WHAT DRUGS IMPAIR VITAMIN ABSORPTION-UTILIZATION OR ELIMINATION

(c) Wm. R. Borrmann, N.D., D.C.
Diplomate, ICAK

COMPREHENSIVE ANSWERS TO NUTRITION

WHAT DRUGS IMPAIR VITAMIN ABSORPTION-UTILIZATION-OR ELIMINATION?

<u>DRUGS THAT IMPAIR VITAMIN ELIMINATION</u>	<u>VITAMINS AFFECTED</u>
Mineral oil	Vitamins A-D-E-K and unsaturated fatty acids.
Tetracycline (Achromycin-Sumycin-Tetracycl)	Vitamins K Minerals Calcium-magnesium and iron
Glutethimide (Doriden)	Vitamin Folic acid
Cholestyramine (Cuemid-Questran)	Vitamins A-D-E-K and B12
Os-Cal-Mone	Vitamin B6
Kanamycin (Kantrex)	Vitamins B12 and K
Polysporin	Vitamins B12-Folic acid and K
Neo-Sporin	" "
Neomycin	" "
Mycolog	" "
Neo-Cortef	" "
Cortisporin	" "
Lidosporin	" "
Mycifradin	" "
Cathartic agents (Epsom Salts)	Vitamins B2 and K
Clofibrinate (Atromid-S)	Vitamin K
Antacids (Maalox-Mylanta-Gelusil-Tums-Roloids-ect)	Vitamins A-B Minerals Phosphorous
Cortisone (tablets and suspension-Orasone-prednisone)	Vitamins B6-D-C- Minerals Calcium-zinc-and potassium
Sulfonamides	Vitamin K
Chloramphenical (Chloromycetin)	Vitamin K
Phazyme	Vitamin K
Polymyxin (Aerosporin)	Vitamin K
Trifluoperazine (Stelazine)	Vitamin B12
Colchicine-Colbenemid	Vitamin A-B12- Mineral potassium

COMPREHENSIVE ANSWERS TO NUTRITIONDRUGS THAT IMPAIR VITAMIN ELIMINATIONSulfasalazine (Azulfidine-Aso-Gantanol
Gantanol)VITAMINS AFFECTED

Vitamin Folic acid

DRUGS THAT IMPAIR VITAMIN ABSORPTIONPhenobarb with Bentyl or Cantil or
with IsordilVITAMINS AFFECTED

Vitamin K

Indocin (Indomethacin)

Vitamins B1-and C

Asprin

Vitamins B1-Folic acid-and C

Butazolidin (Phenylbutazone)

Vitamin Folic acid

Bactrim-Septra (Trimethoprim)

Vitamin Folic acid

Furadantin-Macrodantin (Nitrofurantoin)

Vitamin Folic acid

Daraprim (Pyrimethamine)

Vitamin Folic acid

Dyrenium (Triamterene)

Vitamin Folic acid

Methotrexate

Vitamin Folic acid

Probital (Pro-Banthine)

Vitamin K

Dicumarol-Coumadin (Coumarins)

Vitamin K

DRUGS THAT IMPAIR VITAMIN ELIMINATION

Aldactone (Aldactazide)

VITAMINS AFFECTED

Mineral Potassium

Nydrazid-Inh (Isoniazid)

Vitamin B6

Serpasil-Apresoline-Esidrix
(Ser-Ap-Es)

Vitamin B6

Apresoline (Hydralazine)

Vitamin B6

Cuprimine (Penicillamine)

Vitamin B6

Diuril-Diupres (Chlorothiazide)

Minerals potassium and magnesium

COMPREHENSIVE ANSWERS TO NUTRITIONDRUGS THAT IMPAIR VITAMIN ELIMINATION

Boric acid

Bronkotabs-Bronkolixer

Chardonna

VITAMINS AFFECTED

Vitamin B2

Vitamin K

Vitamin K

OTHER DRUGS

DES (Diethylstilbestrol)

Anticonvulsants

Dilatin (Phenytoin)

Barbiturates (Phenobarb-
Seconal-Nembutal-Amytal-
Butisol-Tuinal)Oral contraceptives steroids
(Brevicon-Demulen-Enovid-
Lo-Ovral-Norinyl-Ovral)

Betapar

Alcohol

Marijuana and Cocaine

VITAMINS AFFECTED

Vitamin B6

Vitamins Folic acid and D

Vitamins Folic acid and D

Vitamins Folic acid and D

Vitamins B6-C-and Folic acid

Vitamins B6-C
Minerals potassium and zinc

Vitamins B1-Folic acid and K

Vitamin B-Complex-C

HIGH BLOOD PRESSURE DRUGSAldactazide-Aldomet-Diuril-Dyazide-
Hydrodiuril-Regroton-Reserpine-
Ser-ap-es-VITAMINS AFFECTED

Minerals potassium

ANTIARTHRITICSIndomethacin (Indocin)
Phenylbutazone (Butazolidin-
Fenilbutazoma)-Prednisone-VITAMINS AFFECTEDVitamins B6-Pantothenic acid-C
Protein Raw Liver-Kidney-Adrenal
concentrates.

COMPREHENSIVE ANSWERS TO NUTRITIONANTIBIOTICS

Ampicillin-(onmipen-Polycillin-
 Penbritin-Principen-Amcill)
 Tetracycline (Achromycin)
 Erythromycin (Erythrocin-
 Ilotycin-Ilosone)

VITAMINS AFFECTED

Vitamins A-C-Bioflavonoids
 Protein Raw glandular concentrates
 Liver-Adrenal-Thymus

TRANQUILIZERS

Phenobarbital-Diazepam (Valium)
 Chlordiazepoxide (Librium)-
 Meprobamate (Equanil-Miltown)-
 Trifluoperazine (Stelazine)

VITAMINS AFFECTED

Vitamins all the B-Complex group
 at least 50 mg of each of the B-group
 Minerals calcium-magnesium-potassium
 Protein Raw glandular concentrates
 Liver-Brain-Hypothalmus

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Comprehensive Answers to Nutrition

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Vita Chart Vitamins-Minerals

Vita Chart, Inc. 3130 Arlington Ave Bronx, New York 10463

COMPREHENSIVE ANSWERS TO NUTRITION

WHAT IS THE PROPER DOSE OF SUPPLEMENTATION PER DAY?

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COMPREHENSIVE ANSWERS TO NUTRITION

WHAT IS THE PROPER DOSE OF SUPPLEMENTATION PER DAY?

CODE: Column(1) Following levels of supplementation per day. Not toxic effects will be produced at this level.

Column(2) Following levels of supplementation per day. Research dosage range. May produce side effects in some individuals, if taken regularly.

Column(3) Following levels of supplementation per day. Mega research dosage range. May be toxic to certain individuals, if taken regularly.

<u>FAT SOLUBLE VITAMIN</u>	<u>COLUMN(1)</u>	<u>COLUMN(2)</u>	<u>COLUMN(3)</u>
Vitamin A Your need for A is decreased if you are on the pill.	5,000 IU	10,000-25,000 IU	You need at least 10,000 IU of A if you take more than 400 IU of E daily. More than 100,00 IU of A daily can produce toxic effects in adults. More than 18,500 IU of A daily can produce toxic effects in infants.
Vitamin D (Calciferol-Viosterol, Ergosterol-Sunshine Vitamin)	400 IU	400-1000 IU	Dosages of over 5,000 IU daily may effect some people. 25,000 IU daily may produce toxic effects in adults if continued over a long period of time.
Vitamin E (Tocopherol) Unlike other fat soluble vitamins, E is not stored in the body for any length of time as B and C.	100 IU	200-1,200 IU	Essentially non toxic.
F (Unsaturated Fatty Acids-Linoleic-Arachidonic) If there is sufficient Linoleic the others can be synthesized.	Unknown	Should be at least 1 % of total daily calories. Such as 12 tea-spoons of a seed oil.	Unknown For best absorption take with vitamin E. For those who are heavy carbohydrate consumers more F is needed.

COMPREHENSIVE ANSWERS TO NUTRITION

<u>FAT SOLUBLE VITAMIN</u>	<u>COLUMN(1)</u>	<u>COLUMN(2)</u>	<u>COLUMN(3)</u>
VITAMIN K (Menadione) (K1-K2-K3 can be formed in the intestine. K3 is synthetic.	Unknown	300-500 mcg	More than 500 mcg is not advised.
<u>WATER SOLUBLE (VITAMINS) .</u>			
B1 (Thiamine) B1, B2, B6 should be equally balanced to be more effective.	1.2-5 mg	5-300 mg	Very rare.
B2 (Riboflavin) Most common vitamin def- iciency in America.	1.2-5 mg	5-300 mg	Essentially non toxic
B3 (Niacin-Nicotinic acid- Niacinamide-Nicotinamide)	12-18 mg	50-100 mg	In doses over 100 mg daily.
B5 (Calcium Pantothenate- Pantothenic acid-Panthenol)	10 mg	10-300 mg	Essentially non toxic
B6 (Pyridoxine) Women taking pill should take at least 30 mg daily.	1.6-10 mg	50-500 mg	Very rare.
B12 (Cobalamin-Cyanocobalamin red vitamin)	3-10 mcg	10-100 mcg	Essentially non toxic
B13 (Orotic acid) Metabolizes folic acid and B12.	still under research		unknown
B15 (Pangamic acid)	40 mg	50-150 mg	unknown
B17 (Laetrile) Repected by the FDA on grounds it might be poisonous due to its cyanide content. Everyone is strongly advised to consult with physician before using regimen in- volving B17.	0.25 still under research 5 to 30 apricot kernels eaten throughout the day but <u>never</u> at one time.	0.25-1.0 g.	Cumulative amounts of more than 3.0 g. safe. However, not more than 1.0 g at any one time is recommended.

COMPREHENSIVE ANSWERS TO NUTRITION

<u>WATER SOLUBLE (VITAMINS)</u>	<u>COLUMN(1)</u>	<u>COLUMN(2)</u>	<u>COLUMN(3)</u>
Biotin (Coenzyme R-Vitamin H)	150-300 mcg	300-500 mcg	Unknown
Choline Six lecithin capsules usually contains 244 mg each of choline and inositol	100 mg	500-1000 mg	Unknown
Inositol (refer to choline above)	100 mg	250-500 mg	Unknown
Folic Acid (vitamin M- Folacin) Women taking pill should use 1'000 mcg or 1 mg daily. Available by prescription only.	100 mg	400 mcg to 5 mg	Very rare
PABA (Para-aminobenzoic acid)	50 mg	30-100 mg	Long term dosage of mega vitamin dosage not recommended.
C (Ascorbic acid-Cevitamin acid) Those using 800 to 1000 mg daily of C should take a magnesium supplement assists as a deterrent to kidney stones	100-500 mg	500-4,000 mg	No toxic effects, However, some unpleasant side effects can occur in some cases. Those taking ginseng it is better to take 3 hours after taking C or foods high in C.
P (C complex-Citrus Bioflav- onoids-Rutin-Hesperidin) If the ratio of rutin and hesperidin in a formula are not equal, than there should be twice as much bioflavonoid as there is rutin.	unknown	For every 500 mg of C use at least 100 mg vitamin P	Unknown.
<u>OTHERS STILL UNDER RESEARCH</u>			
Vitamin T	Unknown	Unknown	Unknown
Vitamin U	Unknown	Unkown	Unknown

COMPREHENSIVE ANSWERS TO NUTRITION

<u>WATER SOLUBLE (MINERALS)</u>	<u>COLUMN(1)</u>	<u>COLUMN(2)</u>	<u>COLUMN(3)</u>
Calcium Calcium and iron two major deficiencies found in women.	400-800 mg	800-2,000 mg	Excessive dosage over 2,000 may lead to hypercalcemia.
Phosphorus	400-800 mg	800-2,000 mg	Essentially non toxic
Magnesium	200-400 mg	400-1,000 mg	30,000 mg daily may be toxic over an extended period of time- especially if your calcium and phosphorous are high
Potassium	900 mg	900-2000 mg	25,000 mg of potassium chloride can cause toxicity
Manganese	2.5-7 mg	10-15 mg	Rare usually from industrial sources
Iron Most assimilable form hydrolyzed-protein chleate or organic iron that has been processed for rapid assimilation. Is no nonconstipating and easy on a sensitive system. Only 8 percent of ones total iron intake is absorbed and enters blood.	10-14 mg	14-20 mg Ferrous sulfate, inorganic iron, can destroy E, should be taken at least 8 hours before any E is taken. Organic irons: ferrous gluconate, ferrous fumerate, ferrous citrate or ferrous peptonate, do not interfere with vitamin E.	Rare. However, excessive dosages can be a hazard to children. 100 mg over an extended peroid of time may cause some problems in some adults depending on iron used.
Copper	1-3 mg	3-4	Essentially non toxic However, 40 mg taken over extended peroid of time may result in side effects in some people.
Zinc	15	15-30 mg	Dosages over 150 mg daily are not recommended.
Selenium	50-100 mcg	100-200 mcg	Doses above 5 parts per million not recommended. Not advisabel to exceed 200 mcg daily.
Chromium Chelated zinc seems to substitute for deficient chromium.	8 mcg	10-40 mcg	Unknown

COMPREHENSIVE ANSWERS TO NUTRITION

<u>WATER SOLUBLE (MINERALS)</u>	<u>COLUMN(1)</u>	<u>COLUMN(2)</u>	<u>COLUMN(3)</u>
Chlorine Works with sodium and potassium in regulating alkline-acid balance of the blood.	Unknown	Unknown	1,500 mg can cause unpleasant side effects
Cobalt Mineral that is part of vitamin B12	Unknown	Unknown	Essentially non toxic
Fluorine Part of synthetic compound sodium fluoride (that is added to drinking water)and the natural fluoride calcium fluoride.	Unknown	Unkown	Most people get about 1 mg daily from their fluoridated drinking water. 20 to 80 mg toxic.
Iodine	80-150 mcg	150-1,000 mcg	No known toxicity for natural iodine.
Molybdenum	Unknown	45-500 mcg	Essentially non toxic but 5 to 10 parts per million is considered toxic.
Sodium Average daily intake seems to be 2,300-6,9000 mg	Unknown	100-300 mg	14,000 mg can produce toxic effects.
Sulfur	Unknown	Unknown	No known toxicity from organic sulfur but some may occur from the use of inorganic sulfur.

DEPRESSION

ABSTRACT: This paper was written for those patients who where suffering from depression which I believe is associated with rejection. Rejection being the root cause of their problems.

This paper is offered to those of you who also believe that depression may be associated with rejection.

God Bless,

Wm. R. Borrman, N.C.,D.C.

DEPRESSION

There are many times during the course of the year where situations or circumstances cause a person to feel depressed, sad or rejected (rejected being defined as feeling unwanted, excluded, worthless, a feeling of being on the outside looking in and really not knowing how to get in. Pr. 18:4 puts it this way, "A man's spirit sustains him in sickness, but a crushed spirit who can bear?" In Is. 54:4-6, the Lord compares His people Israel to a wife who has been rejected by her husband - a situation all too prevalent today. The Lord says "Do not be afraid, you will not suffer shame. Do not fear disgrace, you will not be humiliated. You will forget the shame of your youth, and remember no more the reproach of your widowhood. For your Maker is your husband....The Lord will call you back as if you were a wife deserted and distressed in spirit....a wife who married young, only to be rejected, says your God."

This may also happen in reverse when the wife rejects the husband and in some instances be worse, for the man feels ashamed of his weakness. It also occurs to those who have felt unloved in childhood; especially the love of a father. The love of the father gives real security, where the lack of it causes the crushed spirit of rejection. Rejection also occurs in a child who is unwanted during pregnancy or where one child in a family receives more love and attention than the other.

The result of rejection is the inability to receive or communicate love. If we are to communicate love, we must first receive love. 1 Jn. states: "We love because He (God) first loved us." A person who has never been loved cannot transmit love. This tragedy frequently goes from parents to children generation after generation.

The person who has been rejected will usually react in one of three ways or in all three ways. (1) Will give in (2) Hold out (3) Fight back. This in turn results in progressive symptoms beginning with LONELINESS leading to MISERY leading to SELF-PITY leading to DEPRESSION leading to DESPAIR leading to a DEATH WISH ("I wish I were dead") or SUICIDE.

Usually the holiday season prompts more suicides than any other time of the year. This is the GIVING IN SYNDROME LEADING TO SUICIDE. The HOLDING OUT SYNDROME is characterized by INDIFFERENCE, inciting such statements as, "No one or anything will ever come close enough to me again to hurt or reject my spirit. I will never allow it to happen again." The FIGHTING-BACK SYNDROME is characterized by RESENTMENT which leads to hatred. Hatred if outgoing leads to hurting the one you have resentment against. Hatred if directed inward leads to disease of body tissues and organs of multitude varieties, especially of the eating diseases such as arthritis, cancer, etc. Hatred also leads to rebellion which scripture says is related to witchcraft (1 Sam. 15:23). Therefore hatred and rebellion usually leads to some kind of involvement with the occult.

We have received a gift from God in the form of Jesus Christ, who took upon Himself all the evil that was due us, that we might receive, in turn, all the good that was due to Him. These are just seven of the gifts that were given to us:

1. Jesus was punished for our sins, that we might be forgiven.
2. Jesus was wounded for our sins, that we might be forgiven.
3. Jesus was made sin, that we might be made righteous.
4. Jesus was made a curse, that we might receive the blessing.
5. Jesus died our death, that we might share His life (Is. 53:4-5, 2 Cor. 5:21, Gal. 3:13-14).
6. Jesus also bore our despair and rejection not only from man but from God, so that we might receive ACCEPTANCE (Is. 53:3, Mt. 27:45-46, 50-51).
7. Jesus was despised and rejected by men (Is. 53:3). My God, my God, why have you forsaken me? (Mt. 27:45-46)

How do we receive that acceptance that Jesus purchased for us? Scripture tells us that there are four basic steps. (1) You must forgive every person who has ever rejected you or hurt you in any way. Jesus said in Mk. 11:25, "And when you stand praying, if you hold anything against anyone, forgive him, so that your Father in heaven may forgive you your sins." When it involves your parents, it states in Eph 6:2-3, "Honour your father and mother - which is the first commandment with a promise - that it may go well with you and that you may enjoy long life on earth.

(2) You must make a decision with your will to lay down hatred, resentment, bitterness and rebellion. Scripture tells that as a person thinks in his heart, so is he. If you continue to think on hatred, resentment and bitterness, the can poison your whole way way of life. Phil. 4:8 states, "Finally, brethren, whatsoever things are true, whatsoever things are honest, whatsoever things are just, whatsoever things are pure, whatsoever things are lovely, whatsoever things are of good report; if there be any virtue, and if there be any praise, THINK ON THESE THINGS.

(3) By faith you must accept what God has to say in His word. You must accept that you are accepted. You must believe that God wants you to be His child. Believe that when you come to God through Jesus, God accepts you. When you come to God in Jesus, you are the object of His special favor. You must believe God's eternal purpose which was before creation, that we might become His children - His sons and His daughters. Eph. 1:3-6, "Praise be to the God and Father of our Lord Jesus Christ, who has blessed us in the heavenly realms with every spiritual blessing in Christ. For He chose us in Him before the creation of the world to be holy and blameless in His sight. In love, He predestined us to be adopted as His sons through Jesus Christ, in accordance with His pleasure and will - to the praise of His glorious grace, which He has freely given us in the One He loves. Eph. 1:4-6, "According as He hath chosen us in Him before the foundation of the world, that we should be holy and without blame before Him in love: Having predestinated us unto the adoption of children by Jesus Christ to Himself, according to the good pleasure of His will. To the praise of the glory of His grace, wherein HE HATH MADE US ACCEPTED IN THE BELOVED."

(4) This for some is the hardest to do- to accept oneself. We have the tendency to label ourselves failures while God labels us "My Son" or "My Daughter". We must accept ourselves as God has because in Jesus we are new creations, God's workmanship. 2 Cor. 5:17 states, "Therefore, if anyone is in Christ, he is a new creation; the old has gone, the new has come! Eph. 2:10, "We are God's workmanship, created in Christ Jesus....." The word "workmanship" in the original Greek means "CREATIVE MASTERPIECE". We should see ourselves as God see us - a CREATIVE MASTERPIECE. If we criticize ourselves, we are criticizing God's handiwork.

In conclusion: to receive the ~~acceptance~~ God has for us; we must FORGIVE everyone that who has rejected ~~you~~ or harmed you in any way. (2) CHANGE OUR THINKING..... give up thinking ~~in~~ bitterness, resentment, hatred and rebellion. (3) BELIEVE that when we ~~come~~ to God through believing in His ~~pr~~ God accepts you. (4) ACCEPTANCE of ~~yourself~~, the greatest challenge of all for many of us.

Let us pray that we accept not ~~only~~ ourselves as God sees us, but also forgive all those who have rejected us ~~in~~ any way. Let us truly be BORN AGAIN IN THE ACCEPTANCE OF GOD.

FATHER, I THANK YOU THAT YOU LOVE ~~me~~, THAT YOU GAVE JESUS, YOUR SON TO DIE ON MY BEHALF. THAT HE BORE MY SINS, ~~TOOK~~ MY REJECTION AND PAID MY PENALTY. COMING TO YOU THROUGH HIM I AM NOT ~~REJECTED~~, I AM NOT UNWANTED, I AM NOT EXCLUDED. I BELIEVE YOU REALLY LOVE ~~me~~. I REALLY BELIEVE I AM YOUR CHILD ~~AND~~ YOU ARE MY FATHER. I BELONG TO YOUR ~~FAMILY~~, THE BEST FAMILY IN THE UNIVERSE. HEAVEN IS HOME WHERE I REALLY BELONG.

I NOW MAKE THE DECISION WITH MY ~~WILL~~ TO GIVE UP ALL BITTERNESS, RESENTMENT, HATRED AND REBELLION AGAINST.....

I ACCEPT MYSELF THROUGH THE ~~FISHED~~ WORK OF JESUS CHRIST ON THE CROSS WHICH HAS MADE ME RIGHTEOUS ON THY SIGHT.

FATHER, I THANK FOR YOUR ACCEPTANCE ~~AND~~ LOVE. AMEN.

UPDATE ON CELLULAR TRACE MINERAL ANALYSIS BY HAIR

John W. Brimhall, B.A.,D.C.

ABSTRACT: I feel an update on hair analysis and its usefulness is needed. Hair analysis, like Applied Kinesiology has enjoyed it's uses but has also received it's abuses. Even with all the pros and cons that have been postulated in the last few years, we feel hair analysis is very useful in our practice in determining not only heavy metal toxicities but also metabolic trends.

Jeffrey Bland, Ph.D, frequently states a saying when he talks on hair analysis that goes something like this: "Hair analysis has limitations, but we can't throw the baby out with the bathwater." We, like Jeff have been using hair analysis for many years We have personally utilized the technique for around ten years and have found it to be very helpful in patient care. We find it more useful in the complicated patients.

It is well known that that every cell in the human body contains approximately 5,000 enzymes. These enzymes are essential for the biochemical reactions that take place in the body. It is estimated that there is 2,000,000 conversions of substrate molecules per minute. Many of these enzymes require trace minerals for activation. The balance of the mineral in relationship to each other is as critical as excesses or deficiencies

individually.

Many studies show there are declining amounts of minerals in the soil. There seems to be specific mineral deficiencies that cause others not to be utilized properly because of the inadequate mineral ratios. An illustration reported by Harvey Ashmead, Ph.C., Ph.D. was on a four year study conducted in 11 midwestern states on 4,000 grain samples. It revealed the fertilizers do not contain the trace minerals needed. Corn, was analyzed over a three year period with an average of 2.56 parts per million copper. In the last year of the study the copper content of the corn dropped to .82 parts per million or a reduction of 66%. At the same time it was found that the average iron content dropped from 21 parts per million to 15 parts per million over the three year study. The calcium content in the oats from the same areas fluctuated from .1% to .05%. This becomes more complicated when we realize animals eating the same food stuffs will also be deficient in these trace minerals. These animals were reported to have increasing health problems demonstrated by convulsions, hemorrhagic effects, poor growth, scouring, etc.

Albrion Lab in Ogdon, Utah conducted many soil assays to determine the trace mineral level in soils during the past few years. They have found the soil very depleted of minerals in most cases. In a few cases, the company found high levels of some trace minerals, yet the plants grown on this high mineral soil showed excessively low levels of the essential trace minerals in their roots, leaves, stems, etc. They were also found not to be growing normally. It was Dr. Ashmead's opinion

that they either lacked a particular element or have an imbalance of minerals with an improper chemical hook up presenting poor assimilation and poor growth of the plants. As you know, chemical fertilizers do not put back chromium, Selenium, zinc, etc. in their preparations.

One of the criticisms of Hair Analysis has come from the lack of correlation between blood studies and hair studies. I would like to remind us that hair reflects intra cellular levels as a whole and blood represent extra cellular or transport minerals. Therefore they should not be a direct correlation but sometimes even an inversed proportion is noted. I plan on writing a paper for the winter journal that will compare blood and hair studies I have done on patients at the same time. At this time, let us surprise to say that there is not a direct correlation between hair analysis and blood studies as they reflect different sights of use and function. Sodium and potassium abnormalities in the blood and in the hair both can be an indication of adrenal insufficiency, etc., but they will not directly correlate as to being both high in the hair and both high in the blood or both low in the hair and both low in the blood they may actually be an inverse relationship. But both speak to adrenal malfunction.

Some users of Trace Mineral Analysis say Hair Analysis gives you everything you need to know about a patient. The scientific community says that it cannot be substantiated and Hair Analysis users are abusing the tool. I feel there is a happy medium somewhere in the middle. We compare physical findings, symptoms, all kinesiological findings, blood studies,

hair analysis, etc. We try to use all of these findings to ours and the patients benefit. The rest of this article consists of how we interpret a hair analysis. We then use that information coupled with our other findings.

INTERPRETATION HINTS UP-DATE

1. Calcium and magnesium high together are a hypoglycemic trend. This is especially true if sodium and potassium are low or in another adrenal stress picture.
2. High calcium may be indicative of decalcification, osteoporosis, arteriosclerosis, hypercalcemia, poor hormone balance and other endocrine imbalances. Always check for excessive intake. High calcium/magnesium may be vitamin D excess as well as possible hyperparathyroid function.
3. Calcium deficiency has been found in osteoporosis, nervousness, irritability, insomnia, bone pain, headaches, heart palpitation, slow pulse rate, rickets, renal malfunction, muscle or menstrual cramps. Also, fever etc. in teething children. Low calcium/magnesium ratios is suggestive to hypoparathyroid function. Supplement vitamin D, sunlight, exercise and additional calcium.
4. High Magnesium has been associated with junk food diets or with excessive phosphorus containing food ingestion and low calcium intake. Magnesium is relatively non-toxic.
5. Magnesium deficiency has been associated with heart palpitations, neuromuscular disorders, cardiovascular and kidney problems. It has been found in hyperexcitability, hair loss, ulceration, infection, calcification of the kidneys and hormone imbalance. The symptoms of deficiency may be weakness, cramps, spasms, pallor, confusion, depression, sensitivity to noise and proneness to heart seizure. Many enzymes are dependent on magnesium (80% of the 5,300 systems).

6. Calcium/magnesium ration is approximately 7-9 :1.
7. Sodium and potassium low together associated with adrenal stress.
8. Sodium and potassium high together associated with adrenal fatigue and insufficiency as well as a tendency toward infection, allergies and nasal congestion.
9. Sodium/potassium is approximately 2.5-5 :1.
10. Sodium high is found in heart disease, advanced liver and kidney diseases, hypertension and high blood pressure. Make sure to check excessive salt ingestion and soft water consumption.
11. Low Sodium is associated with vertigo, achlorhydria, vomiting, mental apathy, heat prostration, weakness and respiratory failure.
12. Potassium excess may be associated with kidney malfunction, adrenal exhaustion, dehydration, Addison's disease, diabetic acidosis and paralysis.
13. Potassium deficiency is associated with water retention, poor muscle mobility, poor or stunted growth, poor parastalsis and resultant infections and constipation. Nervousness, insomnia, irregular or slow heart beat, proneness to heart seizures and typical exhaustion pattern may also sometimes be found in deficiencies. Being fearful, having shortness of breath, irrational at times and geophagia have also been correlated to low potassium.
14. Copper excess has been associated with a choking off of the cell and destruction of vitamin C. It increases the oxidation rate of adrenalin, interferes with magnesium and zinc enzyme systems due to high complex stability. Copper is found mainly in the liver, heart, spleen, kidneys, brain and blood. In excess it is

a toxic element and may cause behavioral dysfunction e.g. moody, erratic, explosive or schizophrenic. Zinc supplements help to remove if elevated, as well as chelating foods e.g. cooked beans, eggs, onions or garlic.

15. Copper deficiency is associated with nutritional deficiency, poor elastin formation, anemia, inability to hold an adjustment, poor digestion, demylenation, hair loss, graying of hair, aortic aneurism, inability to detoxify adequately and is involved in steroid hormone metabolism.
16. High copper and calcium with low Zinc and manganese have been said to be found in cancer trends.
17. Low copper, iron and manganese may all need to be nutritionally supported in anemia if deficiencies exist.
18. High copper and low zinc is said to be found in many schizophrenics.
19. Zinc excess may be associated with interference with iron and copper, anemia (excess levels of zinc will eventually lead to anemia), anorexia, decreased food consumption and weight loss.
20. Zinc deficiency may be associated with diminished sense of taste, delay in intestinal absorption, loss of fertility, prostate conditions, low resistance to infection, slow healing, interferes with formation of RNA and DNA, arteriosclerosis, vertigo, tendonitis, anorexia, white spots on fingernails, washboard nails, eczema and night blindness.
21. Iron excess may be associated with liver malfunction or malignancy, hemochromatosis, and siderosis, chronic infections, genetic metabolic errors and pancreatic disorders.

22. Iron deficiency may be associated with anemia, weakness, brittle nails, fatigue, difficult breathing, pale skin, sore tongue or mouth with cracks around the lips, insufficient hydrochloric acid and pH balance in the digestive system. It may be caused by ulcer, infection and may be associated with a poor ability to hold a spinal correction. Vitamin C helps enhance its absorption and B-12, folic acid and B 6 help utilization. Iron taken with a meal helps absorption due to the acid medium and iron should not be taken with vitamin E.
23. Manganese excess has been considered as a criminal in demyelination. B-1 is used to help lower high levels. Apathy and ataxia are common in toxic levels. Its natural antagonism to iron could depress iron levels if excessive. Contamination is usually occupational but may come from contaminated well water.
24. Manganese deficiency is associated with rheumatoid arthritis, thyroid malfunction, hypertension - drug usage, recurring vertebral subluxations, failure to grow, sexual processes, deformation of bones, poor equilibrium, myasthenia gravis, lupus, anemia symptoms, faulty cholesterol metabolism. It is necessary to fat-carbohydrate metabolism - this also needs an acid medium for absorption.
25. High zinc with low copper and manganese has been considered a low thyroid profile.
26. Chromium excess is associated with diabetic like symptoms, atherosclerosis, impaired glucose tolerance, impaired carbohydrate lipid and protein metabolism and decreased longevity.

28. A typical diabetic type pattern would be a low chromium, high calcium/magnesium ratio and zinc and manganese frequently deficient also.
29. Lithium is thought to play an important role in the personality. It is suspected to have an effect on serum lipids protective effect on the incidence of atherosclerotic heart disease.
30. Cadmium was called the dragon's teeth by Dr. Schroeder for its poisonous reaction and bizarre effects that even small doses can cause. Most recognized potential problem is hypertension. Cadmium has the ability to displace zinc in enzyme reactions and on the arterial wall. Where cadmium displaces zinc on the artery, there are accumulations of fat and cholesterol. Cadmium, once in the body, concentrates in the kidneys, liver and blood. It is considered more toxic than lead or mercury. Excessive cadmium contributes to heart attack, stroke and thrombosis. It can cause serious vascular disease, arteriosclerosis, cerebral hemorrhage, enlarged heart, hypertension, high blood pressure, possible emphysema and decreased fertility. Sources of contamination may be zinc smelters and refiners and copper smelters, rubber tires, plastics, pigments, plated ware, alloys and insecticides are some of the elements containing cadmium. Some foods have a lot of cadmium, examples are, oysters, foods contaminated in the processing, some instant coffees and teas, some canned foods, kidneys of pigs given cadmium as a worm killer, gelatin, fish dried on chicken wire and some cola drinks. We used to get it from dental fillings

but we don't any more. Pigments can be a source, for cadmium yellow and cadmium red are fast colors; some French lipsticks have it. A necklace of candy "luv" beads made in Hong Kong was colored with cadmium.

31. Lead is highly toxic and more prevalent each year with the breakdown of leaded gas. There are multiple symptoms and side effects. Such as, delta-amino-leulinic acid dehydratase, which is an enzyme essential to red blood cell formation and is inhibited by lead exposure.

The gastro-intestinal or abdominal symptoms are: constipation diarrhea, malaise, nausea, abdominal pain and loss of appetite.

The neuromuscular symptoms are: muscle weakness and discomfort, easy fatigue, tremors degeneration of motor neurons and axons, atrophy and gout.

The CNA symptoms are: Clumsiness, vertigo, loss of coordination, insomnia, headaches, restlessness, mental retardation and emotional instability.

Lead is often found in arthritics due to the increased levels of hyaluronidase it causes. Dr. Schroeder implies that heavy metal toxicity may be a cause factor in cancer and many other debilitating diseases.

32. Selenium deficiency can be associated with increased risk of cancer and increased mercury toxicity. Low selenium in hair has also been associated with pancreatic insufficiency and resulting protein malabsorption. Selenium is a strong antioxidant, and is essential to growth and may help prevent nutritional muscular dystrophy. Selenium is essential for the activation of glutathione peroxidase and activates vitamin E in its protection against oxidation-induced cellular damage,

including cardiac toxicity of drugs, aging pigment, peroxidation of fats and blood hemolytic problems. The daily intake should be between 90-200 micrograms equivalent to 3-5 tablespoonsful of primary yeast.

33. Selenium excess may be a result of the use of Selsun Blue shampoo, or as a result of ingesting high selenium foods. Its toxicity can be dangerous and lead to skin eruptions, damage and is often associated with a garlic-like odor to the breath. High sulfur foods can help rid the body of selenium, these foods include cooked beans, eggs and onions. Before initiating therapy, excess selenium should be confirmed by a pubic hair analysis, blood or urine test.
34. Mercury is a toxic metal and is present throughout the biosphere. In humans it is concentrated in the brain, kidneys, liver and lungs. Like lead, it is incorporated in the body via inhalation and the food chain. The symptoms of mercury toxicity are: Loss of appetite, loss of weight, tremors, insomnia, shyness, nervousness, dizziness, frequent colds, diarrhea, sore gums, albuminuria, fatigue, headache, impaired concentration and memory, tingling or numbness of fingers and mouth, clumsiness, atoxia, inability to speak clearly, concentric defect of visual fields and hearing defects.
- Sources of mercury contamination are: Coal burning, dental amalgams, ointments, paper, cosmetics, adhesives, organomercurial pesticides, felt antiseptics, camera film, floor waxes, canvas, plastics, water based paint, clothing fabric softeners, chemical fertilizers, pharmaceuticals and fluorescent lamps.
- Low selenium levels in hair with increased mercury indicate an increase in brewers yeast might be helpful.

35. Arsenic occurs in coal and oil. In spite of its reputation as a poison, it has a low order of toxicity to mammals, and in small doses for life has no detectable biological effects. It is well tolerated, there are relatively large amounts in seafood, and it is doubtful that arsenic is innately toxic at present levels of exposure (in fact it promoted longevity in rats.) In man, however, it causes skin lesions which can result in cancer. Arsenic has multiple ill effects on the body. It is considered to be the only heavy metal that consistently can cause cancer when taken continuously into the stomach and it causes skin lesions and pigmentation. These may become cancerous and especially on the palms and soles. Its source of exposure and insecticides, fungicides, weed killers, alloys, medicines and pigments.
36. Nickel is not well researched on a hair analysis. More is being suggested in the literature however. Elevated nickel is thought to be related to certain contact dermatitis so it has been suggested high elevations may be related to increased carcinogenesis. High levels may occur in patients who suffer from a blockage of blood flow to the heart (myocardial infarction), strokes, severe burns and in toxemia of pregnant women. Nickel activates several enzymes and may contribute to stabilization of DNA and RNA. It seems to increase in leukemia patients. It replaces zinc in the formation of insulin and activates several enzyme systems and can overactivate these systems as levels rise.
37. Tin when elevated has been suggested to be involved in toxicity and potential mitochondrial energy production uncoupling in active aerobic tissues. The major sources of tin in the environment include stannous fluoride additives in toothpaste,

metal alloys containing tin and some food additives.

38. Aluminum at a high level may indicate the patient may be suffering from systemic aluminum overload resulting in toxicity. The thyroidism, influencing bone dynamics. Processed foods containing aluminum additives should be checked as possible sources of contamination as well as checking patients aluminum silicate antacid use, aluminum cookware, soft water and aluminum vessels.
39. Cobalt deficiency is still under clinical investigation. The sole use of cobalt is as the cobalamine vitamin B-12. Low levels may be associated with low systemic stores of cobalt, and be related to pernicious anemia. This association is not conclusive.
40. Cobalt excess is also still under investigation. The major sources of cobalt are organ meats, red muscle meats and some beers which used cobalt as a preservative. There were a few reports of cardiac problems in beer drinkers who ingested excess cobalt in their beer.
41. All heavy metals respond somewhat to natural chelation with vitamin C and E, amino acids, apple pectin, EDTA, legumes and others. It is more difficult for the body to absorb toxic metals if your good trace elements are adequate, e.g., calcium, zinc, manganese, etc. One must not forget that a remedy becomes a poison if the concentration becomes too great. Metals are two edged swords and balance is the only sheath that brings health.
42. Cardiovascular pathology with normals, the calcium/zinc ratio averages 3.8/1. In a large series of patients with severe arteriosclerosis, the average was 4.8/1. Calcium depresses the absorption and activity of zinc. Adult onset diabetes and (zinc deficiencies) have been associated with vascular pathology. Zinc diet supplementation should be a part of every treatment regimen for this condition. Copper is many times deficient and

is necessary for elastic tissue formation. Chromium deficiency is also a common deficiency and is associated to diabetes and it's necessity to be in formation of healthy arteries.

43. Diabetics: The calcium/zinc ratio alteration noted in arteriosclerosis is also seen in diabetics. High calcium depresses zinc activity and absorption. Magnesium is often deficient. Since 50% to 80% of all enzymes contain magnesium, an enzyme deficiency develops. Chromium deficiency causes poor entry of glucose into the cell. Chromium is a cofactor with insulin. Chromium values in diabetics have been reported to be 30% lower than average non-diabetics. Manganese deficiency is often seen also and is related to the Krebs Cycle. Both sodium and potassium may be very low.
44. Hypertension: Elevation of both cadmium and iron has been linked with hypertension. In the case of iron, this may be but the result of chronic, low grade hemoconcentration secondary to decreased cardiac efficiency, rather than a primary etiologic factor. Copper may be elevated, several pressor peptides require it. Magnesium deficiency has been noted frequently.
45. Nerve Impulse Transmission: Nerve impulse function is impaired when there are low calcium/magnesium and altered magnesium/manganese ratios, especially with a high sodium/potassium ratio. Low calcium, particularly when in combination with low zinc, leads to decrease in monamine oxidase activity as well as a decrease in the activity of the tyrosine enzymes. These metabolize CNS and peripheral nerve amine toxins.

46. Schizophrenia: In many cases (they are not homogenous) high calcium, copper and iron are seen in both hair and serum. Low sodium, zinc and magnesium is common. High lead, cadmium and mercury, as well as low chromium, is not unusual. High copper directly causes hyperexcitability; it destroys vitamin C and increases the oxidation rate of adrenalin. Due to higher complex stability it interferes with magnesium and zinc enzyme systems. The result of the latter is increased muscle irritability. A common additional consequence of copper enzyme blockage is increased iron excretion, often while maintaining a relatively normal serum iron level.
47. Reduced Copper/Manganese/Chromium: This is suggestive of fat metabolism problems resulting from endocrine imbalances, the thyroid, adrenal, liver and pancreas functions should be checked.
48. Magnesium/Manganese: This ratio is a very important consideration and should be around 14:1. Magnesium naturally has a sedative effect on the autonomic nervous system and manganese naturally stimulates it.
49. Distilled or highly filtered water is best, however, multiple liquid minerals or a multiple mineral tablet must be taken to offset loss of minerals in the body. Distilled water is a natural chelator.

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A BIOMECHANICAL MODEL OF VERTEBRAL FIXATIONS

Katharine M. Conable, D.C.

ABSTRACT: Applied Kinesiology fixation analysis as presented in the major A.K. texts is reviewed and discrepancies noted. A model of the fixation complex is described which accounts for palpatory findings and the most commonly used pattern of correction.

The treatment of spinal fixations or "microfixations", characterized by specific bilateral muscle weaknesses, has been a fundamental in Applied Kinesiology for years.^{3,4} It is taught in the first session of the I.C.A.K. basic 100-hour syllabus. It is also an area of considerable confusion for students and teachers alike. In my attempts to fully understand this subject so that I might teach it more clearly, I have discovered disagreement as to precisely how fixations are "supposed" to be adjusted. I consulted the major A.K. texts and several prominent instructors and got conflicting explanations and procedures. It seemed there was little disagreement on the standard A.K. analysis of fixations, involving a two-step process of motion palpation and a decision on which two of three vertebrae to adjust. However, once it got down to where the hands were placed and why, confusion reigned. I believe that the lack of a sufficiently detailed explanation of why we thrust in the direction we do, of which muscles we conceive to be hyper- or hypotonic, is the basic reason for the confusion which abounds on the subject. If a student cannot get a definitive answer as to how the Rotatores create fixation or why in an anterior fixation we adjust the bottom vertebra on the middle one, etc., he will never feel fully certain of the technique. There will be a moment of blankness

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whenever he considers the subject and he will not use the material.

Fixation analysis was first published by Goodheart in his 1967 Research Supplement (The Neurovascular Reflex and its Relationship to Muscle Balancing).³ At this time the motion analysis was described as having primarily one stage. The doctor attempted to counter rotate the vertebrae in an area of suspected fixation and isolated a group of three which resisted counter rotation more than their neighbors. These fixated vertebrae were then rotated to each side. The doctor grasped the transverse processes in the cervicals and pressed on the spinouses in the thoracics and lumbar. One direction would be found markedly more resistant than the other. The side to which it was hard to rotate the vertebrae was understood to be the "posterior" side, on the rationale that vertebrae move more easily into lesion than out of it or they would have corrected themselves. In the cervical spine an evaluation was made as to whether it was more difficult to move the posterior side posterior to anterior (P to A) or the anterior side anterior to posterior (A to P). If the "anterior" side was more resistant to the correction of its "anteriority" this was called an "anterior facet fixation" and the bottom vertebra was adjusted on the middle. If the "posterior" side was more resistant to correction of its "posteriority" it was called a "posterior facet fixation" and the top vertebra was adjusted on the middle vertebra.

This analysis breaks down in the thoracic and lumbar spine, as one cannot push A to P on the anterior side to

FIXATIONS: Conable pg 3

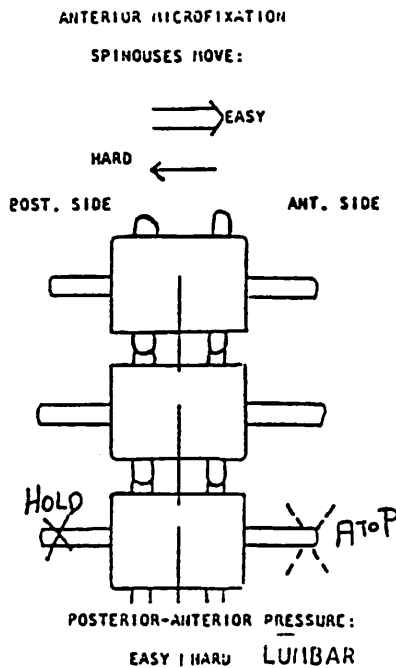
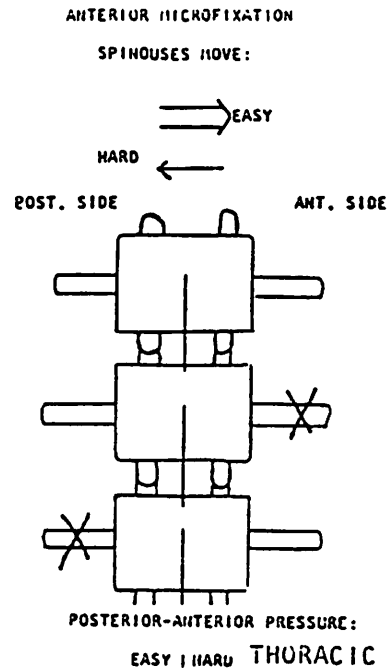
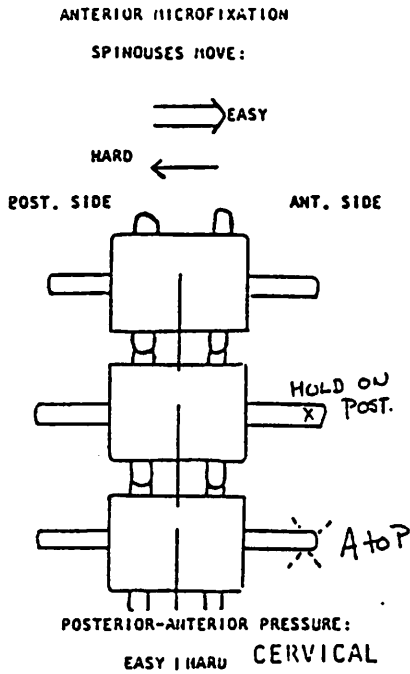
evaluate it. Goodheart does not address this point. He says only (p. 37), "The vertebrae of a group posterior facet fixation will strongly resist efforts to correct the posteriority....The vertebrae of a group anterior facet fixation will strongly resist efforts to correct the anteriority.". In this regard he speaks of "derotation resistance". It would seem that when the spinous alone is being used as a lever, it is impossible to determine whether resistance in one direction is due to resistance of the facets on the anterior or posterior side. This point may have been addressed in the lectures of the time, but is not addressed in print here.

The direction and manner of correction was specifically described. It was to correct the "anteriority" of the bottom vertebra in an anterior fixation, and to correct the "posteriority" of the top vertebra in a posterior fixation. Where possible in an anterior fixation, the bottom vertebra was adjusted A to P on the anterior side, while the middle vertebra was stabilized. In the case of lumbar, the posterior side of the bottom vertebra was stabilized while the anterior side is adjusted to the posterior by a thrust on the upper shoulder in a lumbar roll position. No mention is made of the manner of determining or adjusting an anterior fixation in the thoracic area. It is presumed that this could be accomplished by adjusting P to A on the "posterior" side of the bottom vertebra and counter thrusting on the middle vertebra with the patient prone. A skillful variation of a supine "anterior move"

FIXATIONS: Conable pg 4

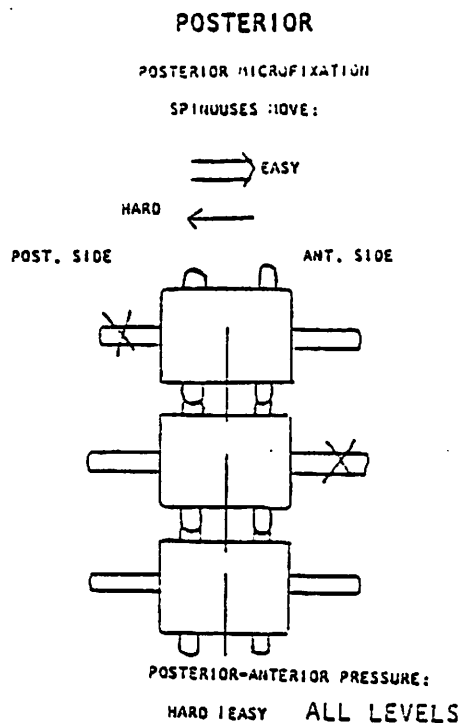
would accomplish the same thing, allowing the "anterior" side of the bottom vertebra to drop posterior into a gap left while contacting the posterior side of the bottom vertebra and the opposite side of the one above. Graphically this becomes:

GOODHEART
ANTERIOR



FIXATIONS: Conable pg 5

Although I will use the thoracic drawing of this procedure for later comparison, it is necessary to remember that where possible Goodheart described contacting the anterior side of the inferior vertebra and thrusting to correct the anteriority on the fixated side of an anterior fixation.



4

In the 1970 Applied Kinesiology Research Manual, Goodheart introduced the concept of specific bilaterally weak muscles which would consistently be found when fixations existed in specific areas of the spine. These are listed in many Applied Kinesiology texts and are not particularly in dispute. Again for the vertebrae it appears to be essentially a one-step analysis. The fixated vertebrae are rotated right to left and

FIXATIONS: Conable pg 6

left to right to determine the direction which resists motion. However the specifics of determining whether the anterior or posterior facets are locked is not spelled out. When the sacrum is discussed, Goodheart spells out a fully two-step analysis. First, the sides of relative anteriority and posteriority are determined according to the direction which resisted rotation. Second, P to A pressure is exerted on each side of the sacrum to determine relative resistance. The more resistant side is taken to be fixated, and may be either the anterior or posterior side. If it was the anterior side, the sacrum would be moved in a manner to allow it to go A to P on the anterior side. If the posterior side was fixated, it would be moved P to A. The correction for the vertebrae is described as it was in 1967.

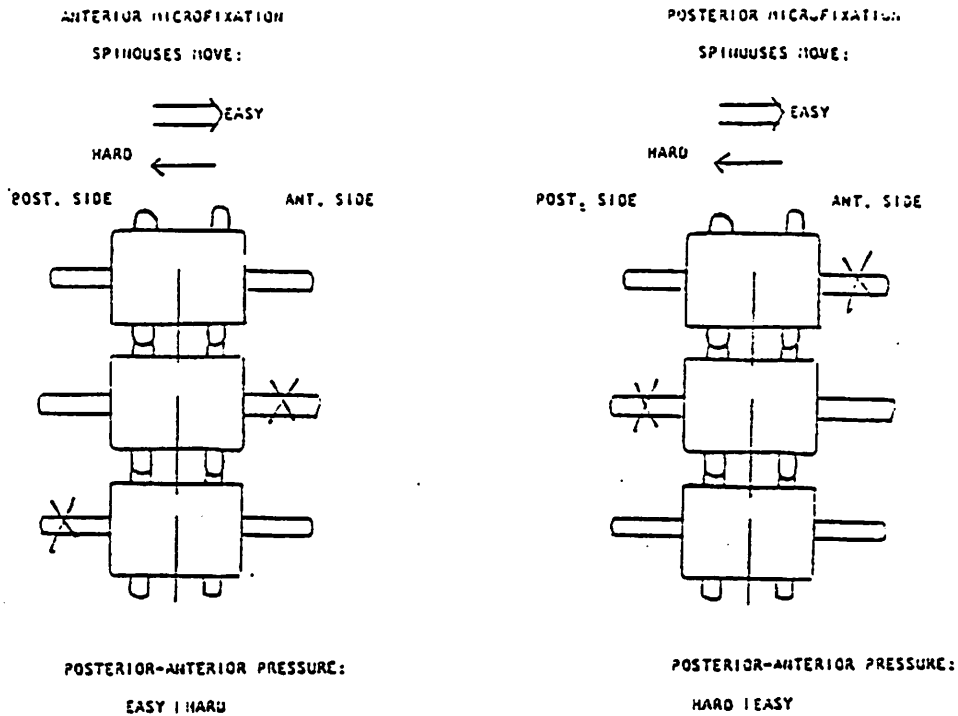
The same analytical procedure is depicted graphically in the 1972 Applied Kinesiology Workshop Manual⁵ compiled by Dr. Robert V. Van de Vyvere. A procedure similar to the second-step P to A pressure on each side of the sacrum was evidently being used along the facet lines in the lumbar and thoracics. The side more resistant to P to A pressure on the facets would be considered the fixated side. Although this may have been intended in the earlier works by Goodheart, it is not stated. This is, of course, different from the earlier cervical spine procedure for anterior fixations, in which an "anterior" side found resistant to A to P, rather than P to A pressure, would be considered fixated. In the Workshop Manual the direction in which the pairs of vertebrae are to be adjusted is not specified.

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An article published by Goodheart in the Digest of Chiropractic Economics in 1973. "The Fixation Vertebral Pattern"⁶ is basically identical to the description of fixation technique in his 1970 Research Manual.

In 1975 Dr. Fred Stoner published The Eclectic Approach to Chiropractic. His analysis basically matches Goodheart's. He states that correction should be in the direction to which the facets move most easily.¹¹ This yields:

STONER

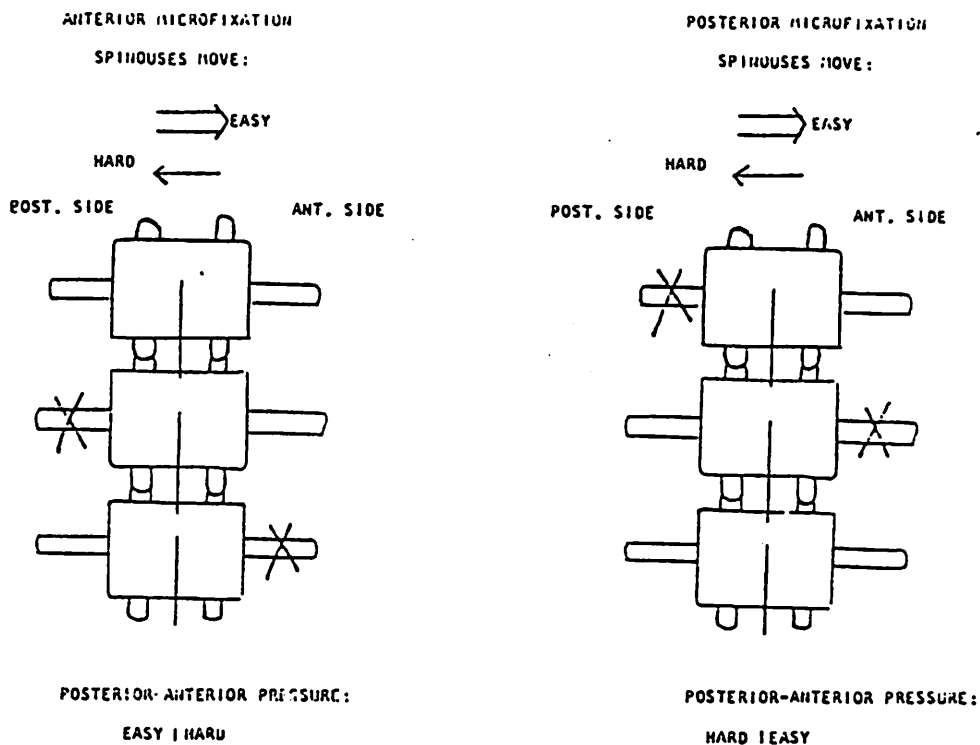


These lines of drive more or less agree with Goodheart for the anterior fixation and disagree for the posterior fixation.

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When Dr. David Walther wrote Applied Kinesiology: Advanced Approach in Chiropractic¹² in 1976, he suggested evaluating only the relatively anterior and relatively posterior sides of the group of three. Otherwise his analysis matches Goodheart's. Treatment is by adjusting the top or bottom vertebra into the greatest resistance on Step 2.

WALTHER



This pattern agrees with Goodheart for the posterior fixation and disagrees with him for the anterior, as Goodheart describes adjusting to correct the "anteriority" - which is the reverse of the above.

Dr. Walther's Applied Kinesiology Vol I (1981) contains an extremely clear description of fixation analysis and treatment, with pictures and examples. He emphasizes that fixation involves

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the vertebra's ability to move, rather than its absolute position. He states that fixations occur in groups of two to five vertebrae, whereas Goodheart has consistently discussed groups of three vertebrae in fixation. Dr. Walther presents a fixation analysis and treatment which is the same as in his earlier book, except that he limits the P to A pressures on the facets in Step 2 to the top vertebra of the group. Correction is to be made with the top or bottom vertebra contacted on the side of fixation and the other hand on the opposite side of the middle vertebra. (See previous drawing)

We now have three sets of contacts for the correction of a single condition with a fairly well agreed-upon analysis. In reading the published material sequentially, it becomes clear how apparent disagreement could arise due to difference in emphasis and selection of rules. Also, much of the initial teaching of this material was done by Dr. Goodheart in lectures and hands-on workshops. Any misunderstandings could be cleared up by him on the spot. For the later generation of students, dependent on Diplomates as interpreters, the disagreement in the written material has become a much greater barrier to full use.

To investigate how broadly standard A.K. fixation analysis was agreed upon among Applied Kinesiologists, I conducted a survey at the Winter I.C.A.K. meeting in 1982. About 60 members were present, of whom 25 returned their surveys. Dr. Goodheart's response was marked as his for comparison. A sample of the questionnaire is appended. This was handed out at the first lecture of the conference, with verbal instructions to mark the drawings in accordance with standard A.K. fixation technique and

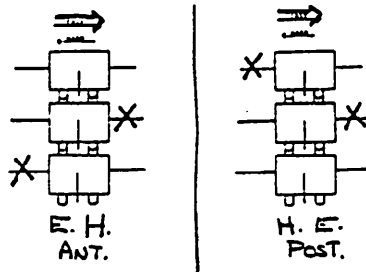
FIXATIONS: Conable pg 10

reassurances that there were no trick questions or drawings. Completed questionnaires were collected at that and later lectures.

I was somewhat taken aback at the number of members who spoke to me saying that they didn't recognize the patterns drawn, or didn't know what I was referring to. Many also responded with, "Oh, I always have to look that up when I teach it." Clearly the confusion includes many of us in I.C.A.K.

Results:

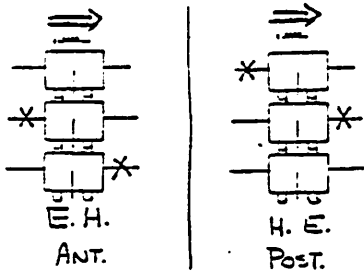
Pattern # 1 (Goodheart)
Number of responses...14



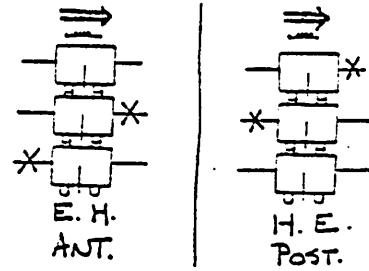
This group included Dr. Goodheart. Only one of these mentioned adjusting in a manner which would primarily move the "anterior" side of the bottom vertebra in the anterior fixation A to P.

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Pattern # 2 (Walther)
Number of responses...1

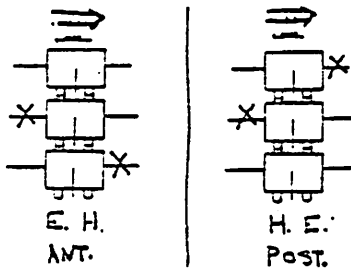


Pattern # 3 (Stoner)
Number of responses...1



Pattern #4
Number of responses...3

2 +1 who drew #1 as Goodheart's but said that #4 made more sense as it opened the fixated facets.



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Other Patterns: # 5 (4 responses)

2 were essentially Stoner's pattern (#3) with the vertebrae to be adjusted for anterior fixation being top and middle, and for posterior fixation being bottom and middle.

1 used the same reversed pairs and marked both diagonals for each fixation.

1 shows the same contacts for both anterior and posterior fixations, on opposite sides of the facets of the middle vertebra, with a different line of drive for each.

No answer or Incomplete: #6 (2 responses)

1 simply said he did not correct fixations this way.

1 stated that the pattern given for anterior fixation was not a fixation. The posterior fixation was marked as for patterns #1 and #2.

The respondents were asked to identify themselves according to type of membership in I.C.A.K. and relationship to the teaching of A.K. as well as to name who taught them fixation technique. In some cases more than one response was appropriate, hence the numbers will add up to more than 100%. The choices were as follows: Original workshop leader - one of the approximately twelve doctors trained and authorized by Dr. Goodheart to teach Applied Kinesiology before the formation of I.C.A.K. Charter Diplomate - named at the formation of I.C.A.K. in 1975. For the purpose of the survey, this classification excluded those Charter Diplomates who were also original workshop leaders. Diplomate by Examination - someone who had passed both parts of the I.B.A.K. examination. Candidate for Diplomate Status - one who had taken part or all of the I.B.A.K. exam but had not been notified of passing. General member of I.C.A.K. - non-Diplomate, and complete on the 100-hour course, or grandfathered into I.C.A.K. in the first two

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years. Associate Member - not yet complete with the 100-hour course. The respondents were also asked whether they were actively teaching A.K. Results:

Fixation	W.S. Leader	Charter Dipl.	Exam Dipl.	Cand. for Dipl.	Gen. Member	Assoc. Member	Active Teacher
#1	4	1	2	1	6	-	6
#2	1	-	-	-	-	-	1
#3	-	-	1	-	-	-	1
#4	1	1	-	-	1	-	1
#5	2	1	-	1	-	-	1
#6	1	-	-	-	1	-	-
TOTAL	9	3	3	2	8	0	10

By far the largest number of responses agree with Dr. Goodheart's printed work. However, it is interesting to note that over half the original workshop leaders identified other patterns as correct. Almost half of those actively teaching drew patterns at variance with Goodheart's.

The survey also left room for the respondents to explain any short-cut or improvement on standard A.K. fixation technique they had found useful. Fifteen of the twenty five included such variations. Two use Dr. Alan Beardall's Hand Mode for fixation, ¹ one uses activator to adjust, one adjusts into palpable resistance without concern for further analysis, and one uses some other unspecified procedure. Three respondents describe the doctor therapy localizing the two vertebrae to be adjusted on opposite sides and adjusting in the direction of

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weakness on the phase of respiration which strengthens. The remaining seven mention some form of challenge: three unspecified, two challenge the two vertebrae to be adjusted simultaneously in opposite directions of rotation and adjust into weakness. This procedure, with respiratory assistance, was first described by Dr. Robert Stevenson in a presentation to I.C.A.K. in 1975.¹⁰ One of the above respondents specifies that the challenge must be held during the test. Another requires that the challenge be without respiratory assistance. Another response describes a challenge of only the middle vertebra in the group of three in a posterior-superior or posterior-inferior direction. This may be a variation of Dr. Julius Sanna's muscle adjusting procedure for fixations presented to I.C.A.K. in the summer of 1979.⁹ I am also aware of several other such short-cuts presented at I.C.A.K. at various times. Of the fifteen doctors who described using variations on standard A.K. fixation technique, eight had identified the pattern of contacts Goodheart originally taught (#1) as the standard, though one of these noted that he didn't recognize the motion analysis the survey described at all.

Clearly there is marked disagreement on what the best way for correcting fixations is. This may be genuine professional disagreement, based on individual experience at variance with the originally presented material, and the development of faster or more effective procedures. It may also result from confusion in the original learning of the technique, from forgetting what was originally learned, carelessness in answer-

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ing the survey, or unclearness in the survey itself. I would like to address the first two possibilities - professional disagreement based on experience and confusion about the material when studied or restudied.

I am sure I am not alone in having spent frustrating hours studying fixation theory in an attempt to teach it more clearly. I have discussed it at length with Drs. Walter Schmitt, Bert Hanicke, and others. Many doctors spoke to me at the 1982 Winter I.C.A.K. meeting expressing similar desire to have this ironed out well. There is a degree of confusion even among those supposed to know fixation technique. I believe that this arises from the points of conflict already noted in the published material, and from a lack of data on certain key questions at the root of fixation theory.

Both professional disagreement and confusion can best be resolved by finding the truth. This requires more clear presentation of the reasoning behind various methods of approaching fixations and by some experimentation to measure the basic assumptions and efficacy of the techniques. It seems likely that the above variations must have worked to some degree for their proponents, or they would not be espoused by thoughtful doctors. Most teachers of A.K. teach that the manner of correcting fixations does matter, that a general "wrack 'em - crack 'em" approach is not consistently effective. Many of us demonstrate this on the platform. Yet what we are teaching is different. There is truth, and either it does or doesn't matter how fixations are adjusted. There may be one best way to do this, or there may be an array of contacts which are

FIXATIONS: Conable pg 16

effective. It is my guess that it will be found that many of the above patterns do alter bilateral muscle weakness, but that they vary in ease, consistency, and duration of result. With terms and assumptions clearly stated on all sides, further studies can be formulated.

This investigation becomes even more important when we discuss confusion in learning. Fixation technique is taught in Session #1 of the 100-hour course. It is fundamental to other A.K. techniques. If this is taught unclearly, it becomes a major stumbling block to future A.K. study. Students get the impression that A.K. cannot be learned, that it is cumbersome, or magic, or subjective. As teachers we must be able to answer the most detailed questions about our basic procedures with good biomechanical reasoning and confidence, and with a reasonable level of agreement among sources.

A biomechanical model of the exact nature of the fixation complex is needed, and missing. To this we could align our understanding and teaching. The model must, at the minimum, explain the observed patterns of restricted motion in fixations, and why adjusting two of the three vertebrae in a fixation complex results in freeing the whole group. It must also explain why the pattern of adjustment described by Goodheart works. Clearly the largest number of survey respondents and the originator of the technique do correct fixations this way. Even though other patterns of correction may also be efficacious, this one at least must be explainable by any model presented. The model should if possible resolve apparent dis-

FIXATIONS: Conable pg 17

crepancies earlier noted between various descriptions of fixation analysis procedure. It may also depict other patterns of correction which would handle fixations of the type being discussed. The model will also offer points at which it can be verified by observation and experimentation.

Possible mechanisms for vertebral fixation include ankylosis, fascial thickening, and muscle hypertonicity, either secondary to hypotonicity on the opposite side, or to proprioceptive error, or as the body's solution to some underlying postural deficit or stress (structural, occupational, traumatic). As many X-rays on patients have demonstrated, we are not dealing with bony ankylosis here. In general, rather light adjusting techniques are sufficient to release fixations. Hence, I doubt that the primary factor is fascial thickening. This may be a secondary development in long-standing problems or traumatized areas, and may explain why greater force is at times needed for satisfactory corrections. Goodheart and later writers have emphasized imbalance in the intrinsic spinal muscles as the cause of fixation, the muscles jamming the facets and restricting motion. This appears to be the best explanation.

The commonly used steps of fixation analysis are:

Step 0 - Find a group of three vertebrae which do not counter-rotate as freely as those above and below.

Step 1 - Find the direction to which the spinouses of the group move most freely. This is the "anterior side". The direction to which the spinouses rotate with difficulty is the "posterior side".

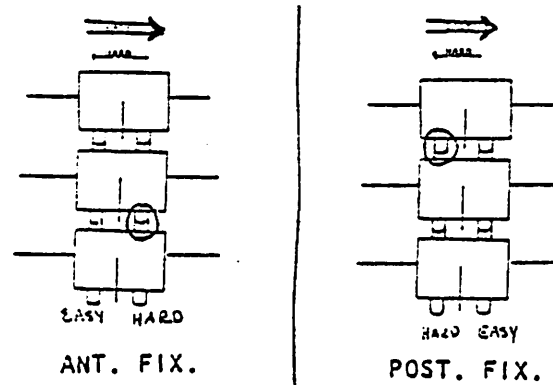
Step 2 - P to A pressure over the facet lines will demonstrate more resistance on either the anterior or posterior side. This is the fixated side.

In this motion analysis what are we feeling? In Step 0 we feel that the group as a group is fixated, less free to move. In Step 1 we are feeling the rotational ability of the group. Many students become confused at Step 2, as they feel that it is also a rotational analysis, and should be consistent with Step 1. In fact P to A pressure along the facet line does not produce much rotation of the vertbrae. Try it on a model spine. Remember that throughout the spine the facets are buried deeply under Erector Spinae muscles, Multifidus, and finally Rotatores. What we feel when we press P to A on the facet line is actually a combination of soft tissue resistance and motion at the facet joints - mostly of a flexion-extension nature.

What, then, produces the clearly different patterns of resistance we do feel when we do motion analysis of fixations? If the facets are indeed locked on the side of P to A resistance in Step 2, then the locked facets must be those on the posterior side in a posterior fixation (see drawing). It must either be both pairs of facets that are fixated, or just the top pair. If it were only the bottom pair, it would not make sense that the fixation releases when only the top vertebra is adjusted on the second. Similarly, if the anterior (or right in our example) facets are locked in an anterior fixation, it would be most logical to assume that it is either the inferior

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pair or both. Below, I will assume the simpler, single-pair pattern, although this model does not preclude primary fixation of both pairs on the fixated side.

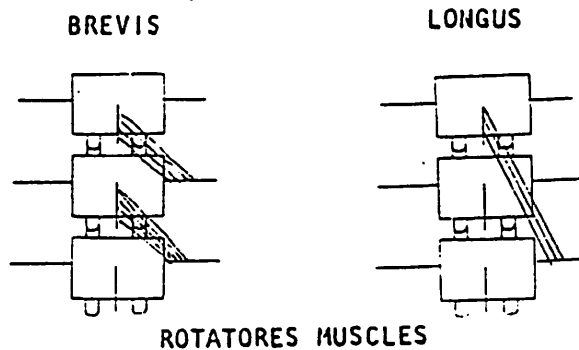


What is the nature of the fixation of the facets? The theory that we have been teaching states that the facets are held in place by hypertonic Rotatores muscles. I have not been able to find an exact description of which muscle is conceived to be hypertonic. It is not difficult to figure out, with the ground work laid.

Gray's Anatomy, 29th American Edition, describes the Rotatores along the entire length of the spine and distinguishes longus and brevis. Both arise from the transverse process of one vertebra. The breves insert into the next vertebra above at the base of the spinous, running almost horizontally. The longi insert at the base of the spinous of the vertebra second up, running obliquely. Their action unilaterally is to extend the vertebral column and to rotate the bodies toward the opposite side.

Walther, in Applied Kinesiology Vol. 1 (pages 55 - 58)

describes these and the other intrinsic spinal muscles and illustrates their actions very clearly in relation to spinal subluxation.



Any combination of tight Rotatores on one side would reduce the ability of the vertebrae to rotate to the opposite side. A single Rotatores longus would tie the group of three together and define a common posterior side. Note, however, that while a hypertonic longus alone would restrict motion of the top and perhaps the middle vertebra to the opposite (posterior) side, it would actually allow the bottom vertebra's spinous to move more freely toward the posterior side. This may be the reason for Walther's suggestion that only the top vertebra be evaluated to determine the posterior side of a fixation complex. I believe that in most cases there are many muscles involved, and the whole group is locked with the same restriction of rotation. This is what Goodheart drew on his survey. However, I have at times palpated fixated groups in which the bottom vertebra's spinous did rotate more freely to the posterior side. This was a fact I did not particularly want my students to notice and ask about.

The Rotatores brevis crosses only one pair of facets and could easily jam them by approximating and slightly imbricating

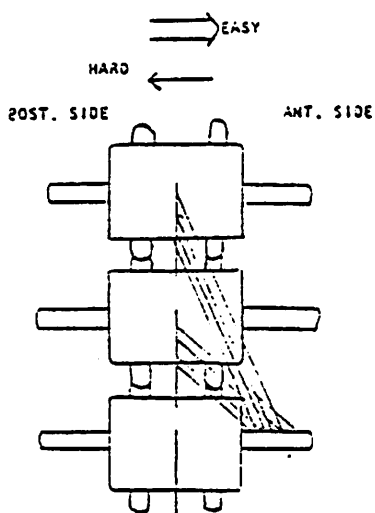
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the articular surfaces, as well as reducing the ability of the vertebra above's spinous to rotate to the other side.

A simple model of the two types of fixation is as follows: One or two Rotatores longi are hypertonic on the anterior side, locking the group of three together and defining the posterior side. The Rotatores brevis and perhaps the Intertransversarius over the primarily jammed facet pair is hypertonic, locking the facets and reducing their freedom of flexion extension. It

ANTERIOR FIXATION

SPINOUSES MOVE:

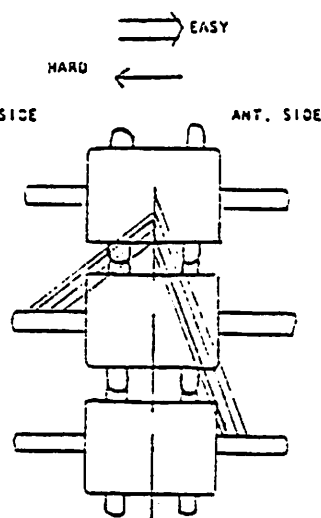


POSTERIOR-ANTERIOR PRESSURE:

EASY | HARD

POSTERIOR FIXATION

SPINOUSES MOVE:



POSTERIOR-ANTERIOR PRESSURE:

HARD | EASY

Obviously, the opposite Rotatores muscles would be hypotonic.

If this is so how would our adjusting patterns release the fixation? At first, I assumed that we must be opening the jammed facet and stretching out the tight Rotatores. This assumption leads to correction pattern #4, with the middle vertebra always contacted on the posterior side. It may work.

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However, a much larger number of doctors espouse the exact reverse. In fact, if this were the mechanism, Goodheart's procedure should make the fixation worse - jamming the facets more and failing to stretch the tight muscles.

Another possibility is that the body is not making a mistake by creating the fixation. Rather, assume that the proprioceptive mechanisms had correctly identified an underlying problem requiring fixation and had produced it. In this model, the Rotatores are trying to correct something, which they have not fully been able to do. Had they been successful, normal tonus and freedom of motion would have been reestablished long before. By adjusting the fixation and realigning the articulations, we are changing the proprioceptive feedback from the area and allowing a resetting of tonus commands to the intrinsic muscles. In this light Goodheart's pattern of adjustment can be seen to assist the muscles in doing what they have been attempting to do. This is similar to the principles taught by Hugh B. Logan⁸ with regard to Erector Spinae imbalance. He suggested that the tight muscles were attempting to correct subluxation and Basic Technique, in lifting the sacrum, was helping them to achieve that correction. With such help, the muscles are seen to dramatically resume their normal tonus. In addition, we can see that pattern #1 stretches the hypotonic muscle. This would excite its stretch reflex and produce an increase in tone and concomitant decrease in the tone of the opposite, tight Rotatores. Such a proprioceptive model helps explain why extremely light adjusting, such as with an activator, or as Sanna suggests, in the soft tissue, may be effec-

FIXATIONS: Conable pg 23

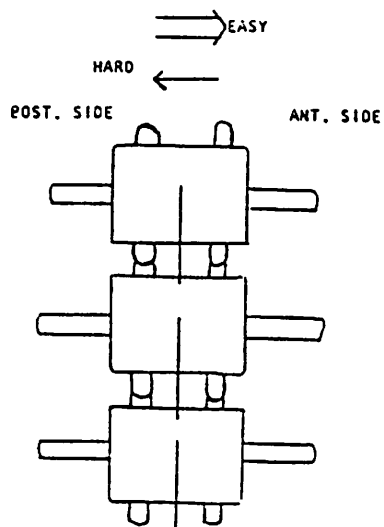
tive. This model is also consistent with Durlacher's findings² that underlying many or all fixations there are subluxations of the nature found at sites of disc injury.

Some points which might be further investigated include: How often and in what circumstances does the spinous of the bottom vertebra in the group of three rotate more freely to the posterior side than the anterior? Does this occur primarily in posterior fixations? To what extent can fixations analyzed in the standard manner be fully corrected by muscle spindle type work on specific Rotatores? Can the Rotatores be reached in fact? What is the comparative staying power of the various correction procedures described? Do others find disc-type subluxations consistently after fixations have been corrected, as Durlacher suggests? What commonly underlies fixation when Beardall's Hand Modes are used and the fixation is not corrected first?

In summary, I feel that it is essential to our work as teachers and doctors that we be extremely explicit about the assumptions we make and the models we use to understand our procedures. We need to share these with each other and to think critically about what we accept. Truth is truth. The underlying truth about how the body works is available and will resolve our apparent differences. Only by thinking and by observing honestly and in detail will the confusion that is the human organism become aligned so that we can help our patients, each other, and our students to greater understanding, responsibility, and control of our bodies.

ANTERIOR MICROFIXATION

SPINOUSES MOVE:

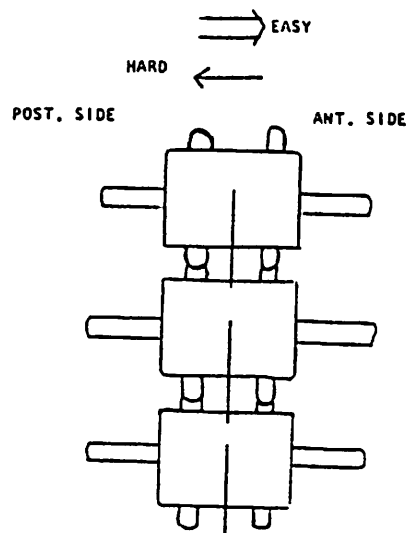


POSTERIOR-ANTERIOR PRESSURE:

EASY | HARD

POSTERIOR MICROFIXATION

SPINOUSES MOVE:



POSTERIOR-ANTERIOR PRESSURE:

HARD | EASY

On each drawing mark X at points of contact for correction.

Describe Line of Drive:

Describe Line of Drive:

I am:

- 1. One of Dr. Goodheart's original workshop leaders
- 2. A Charter Diplomate, but was not one of Goodheart's original workshop leaders
- 3. Diplomate by examination
- 4. Actively teaching A.K.
- 5. Candidate for Diplomate (have taken part or all of exam)
- 6. General member of I.C.A.K. (Non-Diplomate)
- 7. Associate member of I.C.A.K. (I.E. have not completed 100 hours course, and did not Grand-father into I.C.A.K. in first two years)

I was taught Microfixation Analysis by:

- 1. Dr. Goodheart (hands-on training)
- 2. Reading books only
 - Goodheart
 - Stoner
 - Walther (blue)
 - Walther (vol. 1)
 - Other (specify) _____
- 3. Diplomate or original workshop leader
Who? _____
- 4. Other _____

I have found the following to be a useful short-cut or improvement on standard A.K.

Microfixation Technique:

_____.

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CARPAL TUNNEL & ANKLE WEAKNESS

by Earl L. Colum D.C.

Abstract: The indicator muscles of the carpal tunnel syndrome, weakness in approximating the thumb and little finger, relationship to the concurrent weakness of the anterior tibial and peroneous muscles on the opposite side of the body. Using double contacts on the wrist and opposite ankle for the correction of muscle weakness.

This therapy has proven itself effective as a primary treatment in the carpal tunnel syndrome and in some cases essential in augmenting the usual Applied Kinesiology therapy. Certainly all known therapy should be used.

With the patient and Doctor seated facing each other challenge the opponens muscles of the hand. We know that if weakness is present therapy localizing (TL) over the lower part of the wrist will strengthen the muscles. Now TL over the medial side of the lower tibia and if positive in strengthening the hand muscles the following should be done. On the side of ankle contact, test the anterior tibial and peroneous muscles. If the anterior tibial is weak it will be strengthened by contacting the ankle on the same side or the wrist on the opposite side. If the peroneous is weak it will be helped by contacting the lateral portion of the ankle or the dorsal side of the opposite wrist and is usually a VOLAR contact. The peroneous is related to the opponens muscles of the opposite hand when it is tested in a palm down position. It is convenient to TL and treat if the patient places the involved foot on the doctors chair. If the ankle contacts are negative treat the carpal tunnel as usual. If ankle TL is positive -

Treat by using a double contact to the inner wrist and opposite inner ankle and challenging for direction, circular, and respiration. Treat as indicated several times. This will strengthen the palmar hand weakness along with the anterior tibial. The palm down weakness along with the opposite peroneous is corrected with a double contact to the lateral portion of the lower leg and the dorsum of the involved wrist. If bipolar magnets are available change the volar to a palmar contact. If not challenge with volar contacts for direction and respiration and treat accordingly.

This correction not only helps the carpal tunnel but will also help ankle problems that reoccur. The double contact and directional therapy is also effective in treating other muscle weakness patterns.

CATEGORY IV

By Earl L. Colum D.C.

At the May meeting 1982 Dr. Dan Gleason gave a name to using pelvic blocks under a patient while in the supine position, Category IV. It was also stated that the patient would have to stay on the blocks over a half hour. The following procedure will allow the doctor to treat the torqued pelvis in less than ten minutes. This correction is made with the patient on the blocks, challenged for direction and respiration and combined with a cranial fault.

About seven years ago when giving a class in Applied Kinesiology one of the attending doctors made an observation while testing a patient. Whenever the patient looked at her outstretched arm it was strong, regardless of eye position, phase of respiration, etcetera. If she looked away, anywhere but not at her arm, it became weak. It took over an hour before the lesion was found that caused the problem. It was a malposition of the zygomatic portion of the temporal bone. On further testing on other patients it was found not to be uncommon and could be uni or bilateral. This condition can be therapy localized (TL) by using two fingers of one hand on the zygomatic process close to the ear, not contacting the suture. When found to be positive, a phase of respiration must be included, that will make the weakened indicator muscle return to strength.

To correct a breath in assisted problem. The zygoma is contacted on the inferior side and the mastoid on the posterior side. While the patient takes a breath in the zygoma is moved cephalically and the mastoid moved anterior at the same time. In an expiration assisted lesion, as the patient exhales the zygoma is moved inferior from above and the mastoid is moved posterior from the anterior side. This will negate the TL and the arm will no longer be strengthened when the patient looks at it.

By the use of double contacts it was found that the torqued pelvis correction with the use of blocks in the supine position was related to the temporal bone as described above.

With the patient supine, without the blocks, correct piriformis weakness if present and either category II making sure there is no pain on the lower thigh medial or lateral. Place the blocks under the patient usually found to be needed high on the patients left and low on the right. Recheck the lower

2. Category IV

thigh for pain, medial and lateral, which will now be present, usually over the medial side bilaterally. To challenge the pelvis lift up on the femoral head on the high block side which will produce weakness in an intact muscle. This weakness can be changed back to strength by having the patient take a breath in or TL with the two fingers to the zygoma on the same side. Challenge the patients right or low block side by lifting up on the iliac crest. When positive it will have expiration assist or FL to the zygoma on the right will strengthen the weakened intact muscle.

To treat - The inspiration assisted side (L) contacts are made anterior to the femoral head with one hand and to the zygoma on the same side. As the patient takes a breath in the femoral head is pushed posterior towards the table and at the same time the zygoma is lifted cephalically and the mastoid moved anterior. Repeat four or five times. For ease in maintaining the cranial contact the patients head is turned to the opposite side of contact. The expiration assisted side (R) contacts are on the anterior superior iliac spine and zygoma. When the patient is in a phase of expiration the iliac contact is pushed posterior toward the table and the zygoma is pressed caudalward and the mastoid posterior four or five times. When both sides have been treated recheck for pain on lower thigh. If still present retreat with a few more respirations and movements. If the pain still persists remove blocks and challenge for posterior innominate or ischium as per findings, treat. Usually treating with the double contacts will remove the pain on the lower thigh.

With the patient still supine and the blocks removed. Test the piriformis muscles. One or both sides will be found weak and will respond to a respiratory assist. A corresponding neck flexor weakness will also be found both anterior and posterior, on the same side as the piriformis weakness. Place the patient into a prone position and confirm weakness of the piriformis and respiration. The respiratory assist is usually expiration and found on the left side. Contact over the weak piriformis at the sacral attachment and challenge in a circular motion, clockwise on the left and counterclockwise on the right using an intact muscle. The direction for inspiration assisted would be the opposite. On the side of the weak piriformis a second contact will be made on the base of the skull where the mastoid meets the occipital bone. This when challenged will be positive in the opposite direction from that of the piriformis.

To treat - The doctor makes a double contact, one hand over the piriformis and the other over the back of the mastoid. As the patient exhales the contacts are moved in the circular direction determined by challenge four or five times. This is repeated for at least three breaths. Testing the piriformis and the

3. Category IV

neck flexors both A & P should show them strong. There should also be a noticeable difference in the degree of pelvic torque.

Either on the same or following visit additional attention must be directed to check other muscles having pelvic attachments. After completing the Category IV treatment, the rectus abdominus on the low block side is usually weak. It is readily understandable that with the correction of the pelvic torque that the tension of the supporting muscles will have to be rebalanced. This is best accomplished by utilizing the Golgi and spindle cell mechanism. It is most important to challenge for direction and respiration. When treating tendonous attachments the directions at the opposite ends may be the same. Also when treating spindle cell problems, in some cases, the fibers must be approximated to increase strength. Rebalancing the muscles as needed will add too the correction of the Category IV and prevent its reoccurrence.

DOUBLE CONTACTS
by Earl L. Colum D.C.

Abstract. Treating two related areas at the same for a single purpose enhances both the effectiveness and longevity of the therapy intended. Positive Therapy Localization (TL) to a double contact may show the need to treat the same area more than once but with a different second contacts.

- Double contacts are found in several combinations and two types of contacts. A. Primary contact is one that responds to TL.
B. Secondary contacts usually are areas that have been treated before and do not TL in the clear.
C. Mixed contacts are those related to the same problem but one contact is volar and the other palmar.

Most double contacts have at least one primary involved which makes it easy to find the second contact whether it be primary or secondary. If you are dealing with a weak muscle, find one area that makes the muscle strong, or this area should make an intact muscle weak. With the patient holding the primary contact, the doctor or patient TL other areas until a change in muscle strength is demonstrated. Both contacts should be either palmar or volar. Both areas are now challenged for direction and respiration. The respiration phase must be the same for each challenge. If this is not the case look for another contact. Vertebral, neurolymphatic and alarm points are usually one anterior and one posterior that go together. Cranial contacts may go with the same or opposite side of the head or either side of the pelvis, usually the SI.

It must be remembered that occasionally contacting two areas, such as the TMJs or sacroiliacs at the same time will not have a positive TL because one side might respond to inspiration and the other to expiration or that one is palmar and the other volar. The opposite respirations are frequently found when dealing with the TMJ. When a category 1 seems present but does not TL try a volar contact one one side and palmar over the opposite SI.

Example: A patient stands facing away from us and we see a typical teres minor weakness position (knuckles forward). Testing each teres shows them to be strong. TL to both sides of the Thyroid with thumb and forefinger of one hand also shows negative. In many cases what is found is the right side of the thyroid must be a palmar contact and the left side a volar contact.

2. Double Contacts

The thyroid will TL to each side individually, palmar on right or volar on left, or will also TL to a double contact if the pad of the right thumb is on the right side of the thyroid and the knuckle of another finger on the left. After making this mixed contact the teres minor will be weak bilaterally. Have the patient make a volar contact over the left side of the thyroid which will weaken an intact muscle. With a bipolar magnet touch the back of the neck on the left around the 4th cervical. When the exact area is found the weakened muscle from the first contact that is still being held will strengthen. Challenge the left side of the thyroid and the 4th cervical area with bipolar magnets for direction and respiratory assist. Treat as per findings. Rechallenge the left side A and P with a palmar contact and treat. TL the right side of the thyroid with the right cervical, challenge and treat. Any TL to the thyroid will now be negative and the teres returned to strength.

The use of double contacts is not a totally new technique only overlooked in its potential to bring out hidden problems and additional therapy. For a long time the thyroid was TL positive to show the connection between it and the teres minor. After the connection was shown the other factors of the five finger concept were utilized to strengthen the teres but forgetting the positive TL to the thyroid itself.

EXTENDED HAND & FOOT WEAKNESS

by Earl L. Colum D.C.

In proper muscle testing we are cautioned not to contact especially the hand or foot when testing shoulder or hip muscles. Though this is true let us attack the problem instead of retreat. Anytime pressure is applied distal to a joint when muscle testing and causes weakness or pain in any part of the extremity, the cause must be found and treated.

Using the shoulder muscles as a group with the arm straight forward from the shoulder is a convenient indicator when used as an intact muscle. It can be used supine, sitting or standing with no stabilization of the patient leaving the doctors other hand to challenge or TL. For a long time whenever the patient would comment that my testing hand would be pressing on his hand and not on the wrist. I would move the contact to the wrist and carry on. When we stop and think how strong the body is, contacting distally to a joint should have no appreciable effect.

With the patient seated and an arm extended forward test by pushing floorward on the wrist, both palm up and palm down, making sure the muscle is intact. When intact rechallenge with the doctors contact distal to the wrist in the mid palm and on the opposite side on the back of the hand. The fingers are extended and the wrist straight. Repeat test with other arm. When the test is positive both arms are usually involved, both palm up and down.

It was later found that a concurrent condition existed with the foot. The test is performed with the patient seated with the leg straight as in testing the quadriceps.¹ Contact is above the ankle pushing floorward.² While holding down the opposite knee the leg being tested is contacted on the posterior part of the ankle and lifted ceilingward. During this test the patient is instructed to keep the leg straight and hold from the hip (maximus). If these test negative continue by lifting up on the arch of the foot (toes pointed down) and then floorward contacting the top of the foot. When pushing floorward the quadriceps will weaken. When lifting upward the gluteus maximus will give allowing the leg to come up.

Correction - Two separate methods work but it is suggested to use in this order. 1. With the patient standing the doctors palmar contact passes over the front of the patient from the right hip to the left shoulder. Test intact muscle. Challenge from left hip to right shoulder. Challenge on the posterior side, palmar contact, FRCM each shoulder to the opposite hip. These directional challenges are most commonly found and assisted by inspiration. Any of these

2. Extended hand & foot weakness

four directions could be reversed, singly or paired, with an expiration assist. If both challenges, up in the front and down in the back, between the hip on one side and the shoulder on the other side and inspiration assisted treat as follows. Doctor stands to the side of the patient with one hand on the patients right hip and the other hand passing behind the patient contacting the left shoulder. While a breath in is being held by the patient the doctors hands pass lightly over the front and back at the same time, up to the left shoulder (ant.) and down to the right hip (post.), three times minimum. Repeat respiration and movements three times. Treat the other diagonal challenge per findings. Retest original contacts to the hand and foot. These now should test strong anterior and posterior. If one of the tests shows a weakness that persists the solution will follow in 2.

2. If the previous correction was complete have the patient TL a shoulder with the opposite hand. The contact should cover the front, side and posterior part of the shoulder. Repeat with other shoulder testing an intact muscle. When positive the hand and foot challenges will be positive again, totally or in part. If all weakness has returned a double contact is made by the doctor. One hand on a shoulder and the other hand on the opposite hip, with the hands moving in a circular direction to challenge. The phase of respiratory assist is usually the same as in the diagonal challenge. Inspiration would require a fountain effect challenging clockwise on the patients left side and opposite on the right. Treat with direction and respiration several times. This should again return strength to the foot and hand test. If only one set of hand foot weakness(right hand left foot)were found the areas to challenge would be. -
 A. Right palm up with left foot up, treat anterior right shoulder with anterior left hip. Circles and respiration. B. Right knuckles up with left foot down, treat right shoulder on the posterior aspect. C. On occasion the lateral sides of the shoulder and opposite hip need to be challenged. This will be associated with a weak supraspinatus and an opposite medius.

The above procedures will corrects the hand and foot weakness. The various steps can all be therapy localized and challenged. Correction is best maintained when the direction of treating is combined with the proper respiratory assist.

HEAD TURN

ONE SIDED WEAKNESS - RIGHT, LEFT & BILATERAL

By Earl L. Colum D.C.

When this condition is present one of two things occur. One side of the body will have muscle strength change to weakness (common) or weakness will change to strength. The change is produced when the head is turned to the opposite side of the body. Both conditions are treated by cranial contacts.

If total weakness is present, right, left or bilateral, and helped by respiration correct as indicated. Occasionally some total weakness can be treated by adjusting the atlas. Also this should not be confused with eye movement which will be covered in another paper.

The indicator for need of this treatment is the change in muscle strength on the opposite side of the body to which the head is turned. Head turn is done with the head held perpendicular and rotated as far as comfortable over the shoulder.

The most common finding is the patient who is generally strong and a few muscles weak. But when the head is turned to the right all muscles on the left weaken. Normal muscle strength which maintains the structural integrity of the body can also cover up ligamentous weakness from previous injury. A chronic reoccurring problem that has been treated and tests out strong comes on the minus side of the fiftyone percenter. Depending on the degree of stress placed on the body when the head is turned, will be directly proportional to either the reoccurrence of injury to a previously weakened area or the cause of primary injury.

TREATMENT - With the patient seated. In either case when turning the head produces a change in muscle strength, strong to weak or weak to strong, on the opposite side of the body. The primary contact is over the pterion on the side to which the head is turned. The second contact is over the opposite TMJ, away from the head turn. When the left is the side of change in muscle strength. The correction is usually a bilateral contact (palmar), inspiration assisted, over the right pterion and left TMJ. Correction is made with the doctor standing in front of the patient, with the left hand on the patients right pterion and the doctors right hand on the patients left TMJ. The left hand moving in a counterclockwise direction and the right hand in a clockwise direction. These circular movements are done while the patient holds their breath in. Three or four revolutions with each breath in repeated at least three times. If the

2. Head Turn

right side (muscular change) needs treatment the left pterion and right TMJ are contacted. The respiratory phase that assists is usually expiration and a palmar contact. Volar contacts would have an inspiration assist also but will become expiration after using bipolar magnets. Always challenge for DIRECTION and RESPIRATION. After the above treatment is complete head turning should no longer change muscle strength. This does not correct all muscle weakness. Treat individually as needed.

Now have the patient stand, find an intact muscle and have the patient turn their head to the opposite side. This will usually produce a weakness the same as when the patient was seated. Head to the right, left side weak, opposite or bilateral. When standing and head turning produces weakness. Challenge and treat the TMJ and sacroiliac articulation on the same side as muscle weakness. The respiration phase is the same inspiration on the left and expiration on the right. Correct as per challenge with circular movements and respiration. Retesting should find no change in strength with head turn right or left.

The Head Turn syndrome has far reaching applications. For the patient whose job requires constant head turning, in sports and everyday living. Another answer for, why did this happen to me? For the muscle tester whose findings are erratic because the patient turned their head.

NUTRITION AND SPINAL THERAPY

by Earl L. Colum D.C.

Abstract: Using a nutritional substance as one part of a double contact to determine the spinal level where therapy is needed. In Applied Kinesiology classes it has been said, the N. which stands for nerve can also apply to nutrition. If the five finger concept is related to the intervertebral foramina, the following will show the nutritional connection.

Those who believe that holding the nutritional substance in the hand has no effect in strengthening or weakening muscles should read no further or be willing to investigate for themselves. There is also no doubt that many have used this concept fraudulently for their own profit by unfair testing, intentional or accidental. By using the following the doctor will find the need for supplementation will be reduced.

If a supplement is needed by the body and placed in contact with it. Two things should happen. It should strengthen an associated muscle that is weak in the clear, and secondly it should weaken any intact muscle. It is not unusual to find after the previous testing, other muscles associated with the supplement used will be found to have been weakened.

When a supplement is found that is needed by the body, as in the previous paragraph, that weakens an intact muscle, testing for the spinal level begins. With the patient seated their arm held straight out forward from the shoulder, palm down. The doctors one hand contacts the patients wrist and pushes floorward. The second contact, the pads of the fingers of the doctors other hand are placed on the upper cervicals, centering over the spinous processes. The fingers over the cervicals are vibrated briefly, the contact maintained while testing the weakened intact muscle. If still weak move the spinous contact to the next set of vertebrae covered by the fingers. This vertebral contact is continued downward, testing the arm at each level, until the muscle regains its strength. At that level of the spine use one finger only to TL and isolate the vertebrae(s) or level involved. Challenge the vertebrae for subluxation or fixation. If positive, treat as indicated with direction and respiration. In addition and in some cases where the vertebral challenge is negative, each side of the spine at that level must be challenged in a circular direction both palmar and volar. Where positive, Double TL for an anterior contact. Challenge both for direction and respiration. Volar contacts must be changed

2. Nutrition and spinal therapy

to palmar and rechallenged. Note: When the spinal level is found the supplement is removed from the patients hand. If the palmar contact on the spinouses is negative repeat the proceedure with a volar contact. When the original weakness is only on one side the TL rarely is found only over the transverse on the same side.

Example: If we see an upper trapezius weakness (low shoulder high occiput) and testing shows weakness, there are several ways to proceed. 1. Since this muscle responds to Vit. F (unsaturated fatty acids) or Vit. G (riboflavin) we test the other muscles associated with the two. If Fis held in the hand or placed in the mouth and does not help the weakness try the G. If the F was placed in the mouth or any supplement and you wish to erase that question rubbing both K 27 will return the body to the pretaste state. When the Vit. G is held in the hand with the upper trapezius becoming strong and an intact muscle weak, the G is removed. TL the neurolymphatic on the upper arm, same side, for the upper trapezius and retest. This should also be positive. 2. Now the arm with the positive neurolymphatic is held straight forward with the palm down. Again TL to the same neurolymphatic which will weaken the intact arm. Holding the G in the hand and testing shows the arm to regain strength. Vitamin F will have no effect. Still holding the G and releasing the neurolymphatic contact the arm becomes weak. Double contact to the spine to determine the spinal level to strengthen the weak muscle. Vit. G usually respondsresponds to dorsal 1-2. (F 6 5, D 6-7 or 10-11)

If one or all G muscles were weakened after first testing with G in the hand, usually two combinations will be found. 1. Only the subscapularis on the same side will be weak. Treat left dorsal 1-2 with anterior medial rib at the same level and D 1-2 with the neurolymphatic on the left arm. If all G muscles are weak the treatment will be bilateral A&P. Challenge for circular direction plus respiration A&P. Treat. Challenge vertebrae for subluxation and treat. All muskles should now be strong and holding the G willalso be negative.

Conclusion. If a supplement is needed by the body why aren't all muscles associated with the supplement weak? This spinal level therapy is alleast part of the answer. Not only providing the specific levels for therapy but also the possibility of several corrective proceedures.

UPPER CERVICAL DYSFUNCTION & ARM WEAKNESS

by Earl L. Colum D.C.

Abstract. A non force technique to treat upper cervical dysfunction for the correction of arm weakness.

In 1980 a patient well acquainted with muscle testing, asked me to test her arms in a straight out and forward position with the palm up. Testing the arms by pushing down, either onesided or both together, showed extreme weakness.

With the patient seated, her right arm out and palm up. She began to therapy localize with her opposite hand. Contacting the upper cervicals on the same side strengthened the arm. With the left arm up TL to all areas of the neck and head were negative until a volar contact was made on the left upper cervicals.

Using a circular challenge, palmar contact, over the upper cervicals on the right was positive. Avolar contact over the left upper cervicals, challenging with a circular motion, was also positive. Both challenges having an inspiration respiratory assist.

To treat: The doctor faces the patient making apalmar contact on the patients right upper transverses and the right hand, volar contact, on the patients left side. The doctors hands will be moving in a counterclockwise motion, threeor four revolutions, while the patient holds their breath in. This should be repeated at least three times. Retesting the arms should now show them to be strong.

This palm up weakness was later found to be connected to a Gluteus Maximus weakness on the same side. This combination is usually bilateral and most always found to be palmar on the right and volar on the left. The maximus is tested with the patient seated in an erect position. The direction of testing is to lift the patients foot off the floor. Stabilize by holding the opposite knee down. To test the left maximus it is convenient for the doctor to contact the lower femar, posteriorly, with the right hand and the doctors right elbow on the doctors right knee as a point of leverage. Frequently when a weak maximus is present the patient will lean backwards and should not be allowed to do so. Correcting the upper cervicals in this manner strengthens both the arm and leg muscles. If on a following visit the patient shows arm strength but maximus weakness bilaterally. Afixation in the lower lumbar will be present.

2. Cervical Dysfunction and Arm Weakness

Conclusion: This problem has been found in more than 90% of new patients on their first visit. The action of these two muscle groups in everyday life is easily seen whenever someone tries to lift something. The correction is simple and effective and can be done to anyone especially those with unusual problems that cannot be adjusted.

VOLAR CONTACTS
THEIR SIGNIFICANCE AND TREATMENT

By Earl L. Colum

Abstract: Therapy Localization (TL) of an area whether palmar or volar, when positive, indicates the need for treatment to that area. Volar contacts are the same as and respond to a bipolar magnetic field, using the North and South poles of two magnets on the same area. The following will show that the use of magnets will change a positive volar TL to palmar. The magnets used are pencil magnets, $\frac{1}{2}$ inch wide and a inch $\frac{1}{4}$ long. Four magnets are required.

Areas that frequently respond to volar TL and treatment include:
Acupuncture points - Cranial faults - TMJ - Sacro iliac articulation -
Subluxations - Fixations - Neurolymphatics - Ileocecal valve - etcetera.

In a paper presented circa 1975 it was demonstrated that touching an acupuncture point with either the N or S magnetic pole, and producing weakness, could be negated by treating the area with direction and respiration. The direction will be either right or left circular movement with the correct phase of respiration determined by challenge. The South pole has a Fountain effect in that the direction is up the midline of the body, A or P, outward, down and in. The North direction is down, out and up. This correction would be made with the palmar surface of the fingers. After proper treatment the acupuncture point could not be TL with either end of the magnet.

Occasionally it was found that a patient would have a positive TL to an area but challenging produced negative results. This same area would also be positive with a volar challenge and volar TL. This same area also would not respond to either magnetic pole individually but using the N & S poles at the same time would produce a positive reaction. It was realized at this time that the connection between bipolar TL and Volar contacts were the same.

This area or point could now be treated by the doctor using the volar side of the hand to treat in a circular direction, with the proper phase of respiration, for correction. Volar contacts respond to a respiration pattern, Inspiration assisted is the N pole direction (down, out & up) and expiration is the fountain effect.

In December 1981 I was demonstrating the connection between a left elbow problem (weak med. triceps) and right Knee problem (weak Med. quadriceps). There was a positive TL to the medial side of the elbow and knee with volar contacts. While talking to the patient both areas were being contacted with bipolar magnets trying to show their association. But after, when trying to

2. Volar Contacts

challenge these areas with a volar contact the results were negative. However a palmar contact was now positive and could be challenged for direction and respiration. When treated in this manner the weakness that was present in both the arm and leg was now normal.

The use of double contacts will be more fully ^{covered} in another paper.

In brief. TLan area with a volar contact or two magnets together with the north and south poles side by side. While maintaining this positive TL which has weakened an intact muscle search for another area with volar contacts or magnets till the weakened muscle is strengthened. If a muscle was strengthened by the first contact then the second one should reweaken. Challenge each area in a circular direction with a magnetic or volar contact. When the intact muscle weakens from the challenge check for the phase of respiration that abolishes the weakness. The respiratory assist must be the same to both areas. If no magnets are available the Doctor should use a volar hand contact for a temporary correction until the magnets are available. Both areas are treated at the same time making three or four circular movements in the determined direction with the patient going into and holding the proper breath, in or out. This combination must be done at least three times. If two sets of magnets are used with direction and respiration, one or two times is enough.

Return to the original site of positive volar TL and retest. The response should now be negative. This does not complete treatment. Palmar TL, challenge, and treat. The direction and respiratory assist will not be the same and must be rechallenged. Treat both areas at the same time with the determined direction and respiration. This eliminates a positive TL to the area, palmar, volar or magnetic and strengthens the original muscle problem.

Summary: 1. When a volar or bipolar contact is positive find another area that returns the tested muscle to its original state of weakness or strength, while holding the first contact.

2. Challenge the areas to determine direction and respiration.

3. Using two pair of magnets, one set over each area, do the direction with respiration once or twice.

4. Re challenge with a palmar contact to both areas and treat.

CONVERTING UNILATERAL CRAWL TO CROSS CRAWL

by

SALVATORE V. CORDARO D.C.

In those patients who have a need for cross and unilateral crawl, we teach them the proper crawl patterning and then check to see if all the corrections that were made during the visit are still maintained.

With our patients who present bizarre symptoms indicating schizoid tendencies and who have a need for unilateral crawl we constantly paid attention to neck flexors and extensors and adrenal correction as dictated in printed articles by Dr. George Goodheart. As you know the adrenal system needs close scrutiny and support in these cases.

On a patient with schizoid tendencies I corrected the adrenal system and neck flexors and extensors and then chose to test the need for cross crawl or unilateral crawl. The patient still had Niacinamide-B6 in his mouth when I tested unilateral crawl. To my surprise instead of finding the expected strengthening of all systems I found complete weakness of all previously strong systems. Observing that the patient still had Niacinamide-B6 on his tongue I proceeded to test cross crawl and found that now all systems were strong!

I continued to test this reaction in all my patients with bizarre symptoms who previously required unilateral crawl for strengthening.

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All of these patients now need a normal cross crawl for strengthening when they hold Niacinamide-B6 in their mouths. I instructed all these patients to perform a normal cross crawl daily while holding Niacinamide-B6 in their mouths and found the results to be excellent. All these patients who had complained of bizarre schizoid symptoms reported that these symptoms had disappeared completely. The patients were understandably relieved and elated.

My conclusions are the following:

The schizophrenic patient who was strengthened by unilateral crawl but still complains of bizarre and varied symptoms can now, with the use of Niacinamide-B6, use cross crawl to be elevated to a higher neurological level of healing and ongoing correction of symptoms.

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" The Pink Room and Hyperglycemia "

By Dr. Elmer J. Cousineau, D.C.

Abstract:

To outline the indicators for hypo- and hyperglycemia, and the use of the Pancreas Meridian as a substitute for the use of the Pink Room in the handling of violent or hyperactive persons.

Introduction:

This paper is a discussion of indicators that have been discovered to reveal sugar-handling problems having bio-social significance. The use of muscle testing as in Applied Kinesiology has done much to reveal sugar-handling problems of hyperkinetic or violent individuals. The use of the Pancreas Meridian offers a solution to this problem.

The Pink Room :

The use of the " Pink Room " was discussed by Alexander G. Schauss in his paper "Diet, Crime & Delinquency " presented in July 1978 before the Washington State Criminal Justice Training Commission at Olympia, Washington (1). In it he cites instances where criminal behavior was rehabilitated upon correcting dietary imbalances.

The holding of all new personnel for 15 minutes in a pink cell, or room painted pink, before reassignment reduced

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"The Pink Room" (Contd.)

violence in incoming prisoners at the U.S. Naval Correctional Center in Seattle, Washington. There were NO reports of violence during 156 continual days of its use for 15 minute periods, but one prisoner left there for four hours almost went berserk.

The use of a "pink" fish tank, which holds 12 men at a time at the Santa Clara County Jail in San Jose, California, has been used to reduce violence in incoming prisoners.

The TV Network show "That's Incredible" with hosts John Davidson, Fran Tarkenton and Kathy Crosby showed film clips on National Television of the use of a "pink" room for quieting students that were hyperkinetic or exhibiting violent behavior in a Junior High School. Its principal stated he could not account for the results, altho he could attest to their validity.

One State Police Officer was shown to be able to lift a heavy barbell or weight while a "blue-colored" card was held up for his viewing in front of him, but he could not lift the same weight when a "pink-colored" card replaced the "blue" card. Mr. Alexander Schauss was the gentleman holding up the cards for viewing, and so testified to me in a recent interview.

The Color Pink:

Your author has found that when a hypo-glycemic condition is found to be indicated in a patient, the very mentioning of the word "pink" will cause a strong muscle to become weak, and a weak muscle to now test strong, whether the patient is standing erect, or is seated.

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The Color Pink (Contd.)

The use of other colors either visually or mentioned will not produce this result, but the use of the word "pink" will produce instant weakness. The person doing the testing must first check himself on the use of the word "pink", because if he is suffering from the same condition, he will reverse the test results. This happened to your author once, before he learned to check himself first. The tester merely thinks the word "pink" to himself and tests the patient's previously tested strong muscle, and if the muscle weakens, the tester is suffering from the condition himself and will negate his test results on his patient. Other confirming tests will be mentioned in this article later on.

The Dr. Victor Frank Tests:

The Straight-Leg Raising Test of Dr. Victor Frank, D.C. (3) as confirmed by Dr. Wallace Gunn, D.C. (4) for hypo- and hyper-glycemia can be used for confirmation of sugar-handling problems of the patient being tested. The test consists of pressure tableward upon the straight-leg raising of one leg of the supine patient, while the other leg is flexed at the knee with that foot flat on the table. Weakness on elevating the left leg is considered indicating hypo-glycemia present, while right leg weakness is indicative of hyperglycemia. When both legs test weak, the condition is known as "Oppositic Syndrome" or a condition where the blood sugar level fluctuates between hyper- and hypo- but not both at the same time.

The Dr. John Diamond Indicator: (2) (The best for hypoglycemia)

Dr. John Diamond, M.D. a former member of ICAK showed in his book "Behavioral Kinesiology" the use of a hand placed close to the patient's left ear, but not touching it, which would indicate thymus unbalance due to excessive stress being felt by the patient. This test was found to be positive whenever the weakness to the color pink was evident, as well as the Dr. Frank left leg-raising Test weakness. The hand used may be that of the patient, but is performed most easily by the testing doctor. No weakness results when placed alongside the right ear.

Other Sugar Forms Tested:

The following items were found to cause weakness in a strong test muscle when held in the right hand, but no weakness resulted when held in the left hand: a bottle of Karo Syrup, or one of Honey, white sugar packets from a restaurant, wrist-watches, coins, or other metal objects, even the copper rivets in the jeans that became so popular. All these produce weakness when tested singly, but in combinations would cancel each other or confuse the result. Raw Sugar or sugar substitutes did not produce weakness when held in either hand.

One other item to be watched upon testing the above is if the patient inadvertently crosses his feet while sitting and being tested. When crossed one direction it negates the sugar test, but when crossed the other way will indicate weakness all by itself. So watch the patient's posture. It seems only natural for the patient to assume the position that recruits strength.

" The Pink Room and Hyperglycemia " Dr. Cousineau page 5

The Head-Turn Test - A Correction ?

This author found that by having the patient turn his head to the left while being tested for the previous sugar tests, all tests were negated, while right head turning had no effect.

Since the patient could not very well carry his head turned to the left as a defense against weakness while ingesting sugar products, it seemed only logical to find the offending vertebra that was affected by the head turning.

The Fifth Cervical Correction for Hypoglycemia

Your author remembered that the fifth cervical vertebra was experimentally found to affect the strength of the latissimus dorsi muscle, back in the early 1970s when Dr. Robert Ridler D.C. of Seattle, Washington (5) was researching vertebrae that would strengthen muscles found weak by AK methods of testing.

The fourth cervical would strengthen weakness in the deltoid muscles. The pectoralis major was strengthened by adjusting the sixth for the clavicular division and the seventh for the sternal division.

The Bilateral Lower Trapezius Test

When both lower trapezius muscles are tested simultaneously and weakness is evident, a thoracolumbar fixation is deemed to be present. The failure always occurs when the Victor Frank Test is positive for hyperglycemia.

The Associated Vertebra for Pancreas Meridian:

This author found that if the Ninth Thoracic Vertebra (6) were challenged and adjusted, it eliminated the indicators for the hyperglycemic portion of the Dr. Frank Indicator, and that for the thoracolumbar spinal fixation, It also seemed to correct the Oppositic Syndrome weakness without adjusting the fifth cervical.

The White Sugar Myth ?

The public demonstration by various nutritionists of muscle weakness on ingestion of white sugar on the tongue in front of audiences, seems very convincing when it makes a previously strong muscle become weak. When the hypo-glycemic condition is found to exist by the Frank and by the Diamond Test , one latissimus dorsi will be found to be weak, and the opposite latissimus will be found to be strong. What happens upon the ingestion of sugar, or it being placed upon the body, is that the weakness reverses itself going to the opposite side of the body, with the weak muscle becoming strong and vice versa.

There is nothing wrong with the data, merely conclusions based upon insufficient data, like the legend of "Chicken Little" saying the sky was falling when he was hit on the head by a leaf.

The minerals and other valuable constituents lost thru the refining process need to be replaced so proper sugar metabolism can occur. But the hypoglycemic condition must first exist in the patient before the test can be evident, as with the color "pink".

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Summary and Conclusions:

There are many indicators that a Doctor of Applied Kinesiology can use for analysis of sugar-handling problems in his patient. The conditions of hypo-, hyper- and the Oppositic Syndrome are examples of fluctuations in blood sugar levels in the patient. These may be compared to the fine-tuning of your TV set or of our automobile so it will run more efficiently. Something has gone wrong with the patient's body's ability to respond to its sugar needs. Most doctors attempt to change the patient's environment by changing the dietary input.

What is needed is the adjustment of the patient's circuit-breakers which just happen to be in the spine at the inter-vertebral levels. These control the input to the brain of the environmental changes so the body can respond with the correct amount of sugar required.

The adjustment of the Fifth Cervical vertebra corrects the hypo-glycemia and eliminates the effect upon the patient's body of the color pink, white sugar, honey, glucose products, and metal objects, and the Dr. Diamond Test.

The adjustment of the Ninth Thoracic vertebra eliminates the indicators for hyper-glycemia, namely the weakness in the Dr. Frank Right-Leg Lift, and the thoracolumbar spinal fixation.

Finally the emotional side of the Kinesiology Triangle has not been sufficiently evaluated, since love, anger or just plain enthusiasm for a project or idea, will cause adrenalin to

Summary and Conclusions (Contd.)

be secreted which will bring forth sugar out of the liver to correct hypoglycemia. In contrast to this, a patient who is pursuing activities that are not of his own choosing because he must, or ought to or should, will cause the adrenal output to be depressed and hence hypoglycemia results.

A person with suppressed anger will have hyperglycemia because he cannot express his anger, and the adrenalin brought forth by his anger, continues to bring forth sugar which piles up unused in the blood stream to produce hyperglycemia.

Once more we see that the body is simply intricate, but intricately simple. Merely by the gentle adjustment of the patient's spinal segments, his body functions can now be fine-tuned to correct for his excesses.

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A NEW AID IN THE MANAGEMENT
of
STRESS SYNDROME

Brent W. Davis, D.C.

Many Applied Kinesiologists have had the gratifying experience of helping severely stressed individuals recover when they had failed to respond to other therapies. As the "Diseases of Civilization" become more complex, however, and as stressors multiply, it is becoming increasingly difficult to stabilize the nutritional and mental components of the triad of health as they relate to stress disorders. For this reason, considerable effort has been made in the last two years to develop a product which would support (in as general a way as possible) biochemical and emotional imbalances that commonly occur under stress (eg. blood sugar handling dysfunction exacerbating emotional instability). The product, Phyto-Dren, is the result of this research effort and has recently become available (1).

A description of Phyto-Dren follows, including a list of constituents and their mode of action. A more detailed presentation of how Phyto-Dren was created with examples of case histories will be given at the May meeting.

CONSTITUENTS:

- *Calendula officinalis* (Marigold)

- (9) Promotes healthy granulation and healing of ulcerated tissue. Hemostatic.
- (7) Contains principles which aid bile secretion and can assist menstruation.
- (8) Useful for management of chronic ulcers, capillary engorgement, and in hepatic and splenic congestion.

- (10) Reduces engorgement and benign tumefaction.
- (11) The alcoholic extract of Calendula flowers has shown bactericidal activity against *Staphylococcus aureus*.

- *Cimicifuga racemosa* (Black Cohosh)

- (8,10) Improves digestion by balancing abnormal nerve supply to the stomach, and promotes normal gastric secretory activity and peristaltic action.
- (9) Has a wide action upon the cerebrospinal and muscular system, as well as upon the uterus and ovaries.
- (8) Exerts a strong influence upon reproductive functions, improves hormonal balance, and acts as an emmenagogue (promotes menstruation).
- (12) Possesses sedative, anodyne and antispasmodic properties and is an ideal utero-ovarian tonic.

Is of great utility in irritative and congestive conditions of the uterus and adnexa.

Has a powerful effect over the nervous system and has been used in the management of chorea.

-*Croton cascarilma*

This plant is unknown in Naturopathic, Herbal or Homeopathic medicine in the United States or Europe. It is highly esteemed in Central America as a major herb for the pancreas and to some extent the liver. Wildwood Botanics Co. is pioneering the clinical applications of this remarkable herb in the U.S.

A.K. clinical testing has clearly demonstrated over two years that *Croton cascarilma* is extraordinarily effective in supporting the hypoglycemic pancreas, especially when associated with emotional imbalance.

-*Glycyrrhiza glabra* (Licorice)

- (13) Exhibits mineralcorticoid and estrogenic properties. One of its constituents has a structure resembling that of steroids.
- (14) In a group of experimental animals which were physically stressed, the juice of licorice prevented the development of gastric ulcers which otherwise would have formed.
- (15) Licorice extract has been shown to have a biochemical

effect suggestive of deoxycorticosterone or ACTH.

- (16) Alcoholic extracts of Licorice root showed reproducible antimicrobial activity in vitro against Staphylococcus aureus, Mycobacterium smegmatis, and Candida albicans.
- (8) Is useful as a demulcent in soothing inflammation or irritation of mucous membranes.
- (7) Is mildly laxative, diuretic, anti inflammatory and spasmolytic.
- (16) Licorice root contains a small amount of the naturally occurring analgesic, salicylic acid (0.15%).

- Lomatium dissectum

This plant is virtually unknown in traditional Herbal, Naturopathic or Homeopathic medicine. It is regarded as the "greatest of medicines" by the Indians of Nevada and tribes of the Pacific Northwest, where it is held sacred. It is used as a panacea, especially for influenza, pneumonia and other respiratory affections.

Lomatium especially abolishes A.K. reflexes suggestive of pituitary and thymus involvement.

- Panax quinquefolium (Ginseng, American)

Ginseng has been termed an "adaptogen" which means that it promotes optimal body adaptation to varied biological stresses.

- (2) In general, Panax has a stimulating and normalizing effect on the adrenal cortex. Corticosteroid content in the urine is increased by more than 60% and the eosinophil count is reduced after administration of Ginseng.
- (3) A neurogenic and peripheral stimulation by Ginseng on the adrenal cortex results in an increased ability to cope with stress.
- (2) Experimentally, Ginseng increases both mental and physical efficiency. Double blind clinical studies of ginseng-treated male radio operators demonstrated a noticeable positive effect on psychomotor activity and a simultaneous capacity increase in speed and accuracy of message transmission compared to untreated operators.

During stress, the amount of Vitamin C is decreased in

THE ADRENALS. When ginseng is administered, the time of stress-decreased vitamin C concentration is shortened and there is a more rapid return to a normal level. Ginseng treated experimental animals were better able to withstand conditions of extreme cold or heat, and other stressors, than were untreated animals.

- (13) Ginseng stimulates aerobic and anaerobic glycolysis in the liver and kidneys with no significant increase in oxygen consumption.

There is also a direct effect on muscles, since Ginseng affects efficient expenditure of energy stored in muscle ATP. This allows for better skeletal muscle tonus.

- (8) Ginseng increases brain capillary circulation.
- (3) Rat liver nuclear RNA, RNA polymerase, polysomal RNA, bone marrow DNA, and protein synthesis are stimulated by ginseng. Serum protein is also increased because of the stimulation of albumin and gamma-globulin synthesis.
- (3) Laboratory investigation has shown that Ginseng possesses gonadotropic (estrogen-like and testosterone-like) properties
- (4) Ginseng has been used for its effect on the pituitary gland.

- *Piper marginatum*

- (5) This plant is used successfully primarily to stimulate menstruation, and is likely, therefore, a hormonal regulator. It is also a hemostatic and a carminative.

- *Smilax officinalis* (Sarsaparilla)

- (10) Contains substances resembling estrogenic and androgenic principles.
- (6) Sarsapogenine, one of the active constituents, augments the value of all foods and medicines, by increasing metabolic rate and absorption.
- (17) Through the autonomic nervous system it affects the lymphatics, skin and kidneys and acts as an alterative.
- (8) Has long been esteemed highly for the treatment of blood dyscrasias and has marked alterative properties.

CONCLUSION:

The above information demonstrates that the combined constituents of Phyto-Dren possess the ability to biochemically countereffect or diminish many of the physical problems occurring in Stress Syndrome, eg. thymico-lymphatic, adrenal-cortical, and gastro-intestinal degenerative changes, and it has the ability to favorably influence generalized endocrine imbalances. Furthermore, the fresh plant tinctures in Phyto-Dren are highly active bioenergetically.

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AMINO ACID SCREENING

by

Sheldon C. Deal, D.C., N.D.

and

Richard Utt

ABSTRACT: Herein lies a fast kinesiological method for identifying a rather complex screen of 24 different amino acids. Thus enabling physicians to help determine the protein status of their patient in the way of normal or deficiency levels of 24 different amino acids.

GENERAL INFORMATION:

The importance of amino acid screening for good health can hardly be overstated. The body runs on amino acids. Amino acid metabolism is basic to such health functions as cell division, neurotransmitters, hormones and the endocrine and immune systems. Perhaps most importantly, all known body enzymes (over 15,000) require amino acids. We believe the amino acid screening should be used for routine physical examinations, as well as for patients with problems; either psychological or physical.

An amino acid level below normal range may result from a problem with digestion or absorption, a problem with the metabolic pathway or even some vitamin or mineral deficiency, depending upon which amino acid or precursor amino acid is low. The significance of the amino acid profile depends upon both the level of the individual amino acid and the levels of related and interacting amino acids. For example, the levels of 13 different amino acids are considered in understanding the metabolic pathway of methionine alone.¹

Mental retardation, epilepsy, depression, manic, schizophrenia, headaches, ulcers, even anxiety, nervousness and irritability respond favorably to amino acids.² Amino acids exert their most dramatic and measurable effect at the nerve synapse. Amino acids are either the neurotransmitter itself or the precursor to the neurotransmitter. Some neurotransmitters are excitatory in action and some are inhibiting in their action. However, unless all amino acids are present to work together, almost anything can go wrong with the message transmission and control exerted by the nervous system. More and more psychological problems, especially severe problems seem to be related to body biochemistry. Senility, tumors, even Parkinson's disease and other brain problems will respond favorably to amino acid therapies.³

BACKGROUND FOR TESTING:

One of the many problems we ran into, trying to establish a kinesiological method of identifying the amino acids was a pure test product. Most of the proteins and amino acid products available contain more than one amino acid even though only one may be listed on the label. The manufacturer evidently meant that there was a preponderance of that amino acid present in the product. Not only does that confuse the issue when doing testing, but can also be a serious problem therapeutically. For example, in treating genital herpes, lysine is of benefit and arginine is detrimental. There are many foods that contain both in fair proportions such as soybeans, beef and chickpeas.⁴

We found our answer to this problem by using free amino acids. Free amino acids are individual amino acids in crystalline form. They differ from predigested protein or protein powder, in that

in these products the protein is still present in the form of connected amino acids.

Free amino acids are hooked up with enzymes, hormones, vitamins, and minerals to form body tissues. Without free amino acids, vitamins and minerals cannot do their job. For example, tyrosine combined with iodine to form thyroxin. If a person does not get iodine, thyroxin cannot be produced. But what happens if the person does not have enough tyrosine? Obviously, the thyroid cannot make thyroxin.⁵

The next problem we ran into was finding patients low in just one amino acid. Patients low in protein in general were plentiful. Since some amino acids are precursors to other amino acids and some amino acids appear in branched chains (like valine, isoleucine and leucine) the problem of identifying individual amino acids became more complex.

The answer here was found in relating the end points of the 12 meridians to 24 different amino acids.

TESTING PROCEDURE:

Many combinations were tried before we got the pieces of the protein puzzle to fit into place. What was so confusing in the beginning was that one end point of a meridian would respond to more than one amino acid, if the patient needed more than one amino acid. Only if the patient needed one amino acid only was it a cut and dry picture that we found kinesiologically. Since the mono deficient amino acid patient was rare we had to devise another method to complete our research. After much trial and error we found by sedating the first tonification point of the

meridian with a north pole magnet, we could make the beginning point of the meridian therapy localize. That therapy localization was cleared in turn by one amino acid only. Conversely, by tonifying the first sedation point of the meridian with a south pole magnet, we could make the end point of the meridian therapy localize, and that therapy localization was cleared by one amino acid only.

To clarify "one amino acid only", this was true if the patient needed one amino acid only, otherwise if there were multiple amino acids called for, then more than one would clear the therapy localization many times, depending upon which amino acid it was.

In cases where the patient did need more than one amino acid we found we could get the end point to respond to one amino acid only by using a priority system. Meaning the body preferred the amino acids in a certain sequence or in some cases by determining the number one amino acid need priority wise the other indicators would clear.

The primary priority indicator is determined by the following sequence:

1. The end point will therapy localize in the clear
2. Inspiration will make the muscle go strong
3. Pinching does not change the muscle strength
4. Eyes left or right does not change the muscle strength.

We would not be so bold as to suggest that all patients that T.L. an end point are protein deficient. Therefore, make sure the acupuncture system is cleared first. Meaning that by balancing the overs and unders that no alarm points or pulse points now therapy localize. Only then may you safely check the patient for individual amino acids by therapy localizing the end points.

For that purpose we have devised the following chart:

End Point	Amino Acid	North Pole on Tonification Point	South Pole On Sedation Point
ST-1	L-Taurine	ST-41	
ST-45	L-Tryptophan L-Histidine		ST-45
SP-1	L-Citrulline	SP-2	
SP-21	L-Histidine		SP-5
H-1	L-Serine	H-9	
H-9	L-Glycine		H-7
SI-1	L-Leucine	SI-3	
SI-19	L-Glutamine		SI-8
BL-1	L-Proline	BL-67	
BL-67	L-Ornithine		B-65
K-1	L-Cystine	K-7	
K-27	L-Carnitine		K-1
CX-1	L-Valine	CX-9	
CX-9	L-Isoleucine		CX-7
TW-1	L-Tyrosine	TW-3	
TW-23	L-Cysteine (Mono HCL)		TW-10
GB-1	L-Phenylalanine	GB-43	
GB-44	L-Aspartic Acid		GB-38
Liv-1	L-Methionine	Liv-8	
Liv-14	L-Glutamic Acid		Liv-2
L-1	L-Threonine	L-9	
L-11	L-Arginine		L-5
LI-1	L-Alanine	LI-11	
LI-20	L-Lysine		LI-2

Understand now, that the magnets are not part of the therapy, but rather they were used in the research to create the need for the amino acid. In a cut and dry case, the patient comes in, you clear the acupuncture system and then you have the patient T.L. one end point at a time. If the T.L. of large intestine one (LI-1) makes the indicator muscle go weak, then placing L-alanine in the patient's mouth will make the muscle strong again.

In a research case, placing a north pole magnet over H-9 (held in place by a piece of tape) will make the subscapularis muscle go weak and having the patient T.L. to H-1 will make the muscle go strong again. By placing L-Serine in the patient's mouth will also make the muscle go strong and will negate the T.L.

Some other findings that showed up in our research were whenever you sedate the first tonification point, the alarm point for that meridian also will now T.L. conversely whenever you tonify the first sedation point, the pulse point for that meridian also will now T.L. Therefore, alarm points and pulse points found to T.L. in the clear should make you suspect of an amino acid need, but follow the above procedure to pin down specific amino acids.

We have been using free amino acids from Tyson and Associates, Inc. They will also supply you an amino acid test kit for a nominal charge. You may write them at:

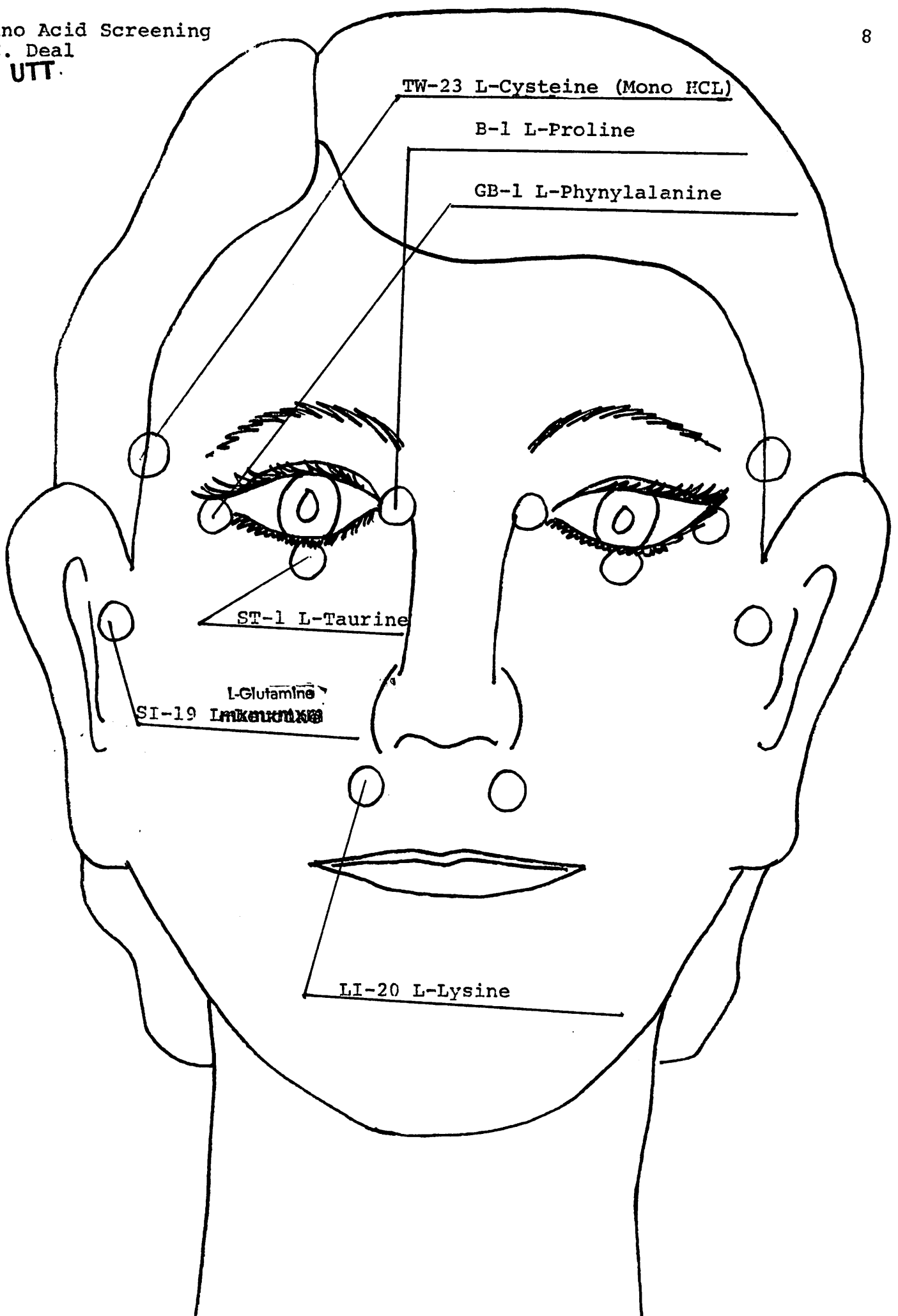
Tyson and Associates, Inc.
19725 Sherman Way #270
Canoga Park, CA 91306.

CONCLUSION:

The ability to identify and supply individual amino acid needs in our patients has been another piece of the jigsaw puzzle for us. We have been able to turn around many previous deficient patients. We have also been able to get patients to hold corrections that were previously blowing out.

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TW-23 L-Cysteine (Mono HCL)

B-1 L-Proline

GB-1 L-Phynylalanine

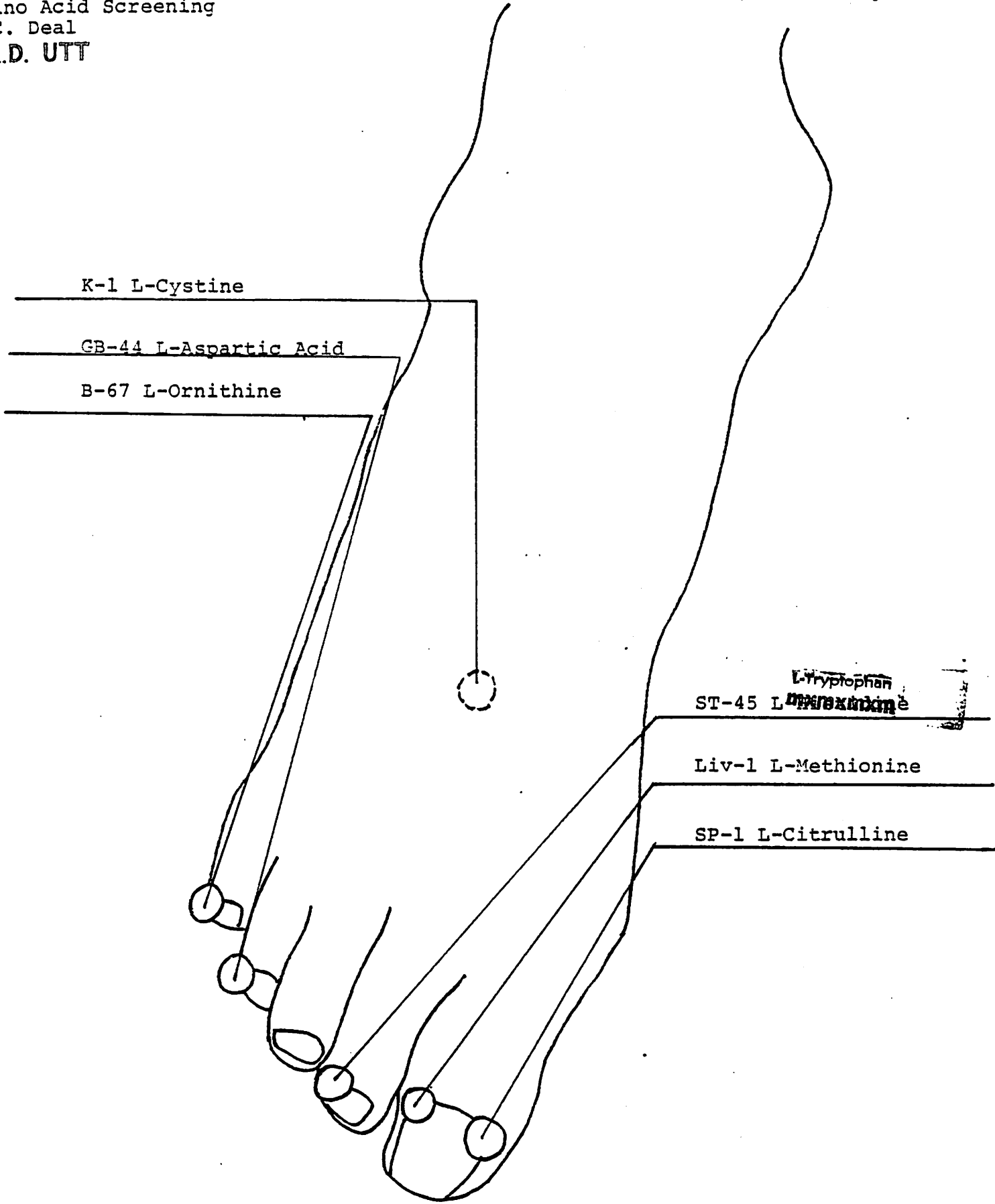
ST-1 L-Taurine

L-Glutamine

SI-19

LI-20 L-Lysine

Amino Acid Screening
S.C. Deal
R.D. UTT



230 CX-9 L-Isoleucine

LI-1 L-Alanine

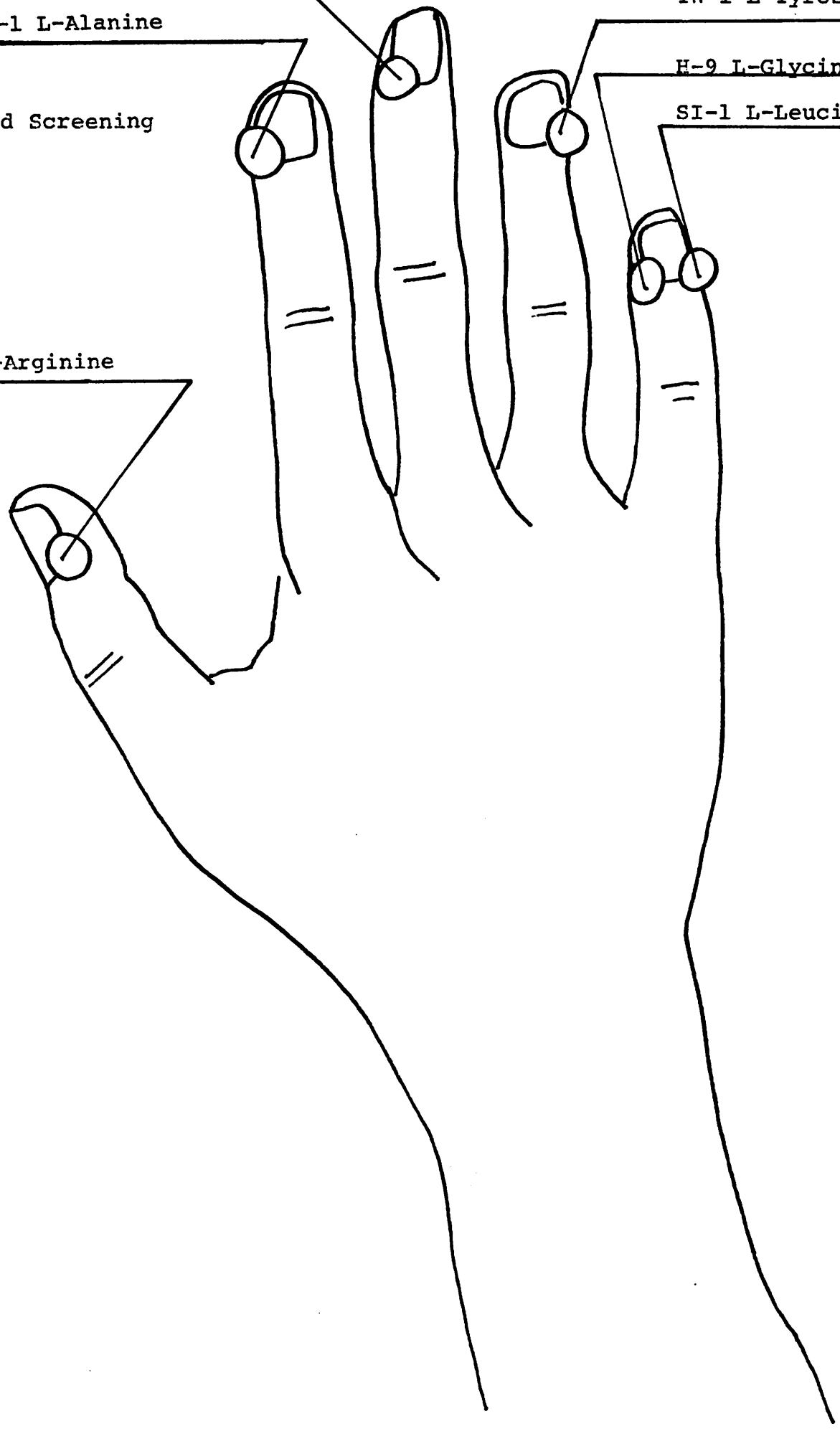
TW-1 L-Tyrosine 10

H-9 L-Glycine

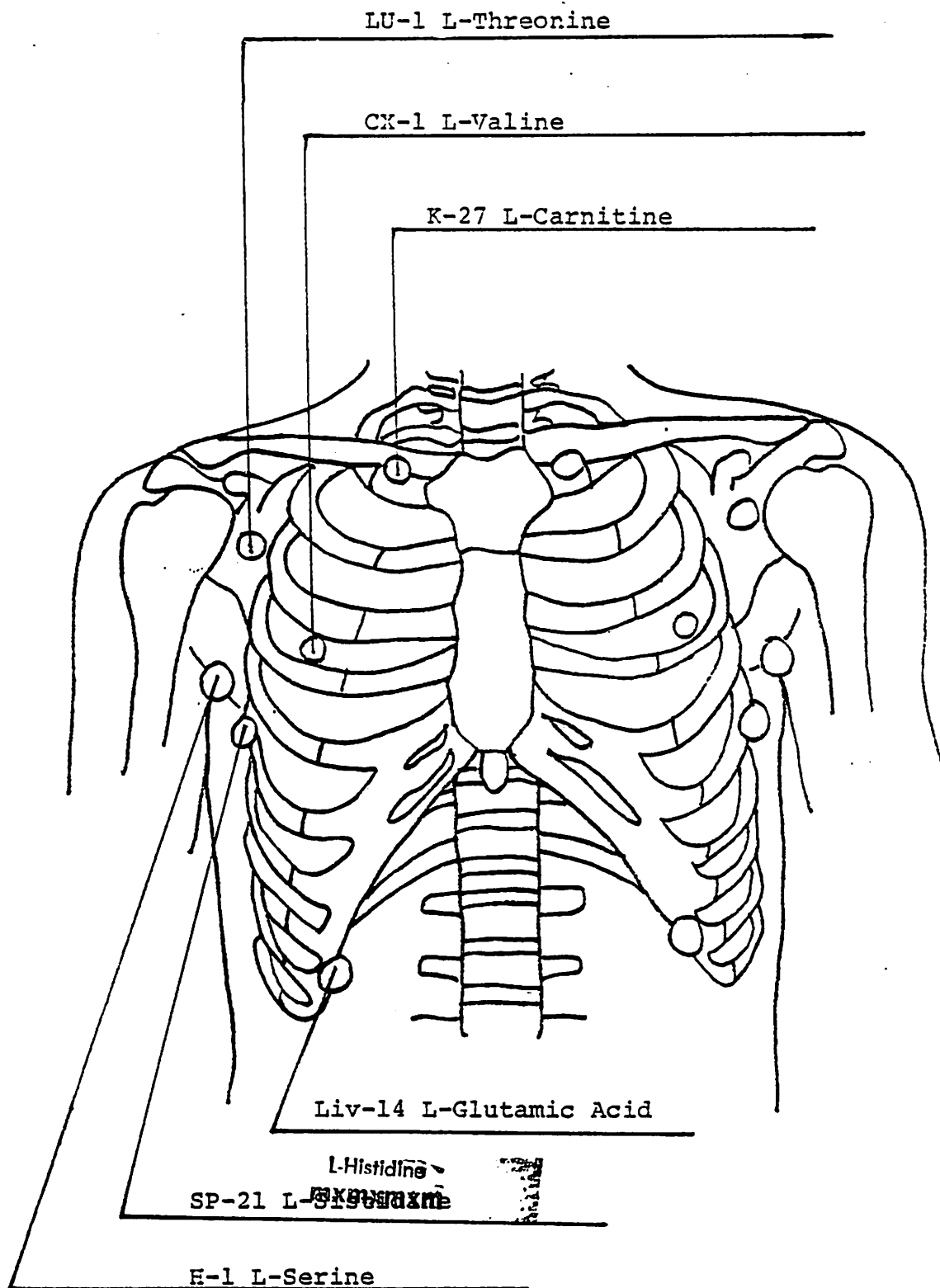
SI-1 L-Leucine

Amino Acid Screening
S.C. Deal
R.D. UTT.

LU-11 L-Arginine



R.D. UTT



THE BIOLOGICAL COMPUTER

By J. V. Durlacher, B.A., D.C.

ABSTRACT:

Dr. Alan Beardall states that the body contains a biological computer which maintains priority over the sequence in which the body wants to be fixed. He also states that before any effective correction can be made, it must be determined that all parts of the body are communicating with each other. (1)

This paper addresses itself to the validity of the biological computer premise.

INTRODUCTION:

For several years Beardall has stated that the practitioner or the patient can therapy localize the patient. After hearing this, I tried it in my clinic with only some success. That is, many times when the patient could T.L., I could not. It was not until I attended a seminar taught by Beardall that I discovered that unless the central processing unit (CPU) was receiving all data, it could not communicate or process properly. The CPU is made up of the nervous system and its divisions: A. Peripheral nerves, B. Spinal cord, C. Mid-Brain, D. Cerebellum and cerebral tissues. (ibid)

The body apparently operates on at least four different levels:

1. The cerebral computer which is primary and the most complex.
2. The glandular regulating the autonomic and endocrine systems.
3. The spinal computer responsible for communications and chemistry

of digestion. 4. The local computer found in the motor point of each muscle is the most rudimentary. It functions as the display unit of the CPU. (ibid)

With this, Beardall devised a method of checking and clearing the CPU, if necessary, so that T.L. and other tests - challenging, leg length measurements, electrical frequency scans of the body, could be made with accurate results in determining the state of the body and what has to be fixed and in what order. (ibid)

METHOD:

The patient is put through the computer clearing technique as described by Beardall in Clinical Kinesiology Instruction Manual.

CONCLUSION:

Since October 19, 1982, this procedure has been used on 104 different patients and has proven to be very effective in revealing the real nature of the patient's problems.

- (1) Clinical Kinesiology Instruction Manual, Alan G. Beardall, D.C. published privately, Box 1752, Lake Oswego, Oregon 97034

RIGHT SP-21 MONITOR

by

EDWARD E. EVANS, D.C.

ABSTRACT

The amount of time we spend holding a neurovascular or stimulating a neurolymphatic can vary a great deal from patient to patient and from local muscle involvement or organ involvement, whether acute or chronic.

Dr. Goodheart suggests that we Temporal Tap¹ and rechallenge the neurolymphatic or neurovascular.

Dr. Beardall² suggests stimulating origin to the neurovascular and insertion to neurolymphatic and waiting for simultaneous pulsation of both points.

I have found a third method which is very practical and has been most helpful in treating acute conditions.

APPLICATION

Having found the major organ and muscle involvement and treating the five factors of the I.V.F., I would T.L. the neurolymphatic and neurovascular points to SP-21 on the right (right handed people) and retest the muscle. If further stimulation is needed the muscle will still be weak. If testing a muscle of upper extremities, the Doctor or a surrogate may T.L. SP-21 on right instead of patient.

Page 2- EVANS- Right SP-21

CONCLUSION

I have found it may take from 60 seconds to 5 minutes to clear some neurolymphatics and neurovasculars.

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1. Dr. George Goodheart
Study Types 30-1-70
31-1-15
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Clinical Kinesiology
Instruction Manual

ANOTHER FACTOR IN LEAD DETOXIFICATION

by

Terry L. Franks, D.C.

ABSTRACT: The use of silver nitrate in lead detoxification is explained.

In a lead toxicity, the most commonly used substances are calcium, vitamin C, amino acids, and pectin. There may also be a need for homeopathic lead, homeopathic colocynthis, vitamin B-12, folic acid, vitamin B-15, and vitamin B-17 to assist the elimination process. EDTA is limited for our purposes because of the need for an IV presentation.

Silver nitrate may not be used internally, but has proven very effective when used in a foot soak.¹ The procedure is to establish the areas of lead toxicity by muscle testing and then place the patients feet in about two inches of water in a pan. Slowly add silver nitrate (a common source is Argyrol 10%) to the water until the muscle indicators disappear. Repeat this procedure until there is a volar therapy localization of the hand located midfrontal at the hair line. The procedure may be repeated when lead toxicity is again apparent.

REFERENCES: 1. Pelikan, W., The Secrets of Metals, Anthroposophic Press, Inc. Spring Valley, N.Y. 1973

SULFUR ALLERGY OR TOXICITY

by

Terry L. Franks, D.C.

ABSTRACT: A list of foods containing inorganic sulfur is presented which can be given to patients.

Inorganic sulfur has been found to have a strong negative effect on many people.¹ It will generally target to the pancreas producing a variety of digestive disturbances. The easiest form of sulfur to use for testing is ferrous sulfate in tablets.

The following foods generally contain some form of inorganic sulfur.

1. FRUITS - fresh, brandied, glacied, dried, or frozen; maraschino cherries; tomatces; most fruit has been exposed to sulfur - dioxide gas to prevent spoilage during shipping. These fruits should be avoided. Ask in the produce department or at your co-op to see if their fruit has been treated with sulfur.
2. FRUIT JUICES - orange juice is among the worst
3. SUGAR, SYRUPS - including corn syrup; avoid products in which these are used
4. CORN OIL, CORN STARCH, CORN MEAL - any processed corn product should be avoided along with any product to which it has been added
5. POP - regular or diet including club soda
6. BEER, WINE, CIDER - some imported wine may be okay, it should be tested on patient
7. TEA - herbal teas are the only ones patient may drink
8. JELLY, JAM - regular, imitation, or diet
9. POTATOES - commercially prepared, dehydrated, frozen or mixes
10. LETTUCE, PARSLEY, TOMATOES - some restaurants spray their salads with a sulfur solution, potassium metabisulfite, to prevent wilting. Ask the manager if they use it. Be particularly cautious of salad bars.

Sulfur
Terry L. Franks, D.C.
Page 2

11. CONDIMENTS - pickles, catsup, mustard, etc.
12. SOUPS - canned, dehydrated (homemade is allowed)
13. BREAD - check label carefully for any of the foods listed above
14. GUM - with or without sugar
15. BAKING POWDER - make your own: 1 Tbl. baking soda, 2 Tbl. arrowroot powder, and 2 Tbl. cream of tartar. Put into an empty spice jar and shake. Use as you would use commercial baking powder.

The following foods are questionable. Proceed with caution.

Mayonnaise

Cooking Oils

Cheese

REFERENCE: 1. Hunter, B., Food Additives and Your Health. Keats Publishing, Inc., New Canaan, Conn. 1980

AN INTRODUCTION TO SOME ENDOCRINE
ORGANS AND THEIR RELATION TO NUTRITION

ABSTRACT

A compilation which will help to remember physiology, laboratory test and symptomatology in the daily practice.

ADRENALS

The adrenals with their mineral, sodium, control the balance of the medullary oriented epinephrine and the norepinephrine which have autonomic nervous system control over fatty membranes and their mineral exchange or electrical conductivity. The cortical mineral, chloride, controls the second stage of carbohydrate digestion as well as cellular membrane permeability by its alkaline influence on the pH of the blood.

- Adrenals control 2/3 of the electrolytes balances between sodium, calcium and potassium.
- Adrenals regulate the alkaline pH of the blood.
- Adrenal medulla controls the chlorides shift.
- Adrenal cortex works with sodium.
- Adrenals work in association with POST-PITUITARY and CALCIUM balance.

CONCLUSION :

The adrenals balance water and minerals in the blood and tissues and are responsible for the movement of nutrition out of the liver and into the cells.

SYMPTOMATOLOGY OF "ADRENALS" PATIENT

- Depression
- Anxiety
- Mood swing
- Extreme mood reaction to eating sweets
- Exhaustion

- Impotency
- Nervous breakdown
- Kidney problems
- Pain in articulation and ligaments, at tip of sternum
- Allergies - Hay fever
- Blood pressure problems
- Leg cramps
- Motion sickness
- Shoulder problems

STEP BY STEP PROCEDURE

In correlation with adrenals, as we all know, are the sartorius, gracilis group of muscles, which acts as a pump.

SARTORIUS :

On of the statilizers of the pelvis in his antero-posterior balance.

- It helps in flexing knees and hips
- It is the support of the medial knee

The patient is usually a category II type of problems

- At the plumb-line, definite shifting of the pelvis on one side genu valgus - foot pronation
- Short leg on postero-inferior side
- Sartorius, gracilis and usually psoas weak on one side
- Patient presents dilated pupils, looks like very tired and depending on type of adrenal problem (hyper of hypo) can be very sweaty and anxious.
- Blood pressure
bilateral blood pressure is altered on diastole (Broockmann) (normal blood pressure : right =120/80 ; left = 120/80). Otherwise, there is the Ragland sign, which is not, in my point of view, accurate.

- 3 -

Ragland sign : abnormal drop in systolic blood pressure when a patient arises from a supine position to a standing position (ideally rise of 8mm of mercury)

Electro. cardiogram : transmission sur one T

LABORATORY - ask for :

1) Alkaline Phosphatase :

Normals : + or - 5 points from the mean of lab. normals

Function of Alkaline Phosphatase : alkaline phosphatase of blood, balancing of water and minerals.

. when it is superior to normal : decreased adrenal function causing acid adrenals

. when it is inferior to normal : increased adrenals function causing alkaline adrenals.

2) Carbon Dioxide :

Normals : 25 - 28

General indication : lung function

. high : lung congestion

. low : lung dry

3) B.U.N. :

Normals : 13 - 17

Involved with thyroid-pituitary-adrenals

function : relationship of glands with the liver

. above 15 and below 20 : thyroid disfunction

- . above 20 : pituitary disfunction
- . below 15 and above 10 : adrenal disfunction
- . below 10 : ant-pituitary disfunction

4) Sodium :

Normals : 140 - 143 meg/L

function : related with adrenal cortex and kidney function

- . above 143 : kidney shutdown
- . below 140 : kidney weakness

5) Chloride :

(chlore plasmatique)

Normals : 100 - 104 meg/L

function : adrenal medulla - bowels and bladder function

- . above 104 : bowels disfunction
- . below 100 : bladder disfunction

Let us see the case of Adrenal insufficiency :

Pathological consideration :

An insidious disease, usually progressive, resulting from an adrenal hypofunction, characterized by an increasing fatigue and weakness, weight loss, dehydration, intestinal upset, abnormal pigmentation of skin and mucous membranes.

Frequently, hypoglycemia complicates the condition or may be concomittent with it from the start and be a factor in etiology of adrenal disfunction.

Physiological consideration :

Atrophy of the adrenal cortex tissue occurs in approx. 70% of these cases. the etiology is unknown (category II and sartorious weakness, could be?).

- 5 -

The remainders are due to neoplasm of the glands, tuberculosis or inflammatory necrosis.

The biologically important products of adrenal cortex are cortisol (hydrocortisone) and aldosterone.

- Cortisol deficiency : produces disturbances in intermediate carbohydrate, protein and fat metabolism and severe insulin sensibility.
Resistance to stress, trauma and infection are reduced.
Cardiac output is reduced and circulatory failure may occur.
- Aldosterone deficiency : results in replacement in the tissue of the sodium by the potassium, producing a marked change in the electrolyte balance, producing severe dehydration plasma concentration, hypotension and circulatory collapse.

Treatment :

Usually applied kinesiology procedure, but do not forget all factors :

Primary muscles : sartorius
 gracilis
 gastrocnemius
 soleus

N.L. - N.V. - S.R. Meridian therapy

Do not forget that usually the patient presents shoulder problems.

Medical approach is usually hydrocortisone injection - In a very severe case it could be of importance.

A high sodium diet is appropriate as well as suppression of refined suger.

Nutrition test must be made on

. Sterotrophic concentrate :

supports adrenal function. Normalizes hormonal outputs of adrenals - resistance to stress

. Corizadin :

high vitamine C complex with vitamine A,D,E, and chlorophyl- Especially needed when condition is complicated by hypoglycemia.

. Vasodyn :

Produces vascular relaxation and vasodilatation - Acts as a physiological tranquilizer - reation due to niacin

. Vitamine B6 :

Reduces fatigue and depression - Adrenal hormone precurser.

. Panthothenic Acid :

Supports adrenal action

- 7 -

THYROID

Major gland controlling liver function and is located in the voice box. This gland removes nitrogen from all foods by using the mineral, iodine. This allows for proper separation of water, sugar and the fats. Reflex is located on the right side of the neck, and the inside of the fatty located below the big toe.

CONCLUSION :

The thyroid controls liver metabolic synthesis of protein and carbohydrates under the specific influence of the mineral iodine.

Hypothyroidism :

Nitrogen is nor released, therefore water and proteins are not released.

Hyperthyroidism :

Nitrogen is too much released, therefore too much water is released.

SYMPTOMATOLOGY OF "THYROID" PATIENT :

- pain on right side of the neck
- pain between shoulder blades
- regurgitation back in throat
- inability to digest all foods
- colon troubles
- coarse nails and hair, tough skin (hypo)
- sinus infection
- vaginal infection
- bladder infection
- extreme puffiness of fingers, eyes, cheeks (hypo)
- hoarseness of voice
- thin skin, nails, hair (hyper)

- protuding eyes
- swelling in throat
- mucous (saliva) problems
- cannot tolerate temperature changes
- easily catches colds and flue

ON THE PHYSICAL POINT OF VIEW :

Check teres minor and infraspinatus and I found as well supraspinatus quite often involved in a thyroid problem. Anyway, the best is to T.L. at the level of N.L. & of the reflex point situated at the right side of the neck.

Check mid-lower trapezius, due to their association with the spleen, which is in intimate relation with thyroid.

On postural analysis, your patient first usually appears very tired, depressed during interview or easily nervous and sweaty. His hands are facing palm post. due to weakness to teres minor and other lateral rotators (supraspinatus and post-deltoid).

The best test should be the Achilles tendon reflex test, (the speed of the achilles tendon reflex to one half of its relaxation is tested either magnetically or by photoelectric methods). But not so practical in our practices.

- Bilateral blood pressure diagnosis

Thyroid problem shows an altered right distolis (hypergland above normal - hypogland below normal)

- Foot relexology

point situated at the level of the metatarsus-phalanxe articulation of the big tow

- Relation also to thymus

LABORATORY :

The value of blood test is still not well accepted - Tests are usually influenced by medication the patient may be taking.

1) B.U.N. :

Normals : 13 - 17

function : relationship of glands with the liver

- . above 15 and below 20 : thyroid disfunction
- . above 20 : post pituitary disfunction
- . below 15 and above 10 : adrenal disfunction
- . below 10 : ant-pituitary disfunction

2) Total Globulin :

Normals : 2.8 - 3.5

function : amount of collidal protein to make anti-bodies,
blood c/ and enzymes

- . above 3.5 : decreased function of globulin - using organ use
tritrophic and iron, copper, iodine, together
- . below 2.8 : increased use by globilin using organs = thyrolate

3) T4 :

Normals : 7 - 8

function : thyroid function

- . high : hypermetabolic thyroid-liver
- . low : hypometabolic thyroid-liver

HYPERTROPHY OF THE THYROID GLAND : GOITER

Pathological considerations :

Hypertrophy and hyperplasia of the thyroid gland resulting from iodine deficiency due to any cause. If the condition exists for a number of years cyst and adenomas may appear.

Physiological considerations :

The iodine containing hormone THYROXINE, which controls the speed at which body metabolism occurs, cannot be produced without adequate iodine intake.

The common type of non toxic goiter is due to lack of iodine.

The less common toxic goiter may have a familial tendency, but basically its cause is unknown.

Treatment :

Iodine and other nutrients, including vitamins, minerals and enzymes are needed before sufficient amount of thyroxine can be produced. The absorption of iodine can be prevented when certain substances in food, particularly peanuts, cabbage, brussels sprouts, soy flour combine with the iodine.

It is wisw to restrict the intake of these foods during therapy.

Mild deficiencies of iodine have been associated with toxic or exophthalmic goiter.

Nutritional therapy, in both conditions includes a high protein diet, avoidance of goitrogen foods and protein supplementation with natural nutrients.

Treat your patient on usual A.K. procedure.

Nutri-dyn to test

Tri Trophic 40

P.B.I.

Raw thyroid concentrate aids in growth and repair of thyroid gland, helps in preventing formation of adenomas and cysts.

Also supplies natural iodine from kelp, which is a form of organic iodine that is better absorbed and retained than Potassium iodine and less readily lost in

Promedyn X :

Very high concentrate of raw unrefined wheat germ oil, including VITE which is essential for the absorption of iodine by the thyroid gland; Normalizes the amount of protein-bound iodine in the blood.

Procace :

Predigested animal protein with all essential amino-acids especially tyrosine from the thyroid hormone is made.

C 500 :

Natural vitamin C is necessary, as thyroxine is inactivated by oxygen if vitamin C is diminished or absent.

Glycodin :

B complex vitamins in combination with vitamin C and a high protein diet - are essential for thyroid function and assist in normal growth and repair of the gland.

ANTERIOR PITUITARY

(Adeno hypophise)

Located at the base of the brain, this gland controls all bodily growth by being in control of all protein digestion.

The anterior pituitary, under the guidance of the mineral magnesium places proteins and lipoproteins in the body for the purpose of hormone placement (stimulating factors). This is accomplished by polarizing magnesium with the other and substance minerals (primarily calcium).

Hormones produced : L.H. - FS.H. - Thyrotrophin.

SYMPTOMATOLOGY :

- left side body numbness or pain
- pain in left temple
- growth deformities (e.g. short fingers, toes ..)
- abnormal birth weight
- inability to tolerate protein
- slow to heal
- loss of skin pigment
- weak ligaments and tendons
- headaches (en barre) at the level of the eyes
- pain at base of skull on left side
- early/late puberty

Bilateral Blood pressure diagnosis :

Altered blood pressure on left side for systolic and diastolic

Spinal reflex :

left occiput

Foot reflex :

At the external and post part of the big toe - A.K. relationship ?

As pituitary balance is re-established, a period of time is needed for the reproductive organs to adjust to a normal level of the hormones. Is it advisable that the patient be informed of this possible change to forestall any anxiety on the part of the patient. This warning is especially important if the patient is using a rythm system of birth control.

Structural and related involvements are tied in very significantly with dysmenorrhoea by affecting the nerve system. Whenever menstruation is abnormal or if there is a reproductive organ problem, examine the structure very closely, especially all the muscles associated with the reproductive system (on a percentage basis, the gluteus medius is the muscle most commonly involved, along with gluteus max., piriformis and adductors).

The uterus itself may need a structural correction because of uterine ptosis. When this condition is present, there is tension on the uterosacral ligament and there will be symptoms stimulating an anterior 5th lumbar. Typically there will be pain of a cramping nature and very profuse menstruation. The pelvic diaphragm which is made up primarily of the levator ani muscle, should be examined and corrected and the uterine technique administered.

The cramping pain of dysmenorrhoea may be the result of calcium deficiency. A practical test for this is to place a Blood Pressure cuff on the arm of leg; pump the pressure up to the diastolic level; hold the pressure for 3/4 minutes; observe for cramping. If cramping occurs, administer calcium in form of calcium lactate or calcium orotate. Dosage of calcium lactate would be 4-41 mg tablets every 15 minutes for one hour, then 3 tablets per hour throughout day time. The tablets should be chewed. Evaluate the patient for HCL function for absorption of calcium.

N.B. Levator ani muscle

Function : Forms the floor of the pelvic cavity and is referred to as the pelvic diaphragm. It constricts the lower end of the rectum and the vagina, retains viscera in position and is a muscle of forced EXPIRATION.

Test : Patient supine with hips in abduction and slight flexion. The examiner places the knife edge of the hand lateral and slightly post to the anus. Fingers should press lightly back into the ischial rectal fossa. The patient is instructed to "bear down" and the examiner observe for building.

N.L. : medial fascia of the thigh on the upper 1/3 lateral to spinous L5 and post medial fascia of thigh on upper 1/3.

N.V. : parietal eminence - post aspect

A.C. : L.I.

Nutri-din supplements :Trace min.

Two tablets every hour until cramps cease - Then 2 tablets in the morning and two in the afternoon.

Each tablet contains 125 mg. of calcium and 200 unit of vitamin D as well as other trace elements.

Natural A and D vitamins

Vitamin D in fairly large amounts is necessary in order to restore and maintain normal serum calcium levels and large amount of vitamin A prevents or reduce inflammation.

E 400

Vitamin E is essential for normal growth, repair and function of all the endocrine glands. It often corrects the menstrual rythm, prevents shriveling of the breast and ovaries and restores menstruation to normal in a few weeks.

Prolantrophic concentrate

Raw pituitary concentrate acts to normalize pituitary function and that of the entire endocrine system.

Uterotrophic concentrate

Raw uterus concentrate, tends to normalize uterine tissue and restore uterus to a healthy functioning condition.

Gonadotrophic F

Raw ovary concentrate improves ovarian health and function.

Betadyn

High potency B complex - Often, a lack of folic acid and/or vitamin B12 may cause menstrual problems.

Chlorodyn

Fat soluble chlorophyll complex act as a systemic detoxicant and is involved in the prothrombin production.

POSTERIOR PITUITARY

(Neurohypophysis)

Back portion of the pituitary gland, involved in balancing major body pH (acid, alkaline balance). This gland balances sugar (acid), minerals (alkaline) in a neutral solution of water.

The posterior pituitary, therefore, under the guidance of the mineral potassium controls the hydrostatic water balance as well as fatty acid carbohydrate placement.

The posterior pituitary secretes two distinct hormones : the Antidiuretic hormones : VASOPRESSIN and OXYTOCIN.

SYMPTOMATOLOGY :

- right sided body numbness or pain
- excess urination
- excess thirst
- retains water
- inability to sexual stimulation
- inability to stimulate breast
- craves sweets
- heart problems, strokes in family or self
- seizures
- mental illness in family or self
- excessive perspiration
- deficient perspiration
- pain on occiput on right side

BILATERAL BLOOD PRESSURE DIAGNOSIS

Altered right side both systolic and diastolic.

FOOT REFLEXOLOGY

At the internal and posterior part of the big toe.

SPINAL REFLEX

right occiput

LABORATORY

1) B.U.N.

Normals : 13 - 17

. above 20 : posterior pituitary dysfunction

2) Cholesterol :

Normals : 185 - 215

general indication : fats which make hormones, enzymes and antibodies

. above 215 : poor utilization of fats

. below 185 : fat congested liver

3) BUN/creatinine ratio

Normals : 14.5 - 15.5

general indication : balance of water, sugar and minerals

. above 15.5 : increase in sugar and minerals
decrease of water in blood

. below 14.5 : decrease in sugar and minerals
increase of water in blood

4) Potassium

Normals : 4.0 - 4.3

general indication : heart function

. above 4.3 : congestive heart failure

. below 4.0 : weak heart

The usual affection related with posterior pituitary is diabetes insipidus.

The person with diabetes insipidus has a tendency to become dehydrated and also to "wash out" an excess of electrolytes from his body fluids. However, these tendencies are usually quite well offset by the increased thirst and an increase desire for salt in food. Under condition of circulatory stress, or when water and salt might not be adequately available, the fluid and electrolyte loss can become important.

NUTRI-DYN :

Prolantrophic :

Supports pituitary function and assists in normalizing entire endocrine system.

Livatrophic :

Supports liver function and greatly aids body detoxification and the removal of metabolic.

Vitamin E 400 :

Supports circulation normalizing blood viscosity and tends to reestablish osmotic transfer in semi-permeable members.

Cardiotrophic :

Supports for heart muscle aiding in growth and repair and containing RNA and DNA factors.

Pinealatrohic :

For the regulation of the balance of water in the blood.

SPLEEN

Gland located at the bottom portion of the rib cage. The primary job of the spleen is to regulate the distribution of calcium and fat. It is also responsible for blood cell production and for breakdown of cells, is under control of iron.

SYMPTOMS

- pain at tip of left rib cage
- difficulty in digesting fats
- gall bladder problems
- anemie
- white-pale
- shortness of breath upon exertion
- fainting or faint feeling
- hyperventilates
- blood clots slowly
- soapy taste in mouth - vomiting
- nausea
- hemmorroids

BILATERAL BLOOD PRESSURE DIAGNOSIS

Altered right diastolic, altered left systotic.

REFLEX

Located at the tip of the left rib cage, left loin and three inches below second to the smallest tow on the left foot.

SUBLUXATION LEVEL

left L3 - L4

Let see a case of an anemic patient.

Body language for anemia is well stated in general physical diagnosis tests.

Look for pallor, graying underneath fingernails, and lack of color in the inverted eyelid tissue. Muscular weakness associated with anemia is a bilateral TENSOR FASCIA LATA weakness. In the presence of the weakness, a blood count is necessary and will show a high percentage of involvements. Nutritional challenge with iron will improve the bilateral tensor fascia weakness.

In some instances a polycythemia will be observed which will respond to minute doses of iron on a somewhat homeopathic basis.

The dosage required can be evaluated by the amount necessary to abolish the bilateral tensor fascia lata weakness.

An excellent method for quick clinical evaluation of anemia is a microhematocrit, which uses capillary blood from a finger puncture. This can be used as a continuing monitor of the packed RBC volume after a complete blood count has been done in a laboratory.

There are many factors involved in the formation of new blood cells. All who are in the healing arts are familiar with the nutritional requirements necessary for RBC formation.

Iron, copper, cobalt, trace minerals, specific amino-acids, B complex B12 and vitamin C complex. Also lack of intrinsic factors causes pernicious anemia.

Quite frequently, anemia is not brought under control because of the presence of a subclinical hypoproteinemia. When this subclinical hypoproteinemia is present, the blood streams show a normal blood protein : however, the body is shifting proteins from other body compartments to maintain that level. The body goes into a protein sparing effort in which it reduces production of new tissue including RBC. This is quite often the cause of scanty menstruation or amenorrhoea. To evaluate protein, it is necessary to evaluate the total digestive system. This evaluation also covers other areas which can cause anemia, such as chronic diarrhea, colitis sprue and Crohn's disease. Digestive system evaluation also examine for some loss of blood, such as ulcer and ulcerative colitis.

Attention to the usual A.K. factors for the spleen and bone marrow is important and should include nutrition in the form of cellular extracts of spleen and bone marrow.

LABORATORY

1) Calcium

Normals : 9.7 - 10.1

other organ involved : parathyroid

general indication : digestion of proteins

. above 9.7 : poor fat emulsification

. below 10.1 : poor fatty acid enzymation

N.B. : for each 0.10 of deviation, us 100mg of calcium

2) Total Bilirubin

Normals : 0.5 - 0.7

general indication : body infection and toxin fighting ability

. above 0.7 : problem with fighting toxin - thymus involvement

. below 0.5 : problem with fighting infection - spleen involvement

3) Total iron

Normals : 95 - 100

organ : spleen

general indication : spleen balances the oxidant with the antioxydant

. above 100 : fat emulsification problems

. below 95 : hemopoetic problem

4) R.B.C.

4.5 - 5 million

function : oxygen carrying ability

5) W.B.C.

5'000 - 6'000

concern with infection

. above 6'000 : excess infection = spleen

. below 5'000 : excess toxins = thymus

6) Hemoglobin

14.5 - 15.0

amount of iron

7) Hematocrit

40 - 50

amount of blood production

8) Segmented neutrophils

45- 55

body's ability to fight infection

. above 55 : excessive infection

. below 45 : excessive toxins

TREATMENT AND SUPPLEMENTS NUTRIDYNSplenotrophic

Hemopoetic factors.

Hemadyn

Potent hematinic

Acididyn

Promotes assimilation of iron, calcium and proteins - normalizes gastric acidity.

Preamin chelate

Excellent source of iron, a.a., and trace minerals

Livatrophic chelate

Improves liver function - aids in detoxification

Glycodyn

Source of folic acid, vitamin C and B

Vitamin B12

Stimulates bone marrow function in production of RBC

Intrinsitrophic

Intrinsic factors from stomach mucosa

E.400

Aids iron absorption and emoglobin formation

C.500

Synergistic with vitamin E increases iron absorption and folic acid assimilation.

Thymotrophic

Lymptocytic action

PANCREAS

Located at the bottom of the breast bone, this gland regulates carbohydrate breakdown in the intestine as well as it controls the blood sugar (acid pH) carrying it to the cells.

The pancreas plays a dual role in active biochemical balance. The head of the pancreas, under the influence of chromium, controls alkaline gut digestion. The tail of the pancreas, which under the influence of zinc, controls the acid pH of the blood.

- The primary minerals of GLUCAGON are chlorine and zinc.
- The primary minerals of INSULIN are selenium and zinc.

SYMPTOMS

- pain under left shoulder blade
- pain in left chest area
- pain down left arm, elbow and wrist (often diagnosed as heart-attack)
- poor circulation
- history of diabetes
- metallic taste in mouth
- extreme colon irritation
- difficulty in getting breath
- shaky, sweaty, numbheaded
- lumps, swelling under rib cage
- sweaty hands
- mass body reaction to eating sugar
- high triglycerides
- calcium intolerance
- difficulty concentrating, poor memory
- muscle bloating, shrinking, weakness or fatigue.

BILATERAL BLOOD PRESSURE DIAGNOSIS

Altered left diastolic

FOOT REFLEX

Bottom left side of the shoulder blade as well as the left of the tip of the breast bone.

SUBLUXATION LEVEL

T8 - T9 right and left.

LABORATORY

1) L.D.H.

Normals : more or less 5 points from the mean of the lab. normals

general indication : acid pH of blood, balancing of sugar and water

- . above : diabetic type blood : acid blood
- . below : too much water and not enough sugar in blood:
alkaline blood (pancreatic diabetic)

2) Uric acid :

Normals : 4.5 - 5.5

function : ash of protein digestion

- . above 5.5 : poor of proteins (proteins too fatty)
- . below 4.5 : poor enzymation of proteins

3) Eosinophis

Normals : 0 - 2

gut allergies and gut parasites

- . above 2 : allergy elevation

4) Basophils

Normals : 0 - 2

deep membrane allergies and parasites

- . above 2 : parasite elevation

N.B. : The glucagon carries the sugar from the blood to the extracy fluid.

The insulin carries the sugar from the extracy fluid to the wall.

PANCREATIC HYPOGLYCEMIC

Patients appear to be very muscular, but they keep water inside body. They do not urinate normally : adrenals problems : anxiety, stiff muscle, digestive problems because obviously, tail of pancreas does not function well. D7 to D9 : luxation (if pancreas is enflamed, so is the heart).

PANCREATIC DIABETIC

Dramatic loss of weight - blurred vision.

DIABETES MELLITUS

A disorder of carbohydrate metabolism - diabete is in large part a product of the dietary habits of the highly developed, economically affluent western countries. Primarily, the cells of the islets of Langherhans in the pancreas degenerate and fail to produce adequate amounts of insulin, but also the liver, adrenals, thyroid and pituitary, as well as the entire endocrine gland system and the central N.S. are involved in this disorder.

TREATMENT

Refined carbohydrates, especially white sugar and caffeine, are the major culprits in the etiology of diabetes. These products MUST be removed entirely from the dietary program, and, as the nutritional requirements of the diabetic are undoubtedly many times greater than those of the healthy individual, strict attention must be given to providing adequate food intake of the right kind. Completely natural supplements in large amounts are vital to recovery. Because of urinary losses and stress, the vitamin C requirement is very high and the need for B6 and magnesium is paramount. Diabetic also have high requirements for protein, lecithin, vitamin B2 and B3, panthrotenic acid, potassium and zinc.

NUTRIDYN

Prolantrophic

Trophic, nutritional support for the entire endocrine system, especially the pituitary.

Pantrophic

Support for the pancreas to normalize function of the islets of Langherhans and output of insulin.

Betydyn

High potency vitamin B vital to the health of pancreas, especially B6.

Vitamin B 6

In combination with magnesium prevents pancreatic damage.

C 500

Begin the treatment with C 1000 every hour for 3 days. Then a maintenance of C 4000 mgs per day.

Livatrohic

Much needed in diabetes as fatty degeneration is a common complication in diabetes with abnormal fat metabolism, cholesterol and artherosclerosis.

Renadyn

Support for the kidneys.

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THE INFLUENCE OF SCAR TISSUE ON
THE FEMALE EMOTIONAL PROBLEMS

ABSTRACT

The "how to often" hidden scar tissue leading to nervous/emotional problem in the female patient coming to your practice.

In the everyday practice, we are confronted with female patient usually above 50, coming for different mechanical problems and you find difficult to treat those patients because even so they getting much better in relation to their column, they complain about their nervous system, to a certain state of depression.

Observe your patient and in many case you will see scar tissue at the lower abdomen, following hysterectomy and/or cesarienne.

Usually the scar tissue cut the midline of the body which is as everybody knows the conception vessel.

The flow of energy in that vessel is influenced by the energy of all the others meridiens taking the "used" energy of the 12 other organs to bring it out of the body. That is why when the scar tissue is present in the course of the conception vessel, the energy is locked at this level (the conception vessel is a superficial meridien, just underneath the skin) preventing the normal flow going out of the body through the mouth. As Dr Goodheart said T.L. at the level of scar tissue, if a strong muscle goes weak or if a weak muscle goes strong, challenge the scar tissue on the basis of spindle cell/golgi tendon technique, but usually you will have to "weaken" the scar, i.e.: separation of the thumbs. It is also a very important thing to do is to instruct the patient to massage the scar tissue in the same way as you did, using a vitamin E cream.

Then when the scar tissue is treated proceed in the same way as you learn for emotional neurovascular problems. In the women who had breath surgery following cancer and where the emotional part is so important, the same technique is applied, but there, many meridiens are involved and you have to work on each of them depending where the scar is located.

Attention mostly as lungs - circulation sex - gall bladder - stomach - spleen.

On the emotional part take more interest at the circulation sex meridian in relation to the adrenals glands.

What has been said is in relation with your normal exam and treatment in applied kinesiology, but it is to insist on the work at the level of scar tissue which must be made in a routine way as soon as you discover one, it will help you so much in your normal chronic female patient.

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REBOUNDING - the amazing 'magic' of natural exercise -

Daniel S. Gleeson, DC, DICA

Abstract: Exercise - where so many of us get hung up. Is it necessary? needed? healthy? what kind? follow through? Understanding the physiology of rebounding will open up your right brain; for some it will smash your present image of good exercise to bits and for many will assist your therapeutically with those tough cases. You no longer need to support any conceptualized fallacies about exercise.

Rebound physiology is as old as man, yet, has just recently been understood by man -- it is the most efficient, effective form of exercise yet devised by man, (1) and is one of the best ways to teach balance, coordination, rhythm, dexterity, timing and kinesthetic awareness while building muscle bulk and strength and just could be the exerciser of the '80's. -

My first exposure to the rebound exercise unit left me with the image of a real fun thing on which I could attain my aerobic pulse rate without too much effort and maintain it for as long as I liked without killing myself -- great, convenient cardiorespiratory eu-stress, but boring -- so I turned on some up beat music or the TV and found that 15 minutes of relaxed cardiorespiratory exercise was over in a wink.

My second exposure to rebound exercise found me sitting in a 3 day seminar in Tampa, Florida listening to Al Carter, the father of modern reboundology.

He took the physiology of the cell, lymph, lymphatic system, immune system and vascular system and layed it out in a simplistic way I had not been exposed to before as they are affected by acceleration - deceleration and gravity exercise when done on a shock absorbing mat. In 1911, Einstein (2) determined that the body could not tell the difference between these 3 forces. There is a drastic environmental change placed on all body cells when exposed to the difference in G force created by the forces of acceleration, deceleration - gravity. All body cells can and do identify with and instantly respond to these continually changing environmental stresses by (i) adapting to the stress or, (ii) dying from the stress, making way for new cells.

A cellular exercise!

Why affect the physiology of only a selected area of cells in your body via usual exercise, when you can exercise EVERY cell at one time (3), in a relatively shock free and therefore dis-stress free environment, doing an exercise that specifically affects the DNA, mitochondria and membrane of every single body cell, with each bounce.

Increased extracellular fluid and lymphatic system flow!

How important is it to ensure that these systems are functioning 100% or greater? You will recall that these are the transportation systems of all substances to the majority of cells (eg, O₂, nutrients, vitamins, minerals, enzymes, hormones etc) and from the cells, (eg. cellular waste, poisons, toxins) returning all of it via the thoracic duct into the circulatory system (4). These systems are responsible for congestion as seen in a muscle strain, or joint sprain and in an organ dysfunction (5) that is assisted by neurolymphatic reflex stimulation. These entities in over 200 patients tested, have been improved from moderate to good with rebound exercise, depending on the length of time spent rebounding. A major factor, cellular detoxification, has improved immensely with a resultant increase in energy and healing potential. With an increase of from 5 - 15 times the lymph flow (6) while rebounding, we start to see and feel many things happen to us:

- tolerance to exercise improves greatly and quickly
- recall mechanisms are triggered as we progress, and long forgotten old problems and symptoms start to surface because they were never really corrected, the body only adapted to them. The body is becoming more centred and is giving you a second chance to get these underlying possibly causal irritations and blocks - corrected -
- one quickly feels a new clarity and awareness about their life, making it easier, if they choose to adapt and change the story they live in (7)
- general strength and endurance levels improve at an impressive rate
- weight loss and general body tone comes quickly
- detoxification becomes apparent very soon with the possible symptoms of diarrhea and headaches etc, but they soon abate and the new you starts to shine through.

Lymphatic speed up means the mobilization of the immune system (8). Lymphocytes are on the march and are able to reach into corners of the body long thought to be useless and focuses of infection due to the severe local congestion, toxic build up and cellular destruction. This can result in a turn around effect on many previously stubborn dis-ease states. The entire immune system is, if not rejuvenated, then stepped up due to the increased lymph flow and increased cellular activity in all of the organs of the immune system.

Rebounding - the Eu-stress VS the dis-stress exercise:

Simple muscle testing pre and post jogging, and floor exercises vs rebound jogging and mat exercises quickly points out this fact. Also the fact that all parts of the body come under the same amount of G force with rebounding vs only local areas being affected by G force with jogging etc. is well established (9).

The exercise itself consists of the health, aerobic and strength bounces. Putting these three together in a planned program of exercise and music while not exceeding the cellular rupture level of any area of the body, is what its all about. This program would vary greatly depending on age, state of health etc and in many instances requires the advise of someone who understands rebound physiology.

Patients in our office rebound 2 - 5 minutes prior to a treatment for they relax and test much better when congestion is moved out and from 2 - 5 minutes after a treatment to further assist their (i) newly activated centring devises, (ii) increased kinesthetic awareness, (iii) improved muscular balance, (iv) new structural alignments.

Much has been said and written about other effects of rebounding. I will only mention them here because any experience is limited. It appears as though a quantum break through has been made in the learning disability field, the mental and physically handicapped, hyperactive children, visual problems, cardiac and arthistic recuperative programmes, reversing aging process (the aged call the rebounder a "youthing machine".)

Conclusion: The rebounder is not a toy, you need a proper program to obtain maximum gain from a minimum of input.

In this rapidly changing world of 'work smarter - not harder', computer video games for recreation and 'avoid physical input at all costs' type of mentality, we can expect a whole new, if not just further degenerating, class of patient to appear in our offices. Rebounding seems to be an emmense assist to our patients, practise, community as well as ourselves and probably is -- the exerciser of the '80's.

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(An experiment carried out by NASA)

A MEASUREMENT STUDY OF THE DIFFERENTIAL LENGTHS
OF THE LOWER EXTREMITIES OF 100 PATIENTS

BY

CHRISTOPHER L. HARRISON, D. C., D.I.C.A.K.

ABSTRACT

In this study the author took, at random, 100 files of patients in his clinic to determine the average differential length of the lower extremities. The author discusses the methodology of so called leg length determinations and of related radiography. Further, the author relates the statistical outcome of the study and points out the practical relationship between differential lower extremity measurement and clinical practice.

The differential lower extremity measurement has been a pre-occupation with many Doctors of Chiropractic throughout the history of Chiropractic. Orthopedists and psychiatrists also have looked upon the leg length as a possible factor in orthopedic problems.

In 1974, while practicing in Tahoe City, California, I wanted to see what the validity factor of A-P weight bearing 14x36 radiographs were in relation to differential leg length measurement.

I contacted a radiologist in Reno, Nevada who agreed to perform orthoroentograms referred to as scanograms for this study.

This is an X-ray procedure that utilizes an overhead tube and sequentially takes radiographs of the foot, leg and thigh, including the ankle, knee and hip joints.

Dr. Barnes, the radiologist, informed me that the study was accurate to 1 mm of actual anatomical deviation.

In the study, I took 14x36 A-P weight bearing films with feet in anatomical position and the lower extremities in the extended position, careful to remove any pelvic rotation. The central ray was, of course, approximately at the level of the Xiphoid process.

Sixty patients were sent to the radiologist for scanograms, all X-rayed by myself with the results of my X-rays unknown

either to Dr. Barnes or to the patient.

Upon completion of the study, the statistics were compiled and the average difference between the two groups was .70 mm. In other words, the two different methods of lower extremity measurement were accurate within a millimeter of each other.

Over the years we have used the weight bearing radiograph for leg length determination in addition to its cranial, spinal and pelvic uses. In taking follow-up studies, we have seen the validity of this test proven time and time again. We seldom find over 2 mm of difference between the first and follow-up studies and they usually are the same. The only time that a valid lower extremity measurement cannot be made is when the patient has a severe muscle imbalance and cannot or will not straighten up so as to position him/herself to attain a true measurement. In these cases, we treat the patient first and then take the study when the patient is more balanced. For the past year, we have used a floor plate constructed in 3/4" aluminum with a foot positioner that was installed by an engineering firm so that it is perfectly level. In addition, when we want even more precision in the test we place the central ray at the level of the femur heads and this shows approximately a one half millimeter in difference from that of the full spine view. We will perform a study to statistically analyze the difference between these two methods later this year.

In mulling over leg lengths in my mind, it seemed obvious to me to run a statistical analysis on the incident of so-called short leg occurrence in our practice. The following explains our methodology for this analysis.

METHODOLOGY

We retrieved, at random, one hundred files of our patients and noted the amount of the difference in lower extremity measurement in millimeters as well as the side of deficiency. The only files that were rejected from the study were those without lower extremity measurement. A chart showing the measurements taken at random is shown and is exactly as retrieved.

STATISTICAL RESULTS

100 patients analyzed.

48 patients showed a total of 270 millimeters differentially short on the right. The average short leg in this group was 5.63 millimeters.

47 patients showed a total of 255 millimeters differentially short on the left. The average short leg in this group was 5.43 millimeters.

5 patients showed even leg lengths.

There was a total of 525 millimeters of deviation between right and left. The average short leg in the study was 5.25 millimeters.

CLINICAL APPLICATION

If the clinician makes use of the differential lower extremity measurement, it would appear obvious that one might begin with what is anatomical. For instance, if a patient is lying on the table and a short leg is noted - just what is the clinician seeing? Is it an anatomical short leg, is it a physiological short leg superimposed on an anatomical short leg or is it a physiological short leg masking an anatomical short leg? By knowing what the anatomical deviation really is, can you really know exactly what you are, in fact, seeing?

In the determination of heel lift therapy, the ascertainment of anatomical short leg is an absolute necessity in the author's eyes.

I certainly hope that this has been of some help to you. My special thanks to my staff: Rhonda Schweizer for her help in the retrieval of the data and to Ann Krause for her typing and help in word structure.

Christopher L. Harrison, D. C., D.I.C.A.K.
Palo Alto, California

February 1983

A LIGAMENT INTERLINK-LINK?

By HANNES L. HENDRICKSON, BChE, P.E., D.C.

ABSTRACT: Recent research has shown that stimulation of the radial, median, and saphenous nerves electrically have produced prolonged analgesia in the contralateral side.

INTRODUCTION:

The ligament interlink (1) procedure, which was developed by Dr. George Goodheart, showed that by treating one side of the body one was able to affect changes in the other side of the body. For example, in treating the left elbow one would apply intermittent pressure upon the ligamentous structures about the right knee (the hyoid bone being directed to the right side where the manipulation was performed.) Recently ~~electrical~~ cutaneous stimulation of nerves on the right side of the body would affect the left side of the body.

RESEARCH: Judith B. Walker (2) demonstrated that by simultaneously stimulating the radial, median, and saphenous nerves electrically on the right side of the body, she was able to produce prolonged suppression of ankle clonus on the left side of the body. The clonus was inhibited but not completely abolished. Steel needles were placed in the radial, median nerves proximal to the wrist flexure; and the saphenous connection was at the metatarsal-cuneiform joint and below the medial malleolus. It was stated that stimulation of the nerves in the wrist alone produced a complete inhibition of the ankle clonus. The author stated that there was a stimulation of the cervical neurons (6C-8C) which in turn suppressed the neurons in the lumbo-sacral segments..

CONCLUSIONS: Judith B. Walker's paper should open many doors for further research by members of ICAK.

A LIGAMENT INTERLINK-LINK?

Page 2

Hendrickson

- REFERENCES: (1) Dr. George Goodheart, APPLIED KINESIOLOGY, 1978
RESEARCH MANUAL
- (2) Judith B. Walker, MODULATION OF SPASTICITY:
PROLONGED SUPPRESSION OF SPINAL REFLEX BY ELECTRICAL
STIMULATION, SCIENCE, Vol. 216, April 9, 1982

A MNEUMONIC GRAPHICAL DEVICE TO RECALL THE FLOW OF ACUPUNCTURE
ENERGY

BY HANNES L. HENDRICKSON, BChE, P.E., D.C.

ABSTRACT: By using the 5-Element Chart and using a "Skip an Element" idea one can reconstruct the correct flow of acupuncture energy.

INTRODUCTION: It is important to know the direction of acupuncture energy flow to solve problems involving the meridians. A simple method, using the 5-Element Chart, one can quickly develop the correct flow of acupuncture energy by skipping elements.

METHOD: Use the next page to observe the procedure:

Step 1. Start at HEART and enter into SMALL INTESTINE

Step 2. SKIP the Element (GALL BLADDER/LIVER) and circle into the element (BLADDER/KIDNEY)

Step 3. Again SKIPPING the Element (GALL BLADDER/LIVER) enter into the Element (CIRCULATION SEX/TRIPLE HEATER)

Step 4. Taking a counterclock turn, SKIPPING the Element (SMALL INTESTINE/HEART-Part of the FIRE Element) pass into Element GALL BLADDER/LIVER)

Step 5. Coming out of the Element (GALL BLADDER/LIVER) you SKIP Element (BLADDER/KIDNEY) since you already used it, you enter into the Element (LUNG/LARGE INTESTINE).

Step 6. Since there is only one Element left, namely, (STOMACH/SPLEEN) pass on through and return to the starting Element (HEART/SMALL INTESTINE) completing the cycle.

IN SUMMARY: HEART, SMALL INTESTINE, BLADDER, KIDNEY, CIRCULATION SEX, TRIPLE HEATER, GALL BLADDER, LIVER, LUNG, LARGE INTESTINE, STOMACH, SPLEEN

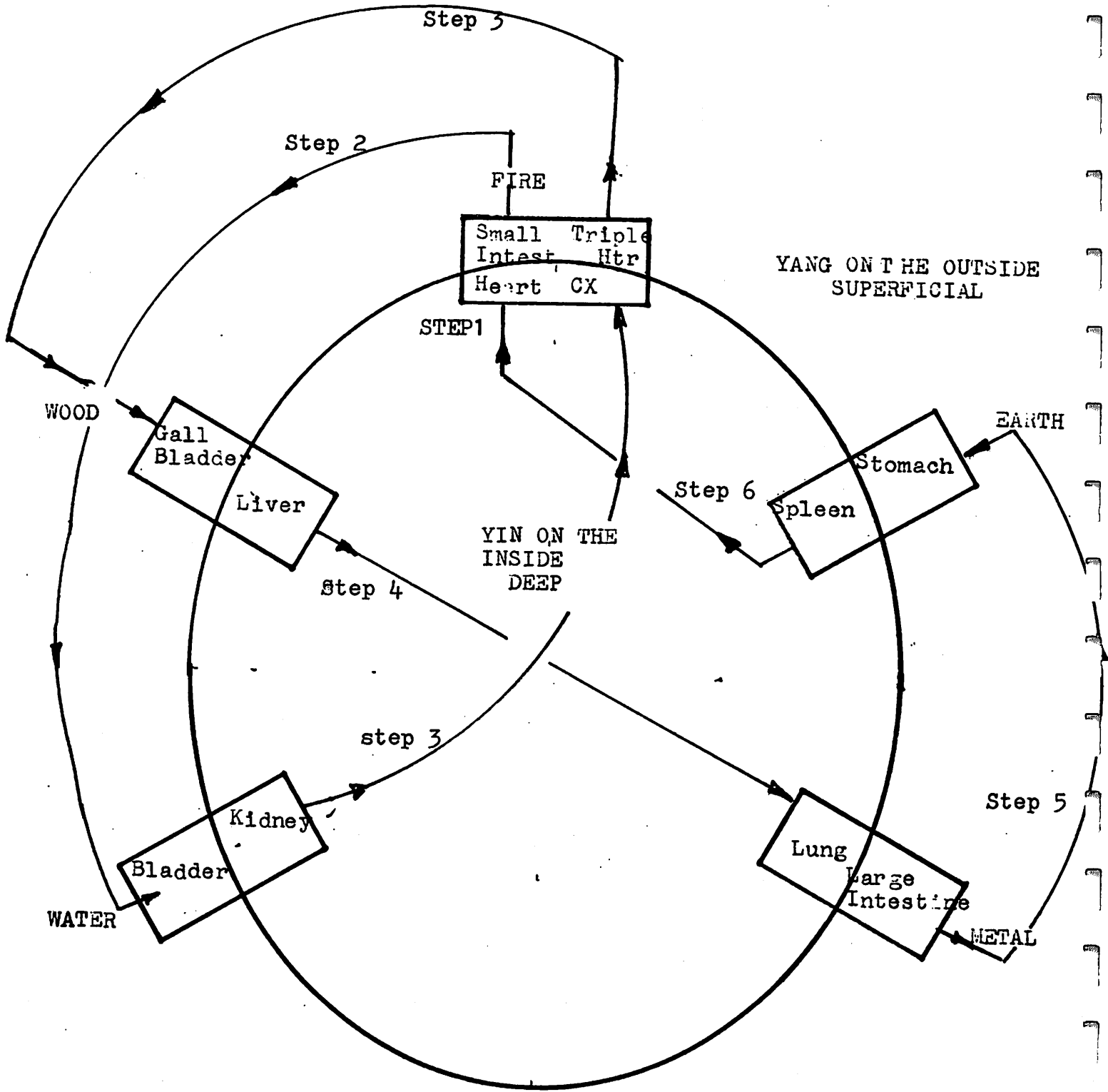


FIGURE 5-Element Chart

BLOOD PRESSURE AND TALKING

JOHN T. HUGHES, D.C.

Abstract: The relationship between blood pressure, talking and glabellar fault is investigated.

It has been reported that the simple act of talking may increase the blood pressure from 15% to 50% in subjects who suffer from high blood pressure.

"The higher your blood pressure the more it goes up when you talk, which means that hypertensive individuals really influence their blood pressure when they communicate," says psychologist, James Lynch, a researcher at the University of Maryland School of Medicine.

We wondered if this blood pressure elevation is a natural body response or a stressful response. If it is natural, there should also be an elevation of the blood pressure in people who have normal blood pressure. If it is a stressful response, then our findings should agree with those of researcher James Lynch.

Further, we wondered, if it is a stressful and therefore undesirable response, could it be due to a cranial respiratory fault?

We started this investigation simply checking people with high blood pressure and checking again after talking. Our findings agreed with the findings of the University of Maryland researcher. However, our findings and correction of glabellar faults were so inconclusive that we discontinued the investigation after fifty cases.

Now, as I write this paper, other questions need to be addressed.

First, as mentioned earlier, is there an elevation of blood pressure while talking in subjects with normal blood pressure? This was demonstrated in one case on the TV program "Sixty Minutes".

Second, what is the relation to left brain imbalance?

We know that the glabellar fault is associated, many times, with blood pressure both high and low. We know that oral breathing predominately causes a weakened muscle response in these cases. We know that we do oral breathing while talking. Therefore, we resumed our investigation with renewed interest and hope to have the conclusions by the time we have our June, Detroit meeting in May at Dearborn.

Reference: (1) Health Express, Vol. 2 No. 8, Nov. 81, Page 33.

INTRODUCTION BOOKLET TO CHIROPRACTIC AND APPLIED KINESIOLOGY

by Alex P. Karpowicz, D.C., D.I.C.A.K.

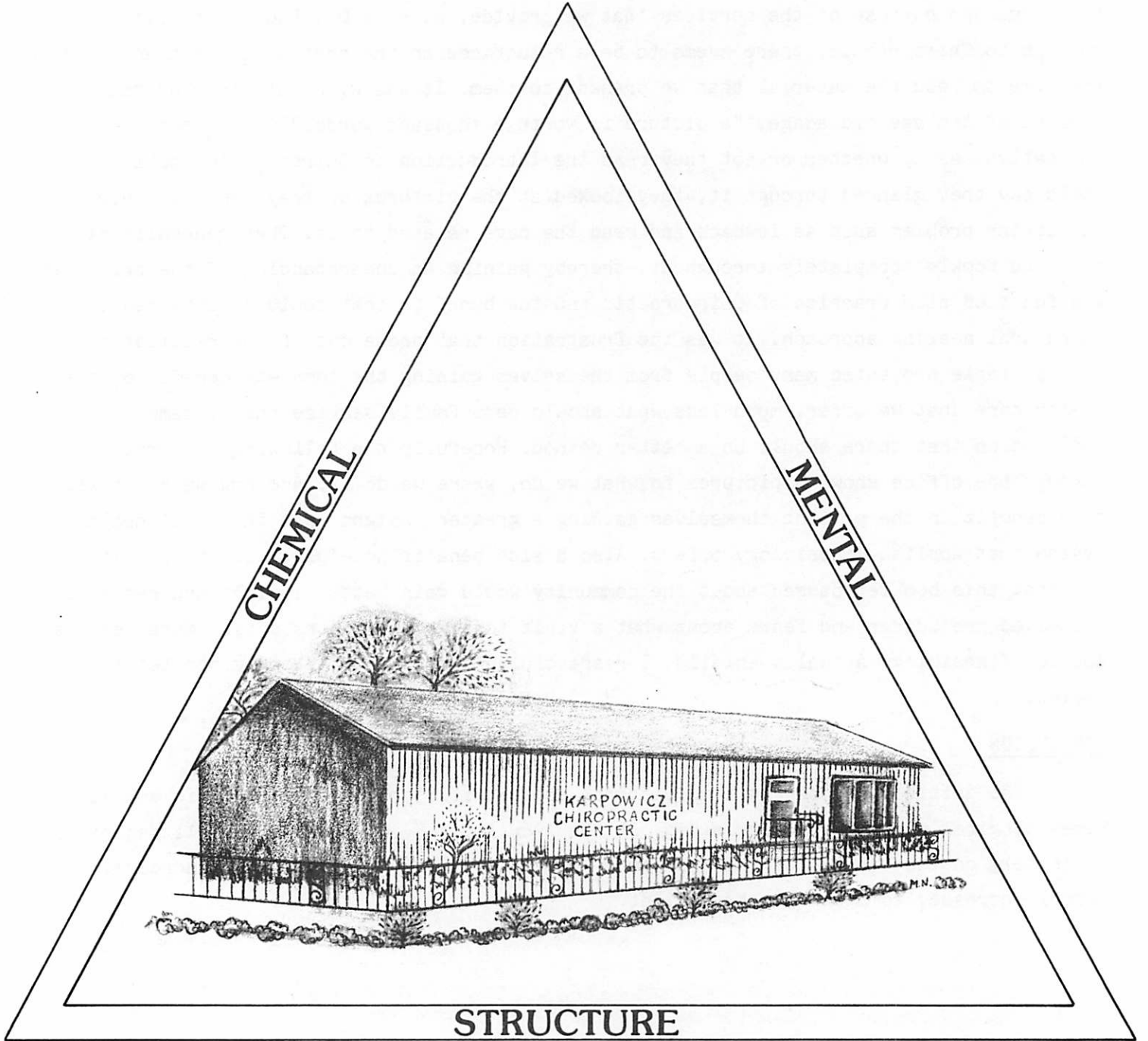
ABSTRACT

Unfortunately the public at large has little knowledge of Chiropractic much less Applied Kinesiology. Of that knowledge much of it is misunderstood or misconstrued. While there are many good pamphlets and publications out that help the patient better understand the value and purpose of the services that we provide, such as Dr. Lou Sportelli's Introduction to Chiropractic, there seems to be a reluctance on the part of the patient to take the time to read the material that we present to them. It was with this in mind that I thought of the age old adage, "a picture is worth a thousand words." Often upon questioning the patient as to whether or not they read the Introduction to Chiropractic Booklet, they would say they glanced through it, they looked at the pictures or they went to their particular problem such as lowback and read the page related to it. They generally did not read the booklet completely throughout, thereby gaining an understanding of the principle and function plus practice of Chiropractic and the benefits that could be obtained through an natural healing approach. It was the frustration that arose out of the realization that this obstacle prevented many people from themselves gaining the complete benefit of the health care that we offer, much less what should be a family service that I came to the conclusion that there should be a better method. Hopefully the following pictorial tour through the office showing pictures fo what we do, where we do it, and how we do it will be a benefit in the patient themselves gaining a greater insight into the total health care system that Applied Kinesiology offers. Also a side benefit hopefully will be realized and that this booklet passed about the community would gain better insight and remove pre-conceived prejudices and fears about what a visit to a Chiropractors office much less using Applied Kinesiology actually entails. I respectfully submit the following booklet for your review.

CONCLUSION

The initial response to this pictorial booklet illustrating Chiropractic and Applied Kinesiological methods is encouraging. At the 1983 I.C.A.K. May meeting I will report more definitely on the results of this booklet. Ascertained will be new patient increase, referral increase, comments by the patient.

Welcome to the Karpowicz Chiropractic Center



1201 Wheeler Avenue
Dunmore, Penna. 18510 • 717-342-0767



Dr. A. P. Karpowicz is a modern Chiropractic physician. After graduation from Trenton Junior College with an Associate of Science Degree in 1962, he entered Logan Chiropractic College. He graduated in 1965 having taken an accelerated course of studies. He holds a license to practice Chiropractic in both New Jersey and Pennsylvania. Dr. Karpowicz is certified to evaluate permanent disability by the National College of Chiropractic Post-Graduate Division. He is a teaching diplomate of The International College of Applied Kinesiology.

Dr. Karpowicz is a member of the American Chiropractic Association, Pennsylvania Chiropractic Society, International College of Applied Kinesiology, and Scranton Chamber of Commerce.

To our Patients and Friends,

Our goal is to provide complete health care for our patients by using a natural approach to health problems. We enable the body to heal itself, thus correcting the cause of the symptoms without dangerous side effects. The Doctor of Chiropractic, utilizing Applied Kinesiology, has the ability by testing the patient's muscles to know what should be treated, when it should be treated, and if the treatment worked. A person's health, or lack of it, is determined by whether or not the chemical, structural, and mental aspects of the body are in balance.

The chemical side of the triangle of health is disturbed by imbalanced nutrition, drugs, pollution, etc.

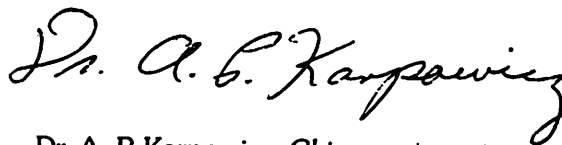
The mental side of the health triangle is imbalanced primarily by stress, which can be of a physical, emotional, nutritional, or thermal nature.

The structural disturbance is created by too much or too little nerve energy caused by misalignment of the spine and associated structures.

Myself and the staff welcome the opportunity to serve you and your family. We will devote our entire efforts to helping you regain and then maintain health and well-being. Your cooperation in following instructions, keeping appointments, and being equally determined to put the effort out to be successful is necessary.

If the occasion should arise that you need emergency care when I am not in the office, a message may be left with my answering service at 717-342-0767.

Yours in health,



Dr. A. P. Karpowicz, Chiropractor
Diplomate, International College of Applied Kinesiology

RECEPTION ROOM

A comfortable area to fill out new patient forms and enjoy hearing others who have been helped through Chiropractic.



RECEPTIONIST AREA

Our pleasant receptionists will assist you. They are the heart of the office, and you can feel confident they will assist you whenever and wherever possible.



CONSULTATION

Upon reviewing the health forms filled out by the patient, Dr. Karpowicz then interviews the patient to best understand their health problems and determine what is necessary to solve them. After the patient fills out the health forms, they are reviewed by Dr. Karpowicz, who then interviews the patient to find out as much as possible about their health problems to better help them.



OFFICE MANAGER – INSURANCE

Mrs. Cookie Perri, Office Manager, will promptly and efficiently process all insurance forms and be glad to answer all questions relative to them.



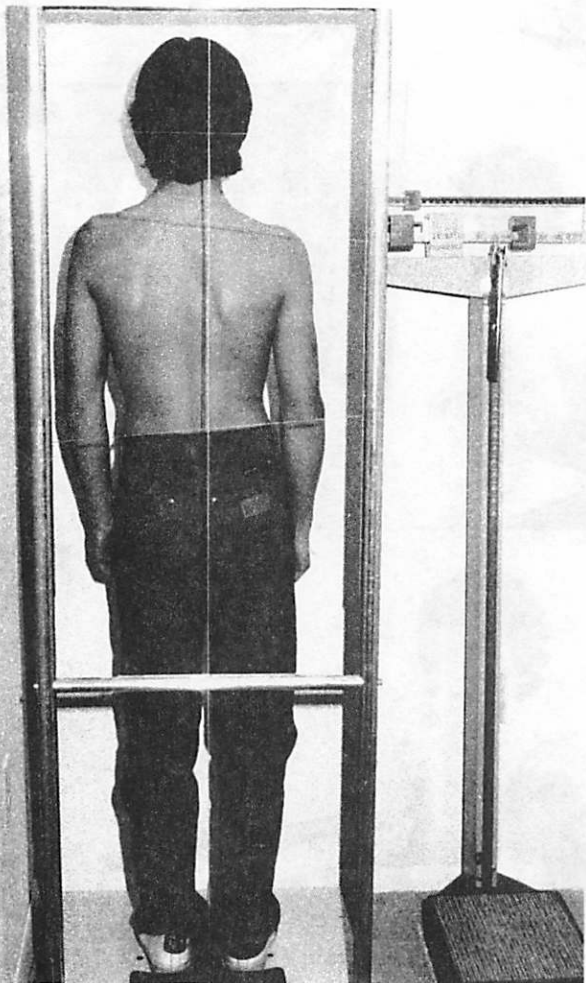
EXAMINATION

1. Physical Exam
2. Kinesiology exam
— postural, m. testing
3. Orthopedic and neurological
4. Chiropractic
5. X-ray
6. Lab tests, hair analysis,
computerized diet analysis

Examinations are tailored to the patient's symptoms. Being thorough in the beginning enables the doctor and patient to realize the best and quickest results possible.



Dr. Karpowicz taking blood pressure.



Postural examination.



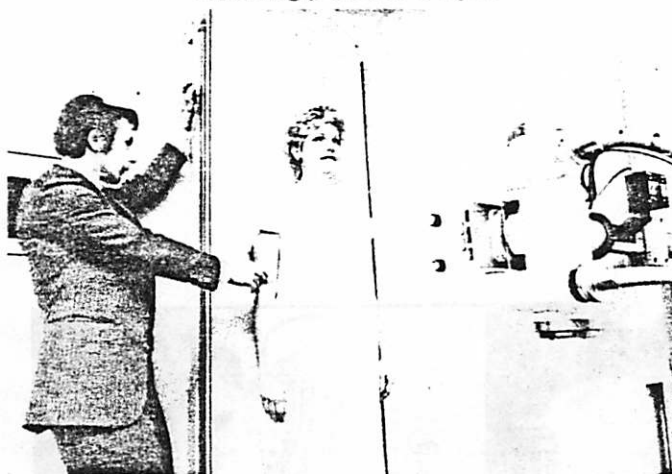
Urine Test.



Checking patient's weight.



Iridology examination of the eyes.



Dr. Karpowicz taking patient's x-ray.



Palpation — manual examination of spine.



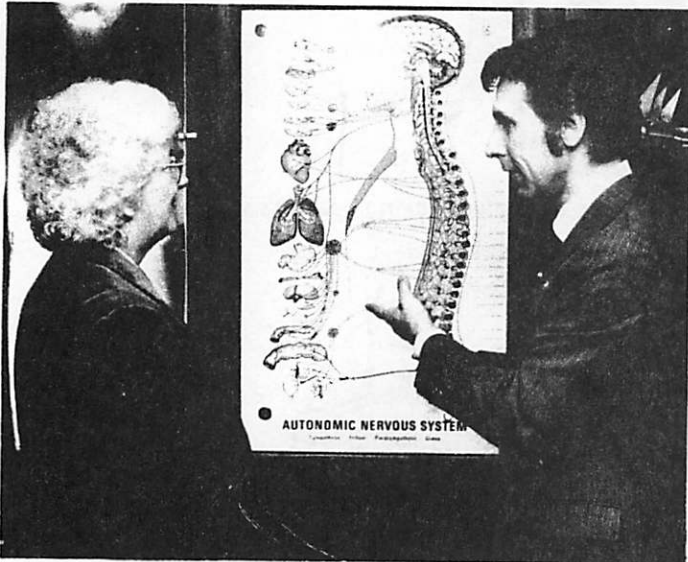
Dr. Karpowicz checks posture of child for level ears, shoulders and hips with relevance for muscle and balance.

REPORT

The doctor gives a complete report to the patient on his findings based on the consultation, all examination procedures, and x-ray analysis. He gives his recommendations and answers any questions the patient may have concerning their health problems.



Dr. Karpowicz interpreting x-rays.



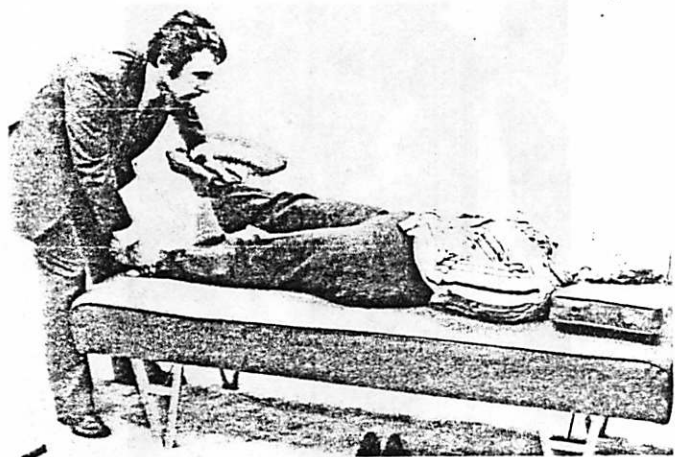
Dr. Karpowicz using Need I for explanation.



Dr. Karpowicz showing patient's spine.

TREATMENT

Consists of gentle Chiropractic Adjustments and Applied Kinesiology to balance body structure and return the body to normal function and well being.



Dr. Karpowicz using reflex points enables patient to see immediate effects of Applied Kinesiology.



Conservative Chiropractic care is most effective in relieving the agony of back pain.



Adjustments are not painful especially if the patient relaxes. Each adjustment restores the bone toward the normal position.



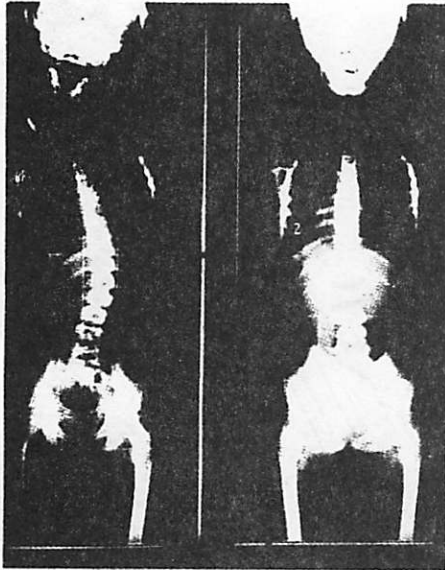
Dr. Karpowicz testing muscles of patient for diagnosis and treatment purpose.



Dr. Karpowicz manipulating (adjusting) patient's spine to relieve spine and other abnormal symptoms.

BEFORE AND AFTER X-RAYS TELL THE CHIROPRACTIC STORY

The following x-rays clearly show the positive results of what chiropractic care did for the various conditions shown. Aren't the results indeed dramatic?



Before

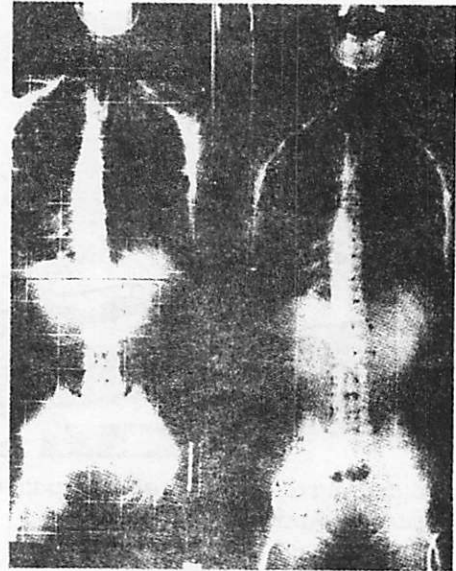
After

ASTHMA

Male, Age 9

Symptoms: Asthma: crushed intervertebral (spinal) cartilage suffered in fall from tree: general body distortion.

Outcome: Asthma eliminated: complete recovery.



Before

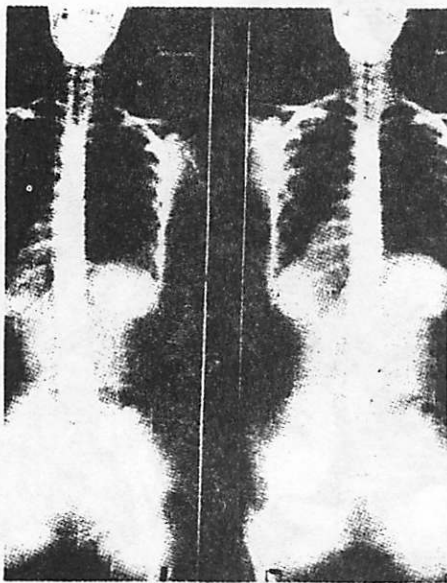
After

BACK INJURY

Male, Age 37

Symptoms: Injury to lower back which would not yield to usual prolonged treatment.

Outcome: Complete recovery; patient returned to work in 2 months.



Before

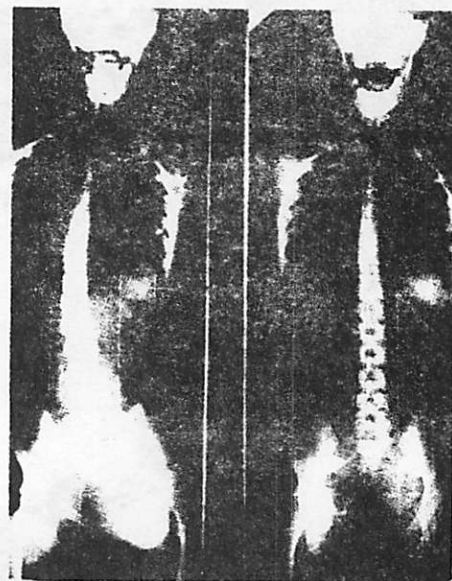
After

SEVERE HEADACHES

Female, Age 24

Symptoms: Severe headaches: patient unable to sleep on either side since car wreck.

Outcome: Symptoms improved immediately; completely eliminated.



Before

After

NEURITIS

Female, Age 48

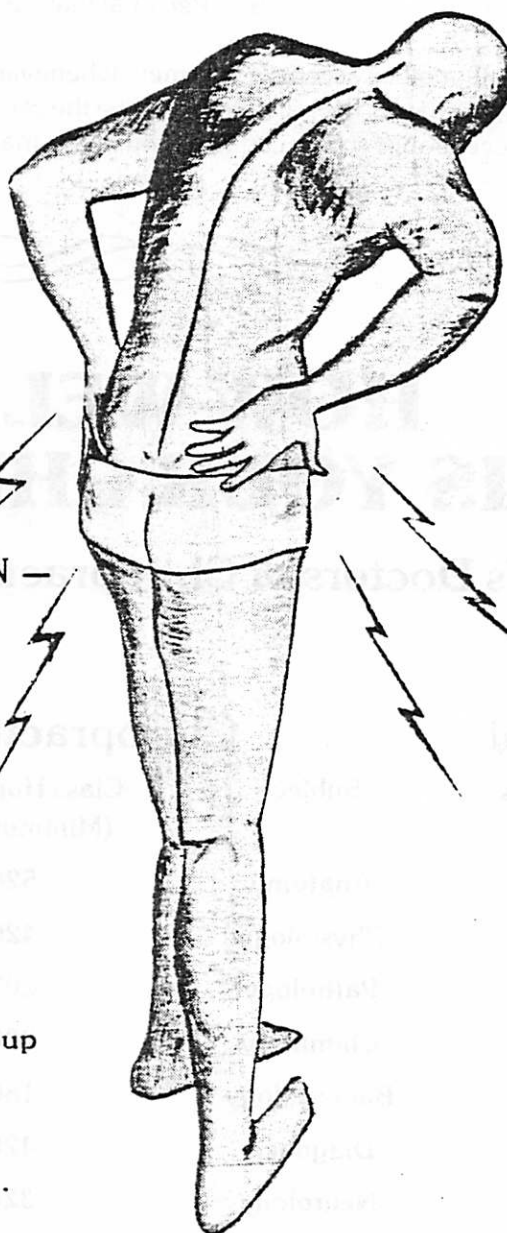
Symptoms: Recurrent acute indigestion, constipation, neuritis.

Outcome: All symptoms corrected, no recurrence to date.

BACK PAIN

REMEMBER:

the Doctor who knows
your spine best is your
CHIROPRACTOR



HEALTH HINTS TO PREVENT BACK PAIN

1. Sleep on a firm mattress.
2. When you first awake, stretch a bit, loosen your muscles.
3. Sit, stand, and walk TALL, improve your posture.
4. Stay within your physical limitations, don't over-do it.
5. If you work in a cramped position, then get up occasionally, stretch, and loosen up those cramped muscles.
6. Are you trying to lift the load of two men . . . DON'T, get some help.
7. Does your work require you to bend excessively! If so, then bend your legs not your BACK.
8. When you bend, don't twist, keep your spine in balance.

INSURANCE

Chiropractic care is covered by the following insurances:

- 1) Group Health Plans/Major Medical.
- 2) Workmen's Compensation — on the job injuries.
- 3) No-fault — automobile accidents.
- 4) Medicare.
- 5) Personal Liability accidents.

Our office accepts assignment whenever possible to limit the expense incurred by the patient. This enables the patients to receive the care they need without financial burden. Inquire with the receptionist so she can help you in this matter.



HOW WELL EDUCATED IS YOUR CHIROPRACTOR?

Today's Doctors of Chiropractic Have Six or More Years of College

Medical

Class Hours
(Minimum)

Class Hours (Minimum)	Subject	Class Hours (Minimum)
508	Anatomy	520
326	Physiology	420
401	Pathology	205
325	Chemistry	300
114	Bacteriology	180
324	Diagnosis	420
112	Neurology	320
148	X-ray	217
144	Psychiatry	65
198	Obstetrics and Gynecology	65
156	Orthopedics	225
2,756	Total Hours	2,887

Chiropractic

Class Hours
(Minimum)

Other required subjects for the
Doctor of Chiropractic:

adjusting, manipulation, kinesiology, and other
similar basic subjects related to his specialty.

• • •

Other required subjects for the
Doctor of Medicine:

pharmacology, immunology, general surgery,
and other similar basic subjects
related to his specialty.

Grand Total Class Hours

4,248 Including Other
Basic Subjects **4,485**

The above class hours were compiled following a review of the curriculum catalogues of 22 medical schools and 11 chiropractic colleges, and updated from the National Health Federation bulletin and other publications' statistics.

The doctor of the future will give no medicine but will interest his patients in the care of the human frame, in diet, and in the cause and prevention of disease.

ATTRIBUTED TO THOMAS EDISON

Dr. Stephen J. Kaufman

A New Method Of Increasing Lymphatic Activity

Abstract: Simultaneous therapy localization of anterior and contralateral posterior neurolymphatic points is frequently positive, and indicates the need for further lymphatic stimulation.

Many of the techniques so far developed by Dr. Goodheart have indicated the need for extensive neurolymphatic drainage, as determined by enhanced therapy localization methods. These methods include RNA, Melzack-Wall pinch and scratch, right and left brain activity, wetting the area, skin stretching, opposable thumb/high gain technique, cerebellar technique, temporal tapping, local tapping, breath holding, testing during inspiration or expiration, retrograde, anterograde, or vertical positioning, palms up and down, myofascial stretching, aerobic and anaerobic testing, EID, and of course, simultaneous combinations of these. This paper presents yet another method of determining the need for more extensive neurolymphatic activity.

It has always been a source of curiosity to this author that there were neurolymphatic points both on the front and back, and he has frequently observed that manipulating either one or the other has apparently corrected both front and back. In line with Dr. Goodheart's contralateral spinal lymphatic drainage technique, it was thought that perhaps therapy localizing a neurolymphatic area on the back and its corresponding contralateral area on the front, would yield positive results. In other words, after all other means of ascertaining neuro-

lymphatic activity have been done (RNA, etc.) and the area checks negative, therapy localize, for example, the posterior neurolymphatic point for the adrenal on the right (11 - 12th interspace) and the anterior neurolymphatic for the adrenal on the left (2" above, 1" lateral to the umbilicus). Even though these areas previously were treated and are now negative, frequently they will still be positive for simultaneous therapy localization. If not, reverse and check the left posterior neurolymphatic, testing the gracilis or sartorius. Very frequently weakness will then appear, even though all forms of improved therapy localization were tried and treated until they were negative.

Similarly, therapy localizing the area over the left bicipital groove (upper trapezius NL) may be negative and the right posterior side of C1 may be negative, but testing them together with one hand over the left bicipital tendon and one hand over the right side of C1 posteriorly frequently yields a positive response with problems of the eyes and ears, even after all other forms of high gain therapy localization were tried and resolved.

Originally, this author had been manipulating only the posterior neurolymphatic of the combination. This seemed to give better results in this situation than manipulating the anterior point. Occasionally, using this method along with the other presently accepted methods of improved therapy localization, an area may have to be manipulated for as long as 15 to 30 minutes! This has resulted in remarkable responses in cases of ear infections, sinus problems, conjunctivitis,

New Method Of Increasing Lymphatic Activity
Dr. Stephen J. Kaufman
Denver, Colorado

Page 3

bowel and rectal functioning, TMJ problems, and the ubiquitous hypo-adrenia. It will also frequently remove palpatory pain from both lymphatic areas. More recently, we have manipulated the two contralateral points simultaneously. This clears the therapy localization in a few seconds, although it doesn't seem to give quite the same therapeutic results. Your personal trial and discretion is suggested. Results have been rewarding and generally longlasting. This technique has been used on over 1000 different patients over the past three years, usually on several different muscles per patient. In this author's experience, it is a frequently occurring phenomenon.

It is further interesting to note that after this contralateral A-P lymphatic technique has been done, one can pick up further activity by crossing hands. In other words, originally the patient placed his right hand on the right posterior adrenal neurolymphatic (generally he is prone), and the gracilis weakened. Manipulation of the posterior lymphatic point, or simultaneous activation of the points, eliminated this response. If he then places his left hand on the right posterior neurolymphatic, and his right hand on the left anterior neurolymphatic, occasionally weakness will then re-occur, and further activity is necessary. This also seems to hold true with the contralateral spinal lymphatic technique. After therapy localizing the right TP of C1 with the left hand, and the left TP of C4 - C5 with the right hand, frequently there will be need for further lymphatic activity along the contralateral spinal circuit, in the same fashion that Dr. Goodheart has described.

One other observation in this regard may be pertinent. It has been observed in the past that over-stimulation of a neurolymphatic eventually "fatigues" the reflex and weakens the muscle. This has never been observed by this author in regard to the techniques just described. It has been observed however, that when a muscle does weaken under lymphatic over-stimulation, that fascially flushing the muscle will correct it, and it will no longer weaken regardless of how long the lymphatic point is stimulated. It is felt by this author that the weakening of a muscle by overstimulation of the lymphatic is not a normal condition but a failure of the muscle to act as an auxiliary pump to the lymphatics, due to myofascial involvement. When there is no problem with the myofascial sheath, this particular weakness (due to over-stimulation) will not occur.

Summary

Further research is necessary to determine if simultaneous activation of contralateral anterior and posterior neurolymphatic points gives the same good clinical results as prolonged stimulation of the posterior area alone. This raises the general question of "how frequently do we merely clear a reflex (strengthen a muscle) without actually completely healing an area"? A most pertinent question.

REFERENCES

- 1) Applied Kinesiology Workshop Procedural Manual, 1980.
George Goodheart, D.C.

Dr. Stephen J. Kaufman

Further Diagnostic Application of the
"Now" Point - Greatly Enhanced
Therapy Localization.

Abstract: Simultaneous therapy localization of the "now" alarm point and a previously negative area allows many hidden factors to show up.

The time clock of acupuncture postulates a different alarm point being most active during each two-hour period of the day. This is known in the jargon of applied kinesiology as the "now" point, and has been utilized by Dr. Goodheart in the "then-and-now" technique.¹ The present author has always found that particular technique extremely effective, when applicable.

Dr. Alan Beardall has done additional work with the "now" point, especially as it relates to computer clearing techniques,² and feels that it should therapy localize, one handed, and a two handed T.L. should neutralize that weakness. This author is not completely sure that the "now" point should "normally" T.L., although he agrees that the use of Dr. Beardall's computer clearing techniques does generally establish a one-handed T.L. Whatever the case, the current technique can be used regardless of your thinking on the matter.

Having thoroughly checked an area of suspected involvement, either by therapy localization or by challenge and found it to be negative, then therapy localize the "now" alarm point. (If one handed T.L. is positive then use two handed T.L. This should be negative). Then, simultaneous with the patient's T.L. of the

"now" point, simply T.L. or challenge the suspected area, be it vertebral subluxation or fixation, Category I or II, Ileocecal valve, cranial fault, neurolymphatic, etc. In our experience, T.L. will now be positive in a very large percentage of cases, where it was negative previously to the area of involvement alone. (Of course, be sure to rule out simple T.L. of the "now" point alone, or the involved area alone, before testing simultaneously). Simply T.L. or challenge whatever area is under investigation along with the "now" point, and correct in the usual fashion if positive.

Summary

It is postulated that the "now" point is one entrance point into the massive computer system of the patient's body. It is as if you had general access to most of the computer, but for some bits of information you need a special phone number to a particular librarian, without whose help you can't retrieve the information. There are twelve librarians working two-hour shifts, so the phone number changes periodically. Once you know the code, you can increase your accessing ability. Simply intricate, and intricately simple - beautiful!

REFERENCES

- 1) Applied Kinesiology 1980 Workshop Procedures; George Goodheart, D.C.
- 2) Clinical Kinesiology Instruction Manual, 1982, Alan Beardall, D.C.

Further Diagnostic Application "Now" Point
Dr. Stephen J. Kaufman
Denver, Colorado

NOTE: This technique has been used by the author over a four
month period on well-over three hundred different
patients.

Dr. Stephen J. Kaufman

Further Sphenobasilar Involvement

Abstract: Enhancement of sphenobasilar and pituitary drive techniques are discussed.

It has been observed by this author that frequently after the sphenobasilar fault is corrected and therapy localization to the cruciate suture is negative, there may still exist a need for further correction. Therapy localization to the TMJ may be negative (if not, take appropriate action), therapy localization to the mastoid process on the same side may be negative (if not, take appropriate action on the stress center or respiratory fault), but if the mastoid process and TMJ on the same side are therapy localized simultaneously, a weakness of a tested muscle will frequently be observed. This will be negated by either inspiration or expiration (usually inspiration) and is then corrected by continuing the correction of the sphenobasilar fault for either inspiration or expiration. Inspiration assist is usually required, with forward pressure on the mastoid process and cephalic pressure on the cruciate suture during inspiration, frequently for two to five minutes. Both sides should be checked-occasionally one side needs correction longer than the other.

One point worth noting is that, in this author's experience, although TMJ therapy localization with the ipsilateral hand is rarely positive (with the TMJ in neutral position), frequently T.L. with the opposite hand is positive to the TMJ, even without

opening or closing. This generally indicates a subluxation.

An interesting facet of this fault is that it may be neutralized by darkness or totally artificial light. This was accidentally discovered when the author first began experimenting with the technique and found it present fairly frequently in his patients during the day. However, it didn't occur at all on his evening patients, and he was ready to dismiss it as "concepting" until he found it occurring again on patients the following day. Subsequent investigation confirmed that it did not show up at night, or when the curtains were drawn and only artificial light was available in the treatment room. Some relationship between this and pineal activity is suspected, but this is offered only as a tentative observation. In any case this fault may not show up when tested for in a room with only artificial light available.

A further factor which is only occasionally present is that when the patient simultaneously places one hand on the mastoid process and one hand on the ipsilateral TMJ and no therapy localization takes place, having the patient bite down or open wide may then elicit the familiar pattern of TMJ activity, although this may have already been corrected, and may not have shown up when only the TMJ was therapy localized. This is corrected in the usual fashion with spindle cell activity.

Another quite useful addition to cranial technique involves further enhancement of pituitary function. After therapy localizing the glabella and some other point (TMJ, thyroid NL, or whatever) and correcting via a prolonged inspiration - assisted

mastoid contact, and the simultaneous glabella - thyroid therapy localization is negative, proceed to again therapy localize the glabella and thyroid NL (or whatever combination) using high gain techniques. The patient again contacts the glabella and thyroid NL, but this time after chewing RNA, with thumb and little finger opposed, scratching, breath holding, utilizing make and break cerebellar contacts, and most important, during E.I.D. Utilizing this enhanced TL, he may need further respiration-assisted cranial technique, for as long as 10 or 15 minutes. We have found that this contributes greatly to the patient's sense of well-being, energy levels, and permanence of the correction.

Dr. Stephen J. Kaufman

Muscle Facilitation

Abstract: The sequence in which muscles are tested has a strong influence on the outcome. This has been known in the case of reactive muscle testing, where testing a hypertonic muscle will weaken selected muscles tested immediately following. The reverse situation is here described, where a muscle is strengthened or facilitated when tested following another muscle (the facilitator).

This author has observed what he believes is a phenomenon of significant importance in evaluating muscle testing as a diagnostic tool, specifically in regards to its reliability from one tester to another.

Two years ago the author was being examined kinesiologically by Dr. Craig Dillman of San Diego, when he noticed that his right psoas was weak in the clear, but, when tested immediately after the right quadriceps, seemed normal in strength. When re-tested again, several seconds later, it was again weak. Re-testing the quadriceps and immediately re-testing the psoas again showed a strong psoas. This phenomenon is the opposite of reactive muscle testing, and is heretofore referred to as muscle facilitation; a specified muscle, when tested immediately (up to 15 seconds) before a previously weak muscle, causes a temporary strengthening of the previously weak muscle.

Initial attempts at spindle cell manipulation were unsuccessful, and further investigation was post-poned. More recently, however, the author has found that this phenomenon occurs frequently. In fact, on an initial series of 80 patients, only two were seen to not have a demonstrable muscle facilitation

complex, but excessive pain on testing the weak muscle precluded extensive testing to completely rule out the presence of this phenomenon on these two patients.

To recapitulate; test a muscle found weak in the clear. Test another muscle, initially pertaining to the same joint; immediately re-test the first muscle. For example: the left pectoralis major clavicular is found weak in the clear. Test the left pectoralis major sternal. If strong, immediately re-test the PMC. It may now test stronger, having been facilitated by the PMS. (Remember, in a reactive muscle situation, the second muscle is inhibited by the first. This is an opposite situation). If it does not test stronger, continue to test the other left-sided shoulder joint muscles, and quickly re-test the left PMC. Test the latissimus dorsi, subscapularis, teres minor, deltoid, levator scapulae, neck flexors, rhomboid, teres major, suprapinatus, upper and middle trapezius, etc. Most likely, testing the PMC after each test will reveal that it strengthens after one of them. This is the facilitated muscle combination. It may take some time to turn up the facilitator, but have patience - this is a common occurrence, in this author's experience.

Frequently, a muscle that facilitates one muscle will facilitate several. For example, suppose a patient shows a weak right piriformis, gracilis and gluteus maximus. If the right hamstring facilitates the gracilis when tested immediately prior to it, it may also facilitate the other two muscles. However, it won't always. Usually a muscle that is a facilitator will facilitate or strengthen several other muscles, not just one,

but this is not an unbroken rule. (If it does however, it makes up for the time you lost in finding it).

The situation becomes more complex. It is not necessarily a muscle around the same joint that will be the facilitator of a weak muscle. It will frequently be found elsewhere. For example, a weak left psoas (kidney) may be facilitated by a left pectoralis major sternal (liver). A left sartorius (adrenal) may facilitate or be facilitated by a left teres minor (thyroid) or a left infraspinatus (thymus). This observation seemed to indicate that the facilitation complex was not merely a musculo-skeletal phenomena but also pertained to visceral relationships. Curiouser and curiouser, as Alice said.

For the moment, let's limit our observations to ipsilateral relationships, for simplicity. Having postulated a visceral relationship, we proceeded to explore it. To use the above examples, it was obvious there was relationship between the kidney (psoas) and the liver (pectoralis major sternal). It was obvious there was a relationship, especially in infections, between the thymus (infraspinatus) and the adrenal(sartorius), and between the adrenal and the thyroid. In fact, it soon became obvious that there were functional relationships between all the organs of the body! (A fact which, apparently, is not taught in medical school).

Let's assume that the left psoas is weak in the clear. Testing the left pectoralis major sternal, then quickly re-testing the left psoas produces a strengthening of the psoas, a temporary facilitation of the psoas. Placing a tablet of

liver extract on the tongue also strengthens the psoas. Therapy localizing to the liver neurolymphatic strengthens the psoas. Manipulation of the liver neurolymphatic strengthens the psoas (and whatever other muscles the pectoralis major sternal (liver) facilitates). Usually, prolonged neurolymphatic manipulation is necessary, 3-5 minutes or longer. The neurolymphatic will therapy localize and weaken a strong muscle, as well as strengthen the weak (facilitated) muscle.

On a series of 80 patients and approximately three or four different facilitation complexes on each patient, the "wrong" neurolymphatic strengthened the weak muscle in almost every case. (e.g. the liver neurolymphatic strengthened the kidney muscle in our example). Occasionally it was necessary to use the neurovascular or acupuncture points or stress centers of the facilitating (strong) muscle to strengthen the facilitated (weak) muscle. Assuming that neurolymphatic activity is not random, and that just any neurolymphatic will not strengthen any muscle, (in other words, there are definite, specific relationships) we seem to have here a new pattern of activity.

It was thought that perhaps this was related to priority testing. If placing a glandular extract of the facilitating muscle (e.g. PMS/liver), on the tongue strengthened the facilitated muscle (e.g. psoas/kidney), then this (facilitating) organ was thought to be having a strong and over-powering effect on its weaker partner. Treatment of the NL for the "stronger" organ abolished not only its TL, but also strengthened the originally weaker (and facilitated) muscle/organ. There is an

obvious possible relationship here with two-pointing therapy, but we have not explored this connection.

Another fascinating observation in this regard is that one challenge or therapy localization may inhibit another. (keep in mind that inhibiting a therapy localization may be interpreted to be the same as facilitating or strengthening a weakness, at least temporarily). For example, therapy localize the ileocecal valve, establishing a weakness through muscle testing. Then quickly challenge or therapy localize a Category I or II that was previously positive. It may now be negative, indicating that the mere touching contact and therapy localizing procedure of the ICV was enough to temporarily block the therapy localization (or challenge) of the Category I or II. Or it may be reversed, in other words, establish a weakness and TL of the ICV, then TL positively (if present) a Category I or II, and then quickly re-test for the ICV. It may now show negative (usually for a period of 15 seconds). As in reactive muscle testing, the order or sequence is reversible.

In this instance, the usual correction of whichever structure inhibited the therapy localization of the second problem will correct both problems.

For example, if positive therapy localization of the ICV temporarily abolished subsequent TL of a Category II, then correcting the ICV in the usual manner will also correct the Category II. Or, testing the sartorius (if it is a facilitator) may temporarily abolish TL to the ICV. Manipulation of the adrenal neurolymphatic in this case will then strengthen the ICV.

Summary

We find that the process of muscle testing itself is effecting the results of our examination. This has marked relationship to the Huysenberg Uncertainty Principle in physics, which states, briefly, that the consciousness of the observer himself effects the outcome of the experiment. This has been known before in AK, in the situation of operator prejudice. Here we are discussing the actual physical structuring or sequential ordering of the testing procedures as a potent factor in influencing the results of the test. In difficult cases or recurrent problems this facilitation testing has proven to be of great value, especially in eliminating pain on testing a weak muscle. However, it also has value as a caveat for the doctor to beware of the influence his testing procedures per se are having on the outcome. Be aware of timing and possible reactive or facilitated muscle combinations, and always re-test weak muscles to confirm. Some previously bewildering results will now make sense. The patient with re-occurring weakness, severe joint pain, or difficult problems may well respond to this different approach. It also presents some interesting philosophical problems which we will discuss in a future paper.

The therapy localization facilitation/inhibition process may have great significance as a priority indicator, but this and its relationship to two-point therapy, needs to be further explored.

Muscle Facilitation
Dr. Stephen J. Kaufman
Denver, Colorado

NOTE: We have utilized this technique for over a year on several hundred different patients, and find it a frequent occurrence. It has occasionally produced outstanding therapeutic results.

Dr. Stephen J. Kaufman

The Effect of T.S. Line Stimulation
on Diagnostic Muscle Testing,
with Therapeutic Application.

Abstract: Stimulating an active T.S. line nodule with finger tip pressure will cause it's previously strong associated muscle to weaken, indicating the need for further treatment, which should be continued until the T.S. line point is gone.

It has been observed by this author that digitally stimulating an area on the T.S. line, after it's correlating muscle has been strengthened, will frequently cause a recurrence of weakness in that particular muscle. The neurolymphatic should then be re-activated to restore the muscle to strength. The T.S. point is again stimulated, the muscle re-tested, and re-strengthened if weakness still occurs. Usually prolonged neurolymphatic stimulation is necessary before continued stimulation of an active T.S. line point will cease to re-activate muscle weakness, but occasionally neurovascular or acupuncture circuits are involved and require treatment.

Most of the time the T.S. line nodule will largely or completely disappear immediately following adequate treatment; if it persists, further treatment (generally neurolymphatic) is usually necessary. The main point of interest here is that T.S. line points can usually be made to resolve immediately. A continuing active T.S. area, even in the absence of any other observable factor of muscle weakness (high gain techniques, temporal tapping, etc.) will usually elicit a weakness when stimulated directly, and seems to be a source of recurrent

weaknesses.

Another interesting observation is that as one treats the lymphatic point, the T.S. nodule will frequently become much more tender and swell up initially, while further treatment will disperse it. We refer to this phenomenon as "mounding up".

We discovered this technique while observing on many patients that muscles just tested as strong, when re-tested immediately after T.S. line palpation, would be weak. We initially thought that we were concepting, but further examination disclosed that diagnostic T.S. line palpation, in itself, does indeed have an effect on diagnostic muscle testing, demonstrating once again that the observer (i.e., T.S. line palpation), does influence the results of his observation (i.e. diagnostic muscle testing), principally by the sequence that his observations are made in. (This is an application of the Huysenberg uncertainty principle to applied kinesiology).

For further uses of the Temporal Sphenoidal Line, you are encouraged to obtain "Temporal Sphenoidal and Bloodless Surgery Procedures" by Dr. M.L. Rees, Box 74, Sedan, Kansas.

This author has also occasionally seen T.S. points immediately shift from one side of the skull to the other, by the use of complicated switching techniques, but no coherent observation can be made on this at this time.

Effect of T.S. Line Stimulation
Dr. Stephen J. Kaufman
Denver, Colorado

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Summary

It is becoming more and more obvious in applied kinesiology that the process of investigation itself affects the outcome of investigation. We speak here specifically of the sequence of investigation, i.e. testing a series of muscles first, then palpating the T.S. line, and then re-testing the muscles will probably yield different results, i.e. more weaknesses, after T.S. line palpation. We have discussed in another paper how the sequence of muscle testing itself can cause differing outcomes, with regard to muscle facilitation and reactive muscle activity. There are other observer-related factors affecting diagnostic muscle testing, including mental bias (concepting), observer positioning and respiratory phase, health status of observer, etc. Undoubtedly there are many more. We need to become aware of as many of these factors as possible, in order to produce more valid and objective testing procedures.

NOTE: This technique has been in steady use for fifteen months on well over six hundred different patients, and has produced highly consistent results.

Dr. Stephen J. Kaufman

Trigger Point Therapy Localization

Usually, trigger points do not therapy localize. Dr. Goodheart has found that cross therapy localizing a trigger point during inspiration or expiration with the opposite hand will frequently be positive. Additionally, this author has found that simultaneously therapy localizing both the trigger point and the zone of reference (which is frequently where the patient actually experiences the pain) will usually be positive. Manipulation of the trigger point with intermittent pressure should then be carried out until therapy localization is abolished (or a temperature rise is seen at the zone of reference, or the pain caused by manipulation of the trigger point eases).

An interesting observation in this regard is that, although the TMJ will rarely therapy localize in a resting position, with the ipsilateral hand, therapy localization will occasionally be positive with the contralateral hand (this to the TMJ in the clear, not open or closed). This usually indicates a subluxation, NL reflexes, etc. This also should be checked relevant to simultaneous T.L. of the TMJ and mastoid (discussed in another paper).

Dr. Stephen J. Kaufman

Ventricular Compression

Dr. Sutherland (1) and Dr. DeJarnette (2) are both strong advocates of the ventricular compression cranial technique. Briefly, the doctor interlaces his fingers and places his hands under the patient's skull (the patient always lifts his head and drops it down on the doctor's hands) in such a way that his thenar eminences are on the lateral portions of the occiput, just medial to the occipital-mastoid suture. The doctor then compresses the occipital bone slightly as the patient inhales, relaxing his thenar pressure as the patient exhales. Frequently a wave-like pulsation is felt from within the skull as this is done. It is continued until a "softening" of the occipital bone is felt (it actually feels like the bone has softened), two or three minutes.

This ventricular compression technique is said to aid the fluid balance of the body, flush out the brain, and stimulate all body functions. It is useful in fatigue, hypothyroidism, low blood pressure, insomnia, shortness of breath, etc.

This author has successfully muscle tested for the need for this technique with the patient prone, by contacting one side of the occiput with the thumb, the other side with the first two fingers of the same hand, and shaking lightly from side to side. It was felt that any interference of drainage of the fourth ventricle would produce a weakness under these conditions. In

any event, a weakness caused by this shaking is neutralized by the ventricular compression technique. (For a complete description of the technique, see reference #2).

Occasionally, shaking the skull side to side is negative, and it will have to be shaken vertically, with the doctor's thumb under the EOP and the first two fingers approximately at the posterior fontanel.

DeJarnette's "fruit jar" technique² involves a fixation between the frontal bone and the maxilla. This is tested by firmly pulling the frontal bone to one side and the maxilla to the other. If no weakness occurs on this challenge, reverse it and pull the two bones in the other direction. Correct into the direction of weakness four or five times with respiration.

Most of DeJarnette's sutural fixations can be challenged by pulling the sutures in the direction of the corrections, observing a muscle for weakness, and then continuing the sutural correction until the weakness is abolished.

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DR. GARY N. KLEPPER
CHIROPRACTOR

FOOD SENSITIVITY SCREENING

Abstract: Applied Kinesiology can be utilized as a diagnostic method for determining food sensitivities or allergies through a procedure that is safe, comfortable to the patient, inexpensive, and rapid. In addition, it provides insights into how to reverse this condition when it is due to a functional weakness rather than an inborn error of enzyme production. A screening process which can be used on each new patient is discussed.

Applied Kinesiology must be considered to be an experimental procedure in that most of the basic premises upon which it is founded have never yet been proven by criteria acceptable to mainstream medicine, and also in that it has not yet been determined to what extent it can be utilized to gather reproducible data about the functional integrity of the various organs of the body which correlates with information gathered by traditional examination and laboratory procedures. Food sensitivity and allergy testing are good examples of procedures commonly used by practitioners of Applied Kinesiology which pick up information that is not available from even the most careful physical examination. Unfortunately, however, muscle testing procedures commonly used for this purpose are often either oversimplified or are done in such a way that can yield erroneous information.

Briefly, Other Testing Methods

Percutaneous scratch testing is the most widely accepted laboratory examination method for checking specific substances, both foods and airborne, to which the patient is suspected of

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having an allergy. Its advantages are that it utilizes standardized antigens and it is often covered by insurance. Its disadvantages are that it is very expensive and it may not test the same mechanisms that are involved in food sensitivities. After all, we normally eat our food rather than grinding it into an incision. False positives are often seen.

Cytotoxic testing is a relatively new method which is gaining favor rapidly within the chiropractic profession. In this test, white blood cells taken from the patient are exposed to numerous antigens, and their response is observed through a microscope. The advantages here are that many substances are tested at once and that the mechanism tested more closely resembles an immunological response as in an allergy. The disadvantages are again the expense involved and that the test itself has not been around long enough to be a well tried commodity.

The pulse test of Coca involves having the patient monitor for a change in pulse rate after eating a suspected food. The advantage here is that it costs nothing to run. The disadvantages are that it depends tremendously on the subjective judgement of the patient and also their enthusiastic cooperation, and the results can be grossly affected by many factors, including the emotional status during the test.

Provocative testing of various sorts is employed, mainly by practitioners of clinical ecology methods. This type of testing takes many forms, but commonly involves the ingestion, under observation, of suspected foods in a diluted form in an attempt to reproduce the symptoms related to the food allergy. Treatment

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is then given, consisting of the ingestion of a further dilution of the same material which did reproduce the symptoms. This is similar to isopathic antidoting and has definite possibilities. However, being quite a time consuming procedure, it is impractical for use in the general chiropractic office.

The other glaring disadvantage of all of these methods is that they do not address the issue of how to correct the causative mechanisms of the food sensitivity or allergy but only identify the offending foods.

What Is Lingual Testing, Anyway?

It is necessary to understand just what this procedure, known as oral or lingual testing, is intended to reveal in order to be able to eliminate some sources of error in the procedure.

Early investigation by Goodheart into nutritional testing showed that a weak muscle, when related to an organ in need of nutritional support, would strengthen when the correct nutritional substance was chewed by the patient. A randomly selected nutritional substance, when tested the same way, would not tend to bring about the same increase in muscle strength. This procedure allowed the doctor to select a nutritional material that would correct the specific deficiency being identified and lead to consistently good clinical results.

Later it was found that if the patient would chew a substance which created a physiological overload on a particular organ, the muscle related to the organ would weaken. Thus the doctor was enabled to identify those foods or nutritional supplements which were harmful to the patient so that they could be eliminated from

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the diet. Some substances were^{so} often found to have a weakening effect, that it came to be erroneously believed by some doctors that certain substances, such as white sugar, tended to weaken everybody.

Another interesting observation is the effect of stimulating the tongue with an object. If the wooden end of a cotton-tipped applicator is poked into the center of the tongue, there is no change in the strength of a strong indicator muscle. If the same applicator is poked into the tongue first on the left side, then on the right, it is generally found that one side or the other will create a weakness in the indicator muscle. This is a primitive reflex which allows us to discern whether we are chewing on a food or an object, i.e., a grazing animal will automatically expel a pebble picked up with a mouthful of grass. The same weakening response does not occur if a food or a vitamin tablet is placed on one side of the tongue or the other vs. in the middle. The lesson from this observation is that in testing for sensitivities, we must test foods rather than objects. For example, if it is suspected that a particular piece of cookware is dispersing toxins into the food eaten by a patient, this can be determined by testing some of the food prepared in that cookware, but if the patient is instead tested by having them lick the piece of cookware, it is quite possible that a false positive or false negative test will result.

What is Being Tested?

What we are looking for when examining for sensitivity to foods is whether or not the ingestion of the food can be expected

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to create a harmful physiological overload in one or more organs of the patient. Most of the positive tests we obtain are probably not true food allergies, but only hypersensitivities, although for the sake of simplicity, we often, deliberately but erroneously, call them allergies when speaking with our patients. A food can cause a significant physiological overload in one organ or system, yet not reflect itself as a general weakness of all the muscles of the body. For that reason, it is important to test more than one muscle. I generally find it adequate to test the muscles related to all of the digestive organs as well as the muscles related to the organs suspected to be in a state of functional weakness as would be implied by the chief presenting complaints of the patient. Anything short of this can miss important weaknesses and cause us to miss positive tests with foods.

The Foods I Always Test

I have selected foods to test on the initial examination of every patient in order to determine whether food sensitivity is a significant cause of chemical imbalance. Food sensitivities are often involved in the common chronic complaints such as functional hypoadrenia, and these problems will respond better if the food sensitivity is identified and eliminated. The list here is not complete for the purposes of finding every offending food, but if tests of all of these are negative, I generally feel safe in ruling out food allergy as a significant factor in the patient's problems. The substances I use are as follows:

Whole Wheat Flour This contains gluten, and thus will pick up most of the sensitivities to grains. If found positive, it is

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good to confirm by testing other grains.

Lactose A positive here may indicate a sensitivity to dairy products. Confirm this by testing fresh milk or another fresh dairy product. Being a refined sugar, this could also indicate an extreme intolerance for any refined sugars. Confirm this by comparing the results of testing sucrose, fructose, and honey.

Paprika This is a member of the nightshade family so will pick up a sensitivity to solanines. Confirm by testing other nightshades, which include tomato, potato, eggplant, peppers, and tobacco.

Baking Powder This contains many substances which must be differentiated if found positive. They include aluminum sulfate, which would cause weakness in aluminum intoxication or sulfur sensitivity. It also contains corn starch which could pick up a corn allergy. It also contains tartrates, which should usually be no problem. It is also an alkaline salt and could cause weakness if the patient is in a state of alkalosis. Confirm by testing a food baked with baking powder before insisting that the patient eliminate this substance from the diet.

Wine Vinegar This material contains tyramines, so if these are the cause of the weakness's, then the same weakness would be induced by testing another tyramine source such as parmessan cheese. It also contains yeast residues, so confirm this by testing yeast or a food containing yeast. It also is an acid, so could cause weakness when the patient is in a state of acidosis. I confirm this by testing with phosfood.

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Water Stored in Plastic This will pick up an extreme sensitivity to toxic organic residues.

As you can see by the description of the testing procedures outlined above, the underlined substances are just used to scan for sensitivity to a broad range of substances, then the specific sensitivities must be determined by breaking up the primary substance into specific subcategories by confirmatory tests and further investigation.

How to Fix It

Practitioners of clinical ecology approaches follow up the identification of the substances to which the patient is allergic by having them totally refrain from eating those substances for a period of generally 60 days to allow the organs to rest, then the patient is allowed to eat the food once every 5 days. This type of restriction is meant to prevent the patient from resensitizing themselves to the food. This approach is a good one in that it does allow the organs to have some recovery time, but it is insufficient in itself in that it does not permanently correct the sensitivity or allergy.

Various authors of Applied Kinesiology works have made many good general suggestions as to correction of allergy, such as attention to adrenal and thymus factors and correction of hypochlorhydria and specific cranial and other mechanical factors. These factors must all be observed. In addition, there are some procedures which have enjoyed less attention, but which are nonetheless valuable.

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I attempt to identify the weak organ which allows the hypersensitivity reponse by having the patient hold the offending food in the mouth and at the same time have them therapy localize one at a time the various alarm points. The alarm point which abolishes the weakness caused by insalivating the offending food is the alarm point corresponding to the organ in need of primary therapeutic attention. Knowing which organ is involved assists in finding the appropriate nutritional material to use supplantimentally in order to begin to correct the chemical imbalance. It is a good sign if the material can be found which will both negate the weakness created by tasting the offending food when tasted along with the food, and will also strengthen all weak in the clear indicator muscles. Usually I find the organ in need of assistance is one of the digestive organs such as the pancreas or small intestine. In order to really correct the situation, it is usually necessary to correct a source of vagal irritation including possible adhesions in the anterior lower cervical area, and in my opinion, the correction of vagal irritation does more to permanently reverse food sensitivity than any other single factor. However, to more quickly balance the chemistry, it is good to use a material to support the involved organ. I am particularly impressed with the results gained in using the Wildwood Botanicals products Imu-stim 3 when the small intestine is involved and the product Phyto-Pan by the same manufacturer when the pancreas is involved. The use of these products does not actually fix anything, but greatly assists in removing the physiological overload temporarily while the problem is being corrected by manipulative means.

Food Sensitivity Page 9Review

A procedure for not only diagnosis but also correction of food sensitivities has been suggested. It has also been suggested that the doctor attempts to eliminate both oversimplification and erroneous procedures in the handling of this problem. Permanent correction often requires not only attention to general factors as has been well outlined in other Applied Kinesiology Works, but also specific support to the organ that is allowing the sensitivity to develop, and removal of vagal or other neurological involvement. Attention to this situation as a part of routine handling of all patients will greatly assist in the swift biochemical rebalancing which can not help but add to the results which will be obtained through chiropractic treatment.

PATIENT COMPLAINTS AND ASSOCIATED MUSCLE WEAKNESSES

Kerry M. McCord, D.C.

ABSTRACT: A study guide for the doctor endeavoring to further his/her ability to correlate patient history, signs and symptoms with specific muscle weaknesses as identified by applied kinesiological testing.

It is our intention in the following pages to review some of the signs and symptoms commonly associated with specific muscle weaknesses. The information contained herein was gleaned from video tapes of the 10 sessions taught by Dr.'s Goodheart and Schmidt in Detroit, Michigan from February through December of 1982 and, therefore, should not be considered all inclusive or even comprehensive, but rather another effort to offer to the developing Applied Kinesiologist an opportunity to refine and simplify the application of his/her recently acquired knowledge and skill.

Patient Complaints/McCord

MUSCLESSIGNS & SYMPTOMSAdductors

Hernia
 Tennis elbow
 Knee problems
 Bowed leg on one side and knock-knee on other
 Patient whose leg, with ankle over knee, depresses farther on one side than other

Anterior scalene

Atlas rotated one way, rest of cervical spine rotated the other
 Positive Adson's sign (on side opposite weakness)

Anterior serratus

Hard to abduct shoulder past 90 degrees
 Arm goes to sleep (due to relative Pectoralis minor contraction)
 Deep hard ache in chest all the time
 Pain in lateral breast

Anterior tibialis

Shin splints (micro-avulsion)
 Seborrheac Dermatitis (Vitamin B deficiency)
 Drop foot
 Foot pain
 Perspire profusely/high refined carbohydrate diet (Vitamin B deficiency)

Biceps

Biceps ache especially after heavy breakfast
 Arm catches as raised above head and catches at same point as arm is lowered (Slipped Bicipital Tendon)

Brachioradialis

Nervous - can't sleep - can't calm down - depressed
 Chest tension - often difficult to breath
 (Prolonged Neurolymphatic stimulation is therapy of choice)

Patient Complaints/McCord

MUSCLESSIGNS & SYMPTOMSCoracobrachialis

Pain in shoulder when eating or
when combing hair
Shoulder ache following bout of
bronchitis

Deltoid
(Anterior/Posterior/Middle)

Pneumonia more than twice
Bilateral shoulder pain (cervical/
thoracic fixation)
Shoulder aches at night

Diaphragm

Out of breath walking up stairs
Some days can run 5 miles, other
days 1 mile
Pain in left or right chest when
running
Lately feel as if things just not
right - something's wrong
Listlessness

Gastrocnemeus/
Soleus

Calf muscle ache
Restless legs
Forward lean (Soleus)
Patient has flick when he walks
(Gastrocnemeus)
Calf tender if squeezed

Gluteus Maximus

Can't bend over as far as before
(one side better than other)
Back pain worse at the end of
the day

Gluteus Medius

Typical walk - shoulder rises on
one side as take step and not
other
When walking through doorway, hip
will hit on one side and shoulder
will hit on other

Sartorius/Gracilis

Hemorrhoids - valveless veins in
abdomen not being narrowed due
to inadequate adrenal function
Knee pain
Meneires
Indigestion
Dizziness (especially on rising)
Fatigue

Patient Complaints/McCord

MUSCLESSIGNS & SYMPTOMSSartorius/Gracilis (cont.)

Calf pain
 Low back pain
 Accentuated second heart sound

Hamstring

Trouble going down stairs
 Knee hurts when constipated
 "Feels like heavy weight" (at
 area of ischial tuberosity/
 relieved by bowel movement)
 Hamstring cramping (hydrochloric
 acid deficiency)
 Posterior Ischium (on side of
 weakness)

Iliacus

Pain in Gluteus Maximus
 Patient who falls backward and
 catches themselves with one
 hand (treat origin & insertion
 along iliac crest)
 Patient must wear tight girdle
 or sacroiliac support to bed
 at night to be able to sleep
 (weakness of Iliacus allows
 sacroiliac ligaments to
 stretch and become irritated)

Infraspinatus

Infection
 Child with milk allergy
 Bee sting allergy (acid/alkaline,
 calcium, thymus)
 If have recurrent ulcers on leg,
 in mouth, colitis, etc. (Thymus
 not adequately processing RNA
 and passing it on to Parotid)

Latissimus dorsi

Low back pain associated with/
 or precipitated by lifting
 (pain on side opposite weakness)
 Back pain after eating

Levator scapulae

Restriction of cervical range of
 motion
 Burning pain in area of levator
 scapulae and upper trapezius
 Flashes of light in periphery of
 eye (coffee aggravates)
 Microhypertonus - postural, etc.
 (poor calcium metabolism)

Patient Complaints/McCord

<u>MUSCLES</u>	<u>SIGNS & SYMPTOMS</u>
<u>Lower trapezius</u>	Pain all over (shoulders, neck, low back, legs - thoracic/lumbar fixation)
<u>Middle trapezius</u>	Fever
<u>Pectoralis major clavicular</u>	Shoulder pain Scapular pain (one side) Vague ache in chest Stool hard and dry and at times light colored
<u>Pectoralis major sternal</u>	Skin gets dry in winter (patient needs better biliary function to facilitate absorption of fat soluble nutrients) Photophobia Pain between shoulder blades (Fascial Sheath shortening) Excessive intake of coffee (6 or more cups - rancidity)
<u>Pectoralis Minor</u>	Source of much pain, especially pain on recumbancy (test Retrograde) Bruxation
<u>Peroneus longus and brevis</u>	Shin splints (Peroneus longus micro-avulsion) Foot problems
<u>Peroneus tertius</u>	If patient complains of toes hurting on test, may indicate recruitment of toe flexors - will disappear on correction of weakness
<u>Piriformis</u>	Walk with foot turn out on side opposite weakness ($\frac{1}{2}$ of Charlie Chaplin walk) Low back pain Hypervitaminosis E (over 600 IU's daily) One who would rather sit with ankle on knee than straight with both feet on the floor

Patient Complaints/McCord

MUSCLESSIGNS & SYMPTOMSPopliteus

Knee problems
 Can't digest eggs and bacon
 Must avoid fats
 Pain in the arch of the foot
 Regurgitation of food
 Headache in the back of the neck

Posterior tibialis

Posterior shin splints (micro-
 avulsion)
 Feet hurt at end of day

Pronator teres

Pain in arm following such
 activities as tennis, golf,
 etc.

Psoas

Stiff in the morning
 Trouble getting out of a chair
 Crazy dreams

Quadratus lumborum

Elevated hip and low 12th rib on
 side opposite weakness
 Low back pain (recommend enema
 to change flora)

Quadriceps femoris

Narcolepsy
 Falls asleep in car or after
 lunch in class
 Knee pain
 Sneezing 3-4 hours after eating

Rectus abdominus

Falls asleep driving car (can't
 flush spinal fluid)
 Low back pain
 Spondylolisthesis
 20% of people held upright by
 Abdominal muscles (80% held
 upright by Sacrospinalis)

Rhomboids

Mid-dorsal pain
 Dorsal scoliosis (T2-6, every-
 thing else level)

Sacrospinalis

Pain between shoulder blades -
 adjustments don't last

MUSCLESSIGNS & SYMPTOMSSupinator

Elbow problems

Splenius capitus and cervicus
(Posterior neck extensors)Low back pain if sit all day
(feel good if move)SternocleidomastoideusSinus problem
Sinus pain when it rains
Whiplash (Internal Frontal Bone)
Restriction of cervical range of
motionSubclaviusInability to raise arm above
level of shoulder (Frozen
shoulder)SubscapularisOut of breath walking up stairs
Can't put arm behind back
"reached into back seat of car
and it grabbed in the shoulder"
Master's Test positive (heart
rate should rise 40 beats after
hopping 10 times on each foot)SupraspinatusTraumatic dislocation of shoulder
Trouble understanding certain
subjects (math bad, other sub-
jects excellent)
Pain in shoulder at night
Associated with what is commonly
diagnosed as Rotator Cuff tear
(micro-avulsion)Tensor fascia lataPain in leg that improves with
bowel movement
Pain in leg and back at night
Generalized low back pain and
fatigueTeres MajorPatient can raise arm with palm
up (thumb up) but not with palm
down (imbalance between rota-
tors, Teres major and Teres
minor)
Note: following hot bursitis -
contracture of Teres Major after-
effect of wearing a sling

Patient Complaints/McCord

MUSCLESSIGNS & SYMPTOMSTeres Minor

Cry easily (Iodine need)
 Can't tolerate temperature change
 Bilateral Carpal Tunnel
 Indigestion
 Constipation
 Subluxation of C6

Transverse Abdominus/
Oblique Abdominus

Posture appears as if patient
 torqued
 Lumbar rotary scoliosis

Triceps

Person having trouble with serve,
 backhand or forehand in tennis
 Arms tired, ache all the time
 (patient will rub arms)

Upper Trapezius

Recurring musculoskeletal prob-
 lems (check against gait and
 correct cranial stress center
 activity)
 Nails brittle, hair falling out,
 mouth dry (Vitamin F deficiency)
 Nocturnal Enuresis (Vitamin B
 deficiency)

CERVICAL FACET IMBRICATION

Ben C. Markham, D.C.

Abstract: Imbrication of the cervical spine is presented and its similarities and differences to lumbar imbrication. The diagnosis and correction of this hidden, problematic condition is shown.

Much has been written about the problem of lumbar vertebral facet imbrication and it also appears that cervical spine facets may imbricate or overlap in a similar way. Art Holmes, D.C., has described facet imbrication as the "condition whereby the articulating surfaces lose their contiguous alignment and closely approximate their plane surfaces in an oblique superior-inferior direction."¹

Cervical and lumbar facet imbrication have similar etiological factors. Hyperlordosis is a common cause as is hyperextension-hyperflexion injuries in whiplash type trauma. Trauma placed into the cervical spine in a cephal-caudad direction, such as a blow to the top of the head, is a common cause of cervical imbrication. Disc degeneration and thinning also predispose the motor unit to imbrication. The patient with cervical imbrication will many times indicate to the doctor that he feels as if the neck is jammed.

The cervical imbrication can be challenged by the doctor placing both hands under the base of the occiput of the supine patient, and giving a short, moderate traction in a cephalad direction. As usual, if this causes a strong indicator muscle to weaken, it indicates a rebound phenomena, and facet jamming.

The pectoralic major, clavicular division, is an excellent indicator for this condition. No effort is made to identify the exact level of cervical imbrication, as in lumbar imbrication.

The correction is best accomplished with the supine patient in a retrograde position. If the doctor has an examining table with a lower section that will drop down, have the patient drop the knees over the dropped section. With the patient now in a supine, retrograde position, and the legs bent over the dropped section, have an assistant hold and stabilize the patient's ankles to prevent the patient from sliding on the table when the doctor gives the traction adjustment. If the doctor does not have equipment to place the patient in a retrograde position, correction can be adequately made with the patient supine, however, the retrograde position seems to aid the correction.

Correction is very similar to the challenge, except a firmer, sharper move is accomplished. Use both hands under the base of the occiput and bring it straight cephal. Usually there is an audible release at the level of cervical imbrication and there is immediate release. If correction was accomplished, the previous positive challenge will now not be elicited.

As in the lumbar facet correction, this method of correction would be contraindicated in acute disc problems.

Occasionally, you may find the problem returning on repeated visits. If so, check for a positive challenge of imbrication and then have the patient chew a capsule of wheat germ oil containing octacosanol and recheck the challenge. Many times it will be negated and another de-imbrication procedure is not indicated. This would seem to indicate a relationship to weight-bearing in the causation of the cervical facet jamming. As always, check all related structures for proper balance, such as ankle stability and pelvic categories.

Correcting the cervical imbrication will solve many of your problem neck conditions that have not responded to the usual manipulative techniques and applied Kinesiological procedures.

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DIAPHRAGM ISOMETRIC RECRUITMENT

Richard MELDENER D.C.

ABSTRACT : Diaphragm isometric recruitment is endemic in the general patient population exposed to muscle testing procedures .

The diaphragm is known to be a general mobiliser for body energy .

Diaphragm imbalance has a definite disturbing effect upon most physiological activities .

This well accepted evidence needs no demonstration .

A good example as you know , is the fact that imbalance of the diaphragm can create many imbalances in acupuncture meridians .

On the other hand , whenever a non ordinary physical effort is requested upon the body , the diaphragm generally contracts in an attempt to mobilise some extra energy .

During any weight lifting contest , watching the face of the athletes prior lifting weights shows evidence they stop breathing and lock their diaphragm to the maximum for some bonus energy .

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Diaphragm Isometric Recruitment
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In Applied Kinesiology procedures , whenever we use muscle testing examination procedures , the patient , unconsciously will most of the time react just like the weight lifting athlete .

The patient exposed to muscle testing , in an attempt to gain some extra energy will block the diaphragm in a powerfull isometric recruitment contraction .

Diaphragm isometric recruiting contraction is endemic in the general patient population exposed to muscle testing procedures .

A huge potential for laboratory errors develops from this recruiting capacity of the diaphragm .

Whenever the patient has sufficient diaphragmatic power he or she will recruite and this is the case for most patients we see .

This concept does not pretend to offer a new method for subclinical faults discovery .

This concept is trying to offer a sharpened awareness for body language in the clear .

Whenever we muscle test patients which are recruiting with diaphragm isometric contraction , we are limiting our diagnostic capacity .

It is just as if we were jogging with both hands in our pockets .

Don't we pay special attention to recruitment every time we manual muscle test ?

Is not failure of recognition of recruitment a pitfall only the beginner Applied Kinesiologist falls into ?

Are we not rigourous about the absolute necessity to avoid recruitment for reliable body language ?

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 Diaphragm Isometric Recruitment
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The diaphragm is no exception to the rule .
 It has the capacity and will recruit for any muscle in the
 body if we give him a chance .

To avoid diaphragm isometric recruitment I have used the
 following methods :

- During every muscle test I am fully attentive to the patient's
 respiration
- I look , I listen , I feel the patient's normal or absence of
 breathing during every muscle testing examination .
- I always ask the patient to disclose the mouth & breath freely
 while I proceed with muscle testing .

CONCLUSION

As of to day I am considering Diaphragm Isometric Recruitment
 to be a major major parameter in body language difficulty .

I feel it should be used prior any other subclinical tools
 we have learned in Applied Kinesiology .

Avoiding Diaphragm recruitment should be recognized and
 become a part of the routine necessary prerequisite for accurate muscle testing
 evaluation .

Instead of spending lots of time and energy with sophisticated
 subclinical methods ,

why don't we try to do simple things first , & sophisticated
 ones last .

THE LAKHOVSKY CIRCUIT

The oscillating circuits of George Lakhovsky with a polymetal conductor, gold, copper, tin, silver, nickel, iron and zinc.

Translated by: Carl Mestman D.D.S.

Abstract:

George Lakhovsky was the first to give a totally new significance to the constituent elements of animal and vegetable tissue. He demonstrated that the living cell is a small oscillator and an electrical resonator from which the vibrations are then maintained by the radiant energy of the radioelectric waves which fill the atmosphere.

"Life is Oscillation" and "Our Life is Cellular Oscillation".

The great physicist and biologist, George Lakhovsky, a Frenchman, was the first to correlate cosmic radiation with vital phenomena. Because of their deep penetration, the waves invaded the environment in which we live and bombarded, so to speak, the tissues in a continual manner. From every side every human being emits radiation and is capable of receiving and transmitting waves.

In a few words what exactly is a cell, this infinitesimal part of the body?

See Fig. (1). Schematically this is a protoplasm surrounded by a cellular membrane. In this protoplasm is imbedded a nucleus composed of tubular filaments, (the chromosomes), which contain an electrically conductive liquid bathed with mineral salts and enveloped in an insulating substance. The whole forming an open circuit. So described, the cells must be considered as an open oscillating circuit, microscopic in nature.

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We know in fact that any insulated conductor is capable of oscillating if excited by external radiation which corresponds to its proper wave length which makes it vibrate in resonance.

Schematic of Composing Elements of One Cell. See Fig. (1)

One can see the curved tubular filaments in the center that form a circuit. This is a filament which possesses self inductance and capacity and this is a fundamental oscillating circuit. The cell is comparable to an oscillating circuit like a Herz circuit which is a true electric circuit capable of self inductance and capacity and further capable of oscillating and resonating at a very high frequency.

The filaments are in a spiral form in the nucleus and constitute an induction coil and the capacity between the two ends of the filament forms the condenser. See Fig. (1).

According to George Lakhovsky, life is constituted by oscillations of cells, and consequently life is born from radiation and continues to be related to radiation.

Other famous astrophysicists have particularly studied radiation called cosmic waves, electromagnetism, electrostatics, etc., which contain the smallest to largest wave lengths. It is in this radiation spectrum that all elements of the cell find their resulting resonating frequency. The harmony of vibrating cells assure normal vital functions. An imbalance of vibrations because of external and internal causes,

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creates morbidity states which are due to the action of pathogenic microbes. It is a sort of radiation war as described by George Lakhovsky.

As a matter of fact, the microbe consists of an infinitely small single cell which also has a wave emitting capacity. It disturbs the vibrating balance of healthy cells with which it comes into contact.

In the radiation battles these microbic cells are primary and appear as the first manifestation of an isolating imbalance which is recognized as a fever phenomena so frequently found, but its genesis is still surrounded in mystery.

We know that an electric current that traverses a conductor develops heat because of the resistance it encounters. The human cell is constituted just as we have discussed it. This phenomena is produced in our body because of the resistance encountered by the filament contained in the nucleus. When this resistance is varied because of morbid or microbic activity vibrations and temperatures beyond 40° or 41° C (104° or 105° F) diminish the insulating quality of the nuclear filaments and go so far as to provoke fusion and further destruction of the insulating material. When this insulating material is destroyed the cell cannot oscillate anymore and death ensues.

It appears in elementary therapeutics that the objective is to assure the organism a normal cellular oscillation which

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allows the organism to fight with equal if not superior weapons or with the weapons of the pathogenic microbe itself.

George Lakhovsky condensed his thoughts into the following triple principle.

1. Life is born from radiation.
2. Life is maintained by radiation.
3. Life is terminated by unbalanced oscillation.

He created a small simple apparatus of a polymetal spiral thread perfectly insulated but with an open circuit and fashioned in the shape of necklaces, bracelets, belts, garters etc. All are capable of acting as a perfect oscillating circuit under the influence of the cosmic wave, the electromagnetic wave of life, and to act as resonance (as condensers, transformers, amplifiers) upon the cellular oscillation.

The cellular oscillation rebounds tonified and revitalized and can then overcome the endemic pathogenic elements.

However, the beneficial effect of the oscillating circuits do not manifest themselves with the same rapidity with everyone that wears them and in certain cases can be very slow. In his work on matter George Lakhovsky has analyzed the cause of this slowing effect.

It is well known that there are 92 simple elements and each

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simple element is composed of a certain number of atoms such as the iron molecule (Fe) which contains 26 atoms, Nickel (Ni) has 28, Copper (Cu) 29, Zinc (Zn) 30, Silver (Ag) 47, Gold (Au) 79, Tin (Sn) 50.

Each substance emits a specific radiation which is related to the number of atoms of the molecule containing this element and is characterized by the waves of the spectral radiation. According to this principle each atom, electron, positron or each matter entity, identifies with a condensed radiation such as Fe with its 26 atoms per molecule which emits a radiation corresponding to these 26 atoms.

One can therefore admit with Lakhovsky that the law of nature is that each substance in the universe is a product of materialization by radiation. It is the same for the stars as it is for the atoms or electrons. Furthermore, we are forced to admit that all minerals which comprise our organism are also the products of materialization by radiation.

If an organism happens to lose certain of its essential substances because of demineralization, it can lead to oscillary imbalance of cells with more or less grave consequences.

The oscillary circuits presented in the form of bracelets, necklaces, or belts have the purpose of recreating cellular equilibrium.

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Here you have to take into consideration the nature of the soil on which you usually live which can either activate the effect of the circuitry or slow it down considerably. For instance, the conductive soils like (plastic clay, hard clay, or chalk) activate the effect of the circuit, while an insulating soil such as (granite, sand, sandstone, etc.,) lowers it. It is for this reason that the nature of each soil as it materializes in our tissues and minerals which we need in different proportions sometimes in excess, sometimes in deficiency results in unequilibrium.

George Lakhovsky thought that by creating circuits with conductors containing the metals of all the families he would succeed in producing a uniform materialization of all the minerals missing in the organism. Therefore, the use of the oscillating circuit of a polymetal conductor composed of numerous elements which by specific radiations and their harmonics cover the gammet of the spectrum of radiation.

It is necessary to add that the principle that we have just espoused applied differently to the animal and vegetable world. Already proved in clinics since 1923 it can be used for yourself and your family without danger.

Publications of Proof:

April 4, 1927	Tome	184	Page 907
April 11, 1928	"	"	" 1019
Feb. 25, 1922	"	"	" 657/659
April 15, 1929	"	"	" 1069/1071
March 16, 1931	"	"	" 1048

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The problem was resolved without changing the effect of the generator in 1964. It no longer affects T.V. operation.

Model # 2:

Voltage 110/125 Volts A.C.
220/250

Length of wave produced	Fundamental 2-13 meter Harmonics 2-45 Meter
Power	0.05 watts
Box Container	Ventilated Metal, silver or black
Dimensions	150 mm x 100 mm
Height	60 mm
Weight	827 Gms.
Utilization	New electromechanical branching simplified and total security or safety for that unit. Built to function by 2 voltages

It takes sixty seconds for the instrument to warm up. Press the black button and when the red light goes on the instrument is ready to start. Put the antenna around the neck or any member of the body or flat over any part of the body. Make sure the antenna is far away from any metallic body.

Treatment:

1 st week	10/min per day
2 nd week	10/min every other day
3 rd week	10/min twice per week for maintenance and prevention
during full moon	10/min per day and then start the maintenance cycle

Professor Milliken states that "cosmic rays" is the name given to highly penetrating radiation traveling through the earth's atmosphere and emanating from outer space. This radiation is much more penetrating than X-Rays and is correspondingly shorter in wave length. Cosmic rays are of the nature of electromagnetic radiations similar to light but of extremely short wave lengths. They may be the result of aggregations of hydrogen atoms into helium, a process constantly going on in the universe.

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He estimated that the total radiant energy in the universe existing in the form of cosmic rays is from 30 to 300 times greater than that existing in all other forms of radiant energy combined.

Sir James Jeans wrote that "It must break up millions of atoms in each of our bodies every second and we do not know what its physiological effect may be".

The consensus of opinion among astrophysicists favours the view that cosmic rays are high-speed charged particles (electrons, protons, positrons, α -particles, etc.) associated with some kind of radiation of extremely high frequency.

THEORY OF CAUSE OF CANCER:

The essential cause of cancer formations is to be sought in the oscillatory disequilibrium of body cells. The problem of attempting to establish the equilibrium of all the cells comprising the human body would appear to be insoluble. Our bodies contain approximately two hundred quintillion cells and in this fabulous number there are hardly two cells vibrating with the same frequency, this being partly due to the incessant activity taking place within the cells, and partly to the specific characteristics of different tissues, not to mention many other factors. Moreover, from a biological point of view, it would be impossible to find at any given time two individual cells exactly alike in every respect. Every cell of every individual

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tissue of any particular species is characterized by its own oscillation. In order to produce artificially, an oscillatory shock in disequibrated cells, it would be necessary to generate as many wave lengths as there are different cells in any given body. The problem would thus seem insoluble. With remarkable insight Lakhovsky evolved a solution. He designed a new type of radioelectrical apparatus, his famous Multiple Wave Oscillator, generating a field in which every cell could find its own frequency and vibrate in resonance.

A certain number of cancer cases had been definitely cured, and that a marked improvement is the general condition of all treated patients has frequently been observed.

CANCER IN RELATION TO SOIL:

In cancerous patients a certain degree of oscillatory disequilibrium in the cells must occur and this would account for the abnormal development characteristic of neoplastic tissues. Among possible causes the role of external radiations of all kinds capable of affecting the human organism, more especially cosmic radiations which, in striking solid bodies, gives rise to secondary radiations of longer wave lengths and variable intensity.

In studying the geographical distribution of cancer from official statistics, Lakhovsky was able to establish the fact that the density of cancer incidence was closely connected with the geological nature of the soil. The cosmic radiation field at the earth's surface is modified by the nature of the soil

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according as the latter is an insulator or conductor of electricity.

Soils that are especially permeable to rays, that is to say "dielectric", such as sand, sandstone, gravel, etc., absorb external radiations to a great depth without giving any reaction on the surface, while soils that are impermeable to rays, that is to say, conductors of electricity, such as clay, marl, (calcareous earth mixed with clay and sand), alluvial deposits, carboniferous strata, mineral ores, etc., are resistant to penetration by rays and give rise to secondary radiations which modify the field of external radiations. It is those impermeable soils which are associated with the highest incidence of cancer.

Dr. Alfred Haviland of England in 1875 did a study in which he concluded that the districts which had the highest mortality from cancer were characterized geologically by clays such as the London clay of the Eocene, the Boulder clay of the Pleistocene, or Glacial Period and the brick earths and alluvial deposits of recent origin. There is low incidence of cancer mortality in localities characterized by limestone and high incidence where clays and floods are associated. Those who have reason to dread cancer should live in high dry districts characterized by either limestone or chalk formations.

People tainted with alcoholism, tuberculosis, or syphilis, not to mention the toxic effects of excessive smoking and adulterated foods, constitute a degenerated stock whose cellular oscillations are not in a state of equilibrium. This oscillatory

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anarchy in the human organism has far-reaching repercussions in every organ and tissue, ultimately causing under certain conditions, the fatal proliferation of cells characteristic of cancer.

The late Dr. George Crile, the eminent American surgeon, wrote "It is clear that radiation produces the electric current which operates adaptively the organism as a whole, producing memory, reason, imagination, emotion, the special senses, secretions, muscular action, the response to infection, normal growth, and the growth of benign tumors and cancers, all of which are governed adaptively by the electric charges that are generated by the short wave ionizing radiation in protoplasm." He held that living cells are electric cells functioning as a system of generators, inductance lines and insulators and that the role played by radiation and electricity in living processes is no more mysterious in man than in batteries and dynamos.

All physiological functions are dependent upon the specific radiant properties of the visible spectrum. Ultra-violet radiation has the greatest power of generating electricity and of ionizing atoms essential for building up organic compounds which constitute cellular protoplasm. The control of the special senses is affected through environmental energy, mainly solar radiation. The entire energy system of living beings is controlled by radiant and electrical forces in the environment. Thus it becomes evident that the "spectrum of the living" reflects innumerable environmental changes and is itself changing continually in consciousness, in sleep, in emotion and in every adaptic

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reaction. The cosmic harmony of vibrations has given birth to the concept of "Universion" which Lakhovsky defined as the synthesis of the infinitely great and infinitely small. Universion consists of the entire plexus of cosmic radiations emanating from interstellar space. Its nature is indestructible and all pervading. It is the ultimate reservoir of all matter undergoing phases of destruction and reconstruction.

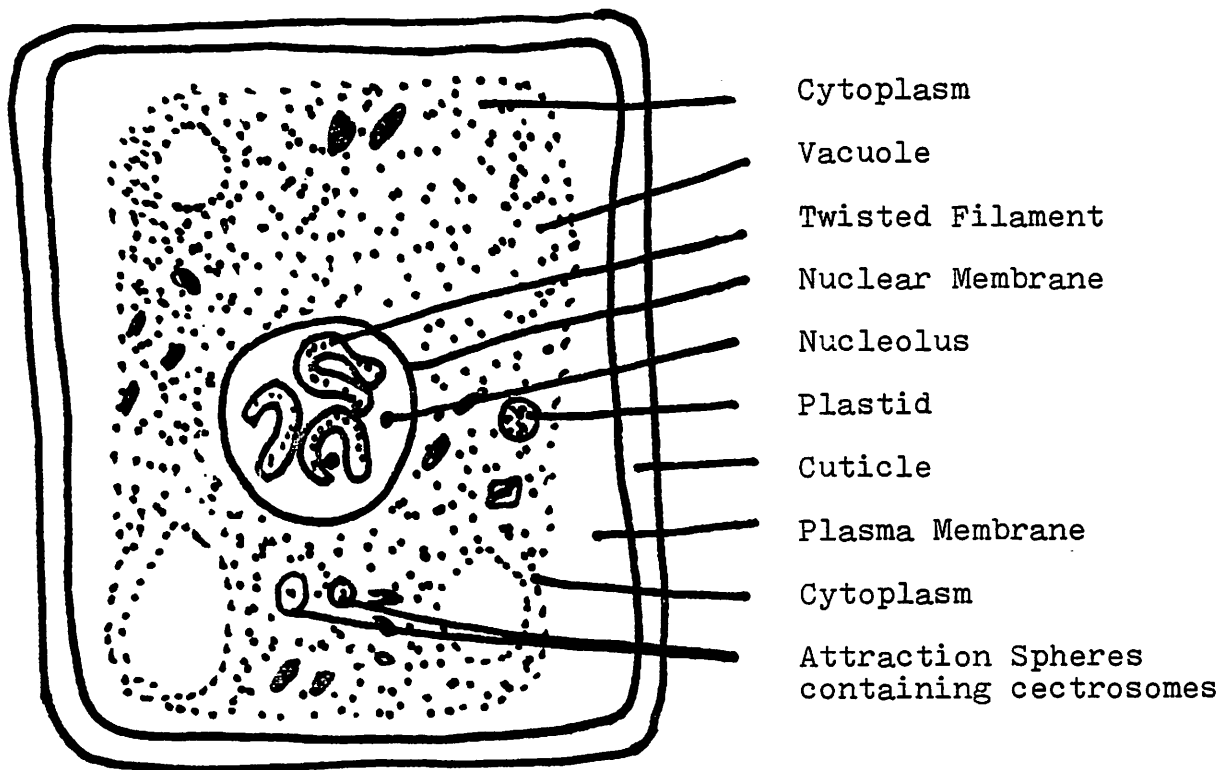
The practical applications of radio-electric theories has had the most remarkable results. Cancerous plants have been cured, human tissues regenerated and sick animals healed.

In Dr. Goodheart's Applied Kinesiology 1982 Workshop Procedure Manual page 7, he states, "It is just as if when the brain operates it sets up resonance factors in the skull." I think that the oscillating circuit of Lakhovsky applies in some way to the mechanism of transmission of information from all parts of the body to the brain. The different frequencies of oscillating elements and how similar frequencies can harmonize and resonate may offer another possible piece to the puzzle.

I believe that further research along these lines will eventually unite presently diverse fields of investigation. Knowledge is a perpetual journey. Let us hope that future travelers will try to make the trip together.

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CELL COMPOSITION



SPARK GAP

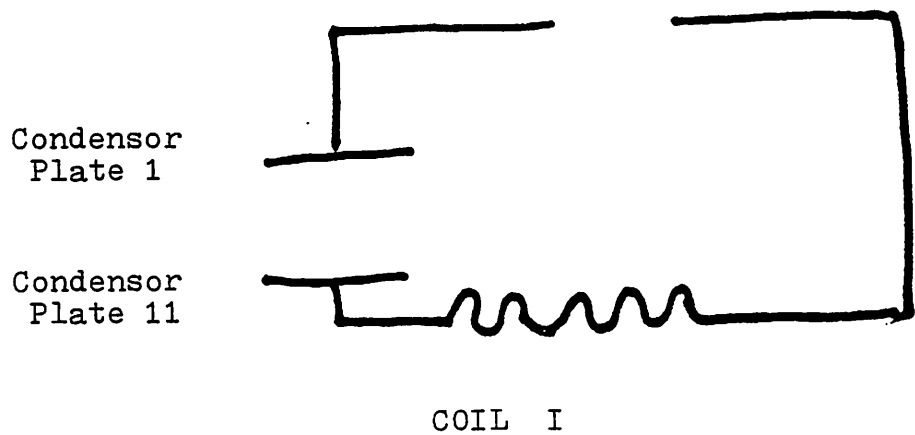


Diagram of Oscillating Circuit

FIG. (1)

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CRANIAL AND SACRAL RESPIRATORY FAULTS

By

George W. Milne, D.C., D.T.

ABSTRACT

This paper describes a procedural order for determining and correcting Cranial and Sacral Respiratory Faults, using the Cerebellar Challenge as the method of their detection. The purpose is to present a smooth and orderly approach for determining and correcting Cranial and Sacral Respiratory Faults.

The detection, analysis, and correction of Cranial and Sacral Respiratory Faults often appears complicated and confusing. The use of the Cerebellar Challenge ("Double Challenge") in determining Faults:

1. Eliminates the need for testing the patient in different respiratory patterns, which can be awkward and confusing to both patient and doctor.
2. Eliminates the need for Therapy Localization which requires placing and maintaining the patient's hands in the correct position.
3. Eliminates the need for correlating the positive Therapy Localization with the appropriate respiratory pattern.
(Phase of Respiration)
4. Eliminates the possibility of confusing Therapy Localization of Faults with active Neurovascular Reflexes, active Stress Receptors and skin lesions, etc.
5. Mostly eliminates the need for using techniques to show hidden Faults, such as E.I.D., Pinch, Scratch, Intermittent Therapy Localization, Left-Right Brain Activity, Temporal Tap, etc.
6. Simplifies the testing procedure by eliminating all the above.
7. Simplifies the testing procedure for determining the mechanism of correction because the correction is made in the same

direction as the Positive Challenge. (with the exception of the Universal Cranial and Universal Sacral Fault where the correction is made opposite to the direction of the Positive Challenge)

8. Simplifies the correlation of the respiratory pattern used to correct the Faults because the direction of the Positive Challenge tells you the type of Fault and in most cases this tells you the related Phase of Respiration. If it does not, the Phase of Respiration is simply the phase which abolishes the Positive Challenge.
9. Reduces the time involved in analysing and correcting Cranial and Sacral Respiratory Faults.
10. Avoids problems which may develop when the challenge is not used to verify a Cranial Fault. To quote page eight of the Applied Kinesiology Flow Chart, "Precautionary on all Cranial-Sacral Pelvic Treatments. Always challenge prior to treatment to determine if the Cranial Fault is in fact present, and how correction is to be made. This is mandatory to avoid reactions and iatrogenic problems."

A suggested procedural order for determining and correcting Cranial and Sacral Respiratory Faults follows the last paragraph. Using the Cerebellar challenge, challenge all possible Cranial Faults in the order given.

Note the positive challenges.

Make the corrections in the same order.

Before correcting each Fault, rechallenge making sure it is still present.

Note the number of corrections required compared to the initial number of positive challenges.

Repeat the same procedure for the Sacral Faults.

This procedural order appears to be efficient and effective in determining and correcting Cranial Faults. When using this order of correction, other Faults in the sequence are often corrected simultaneously. In fact, according to Dr. David Walther eighty percent of Cranial Faults present may be simultaneously corrected with the inspiration and expiration assist when accurate vectors are used. (the vector of correction being determined by the greatest change in the indicator muscle when the Fault is challenged.)

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<u>CRANIAL FAULT</u>	<u>CHALLENGE</u>	<u>RESPIRATORY PATTERN</u>
1. Inspiration Assist	Push Mastoid P To A (Both, Then Left & Right)	Inspiration
2. Expiration Assist	Push Mastoid A To P (Both, Then Left & Right)	Expiration
3. Sphenobasilar Inspiration Assist	On Same Side, Simulta- neously, Push Mastoid P To A And Hard Palate Superior	Deep Inspiration
4. Sphenobasilar Expiration Assist	On Same Side, Simulta- neously Push Mastoid A To P And Pull Central Incisor Anterior & Superior	Deep Expiration
5. Glabella	Simultaneously Push Glabella & E.O.P. Together	Nasal Inspiration
6. Sphenoidal Wobble	Push Frontal Bone (Medial to Orbit) Toward Opposite Pterion	Phase Which Abolishes Challenge
7. Universal	Rotate Occipital Bone Clockwise and Counterclock- wise Or Simultaneously Push One Mastoid Superior & Other Inferior	Correct Opposite To Direction of Challenge With Phase Which Abolishes Challenge
8. Atlas-Occiput Countertorque	On Same Side Simulta- neously Push Mastoid P To A & Atlas T.V.P. A To P And Vice Versa	Oral Inspiration
9. Temporal Bulge (Banana Head)	Push In Two Directions Simultaneously To Increase Temporal Bulge	One Half Inspiration
10. Parietal Descent	Lift Temporal Border Of Parietal Bone	One Half Expiration
11. Internal Frontal	Push Zygomatic Arch Nasally	
12. External Frontal	Pull Down On Central Incisors	
13. Heath Cranial	Push Opposite Frontal & Occipital Bones Together	Phase Which Abolishes Challenge
14. Sutures		
Cruciate	Separate And Approximate	Phase Which Abolishes
Lambdoidal	With Different Vectors	Challenge
Squamosal	"	"
Zygomatic	"	"
Coronal	"	"
15. Mandible	Separate And Approximate With Different Vectors	Phase Which Abolishes Challenge

<u>SACRAL FAULT</u>	<u>CHALLENGE</u>	<u>RESPIRATORY PATTERN</u>
1. Sacral Inspiration Assist	Push Sacral Apex P To A (Both, Then Left & Right)	Inspiration
2. Sacral Expiration Assist	Lift Sacral Apex A To P (Both, Then Left & Right)	Expiration
3. Sacrum Coccyx Inspiration Assist	Simultaneously Push On Apex of Sacrum & Lift Tip of Coccyx	Deep Inspiration
4. Sacrum Coccyx Expiration Assist	Simultaneously Push On Base of Sacrum & Tip Of Coccyx	Deep Expiration
7. Category 1	Simultaneously Push On P.S.I.S. And Opposite Ischial Tuberosity	
7. Universal Pelvis	Simultaneously Push One P.S.I.S. Superior And Other Inferior	Correct Opposite To Direction Of Challenge With Phase Which Abolishes Challenge
8. Sacral Wobble	Simultaneously Pull A.S.I.S. Posterior & Push Opposite Sacral Apex Anterior	Inspiration
	Simultaneously Push One Side Of Sacral Base Anterior & Lift Opposite Sacral Apex Posterior	Expiration

NOTE: Sacral Faults are numbered to match their corresponding Cranial Faults.

FIXATIONS

By

George W. Milne, D.C., D.T.

ABSTRACT

This paper describes the two-step challenge as a method of determining how to adjust fixations. The purpose is to present a more simplified approach to adjusting fixations without the use of subjective motion palpation.

The two handed, two-step thrust described by Dr. David Walther (Applied Kinesiology Volume One page 75) for unlocking fixations, and my desire not to use subjective motion palpation to analyse fixations, led to the idea of using a two-step challenge to determine how to unlock a fixation.

To locate the level of a spinal fixation without subjective motion palpation, one of the two methods may be used.

1. Challenge adjacent vertebrae on opposite sides at the same time (with each contact on the lamina, transverse process or mammillary process depending upon the spinal level). See diagram A as an example of the contacts that may be used for a simultaneous, two handed challenge.
2. Therapy localize using a double contact of thumb and forefinger on adjacent vertebrae on opposite sides as described in a paper by D. James Durlacher and presented at the annual summer meeting of I.C.A.K. in Dearborn, Michigan, May 1982. An example of the contacts for this therapy localization is the same as diagram A.

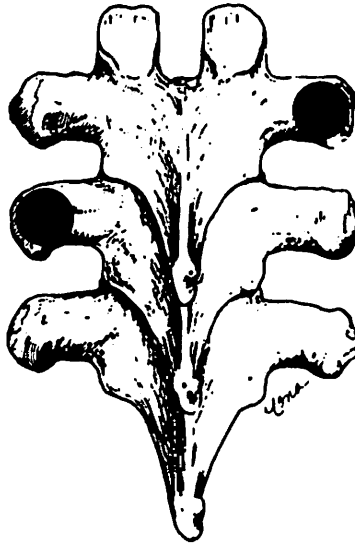
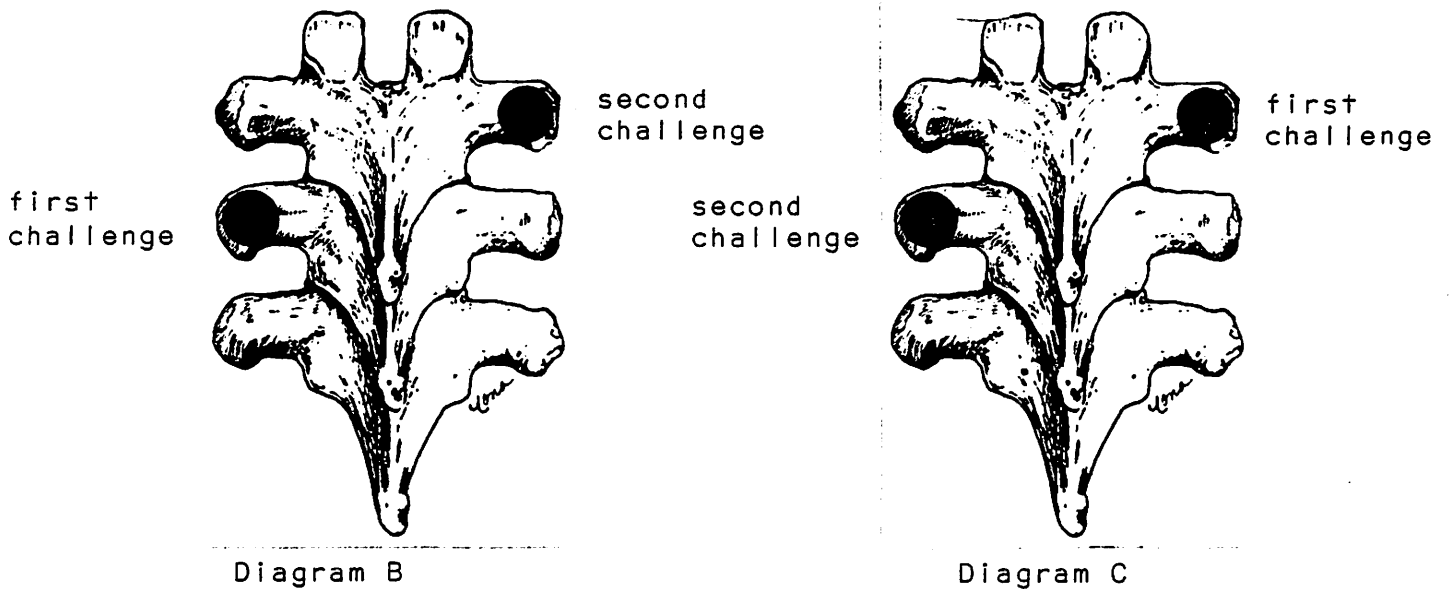


Diagram A

Example of contacts for simultaneous challenge
or therapy localization used to locate fixation

Once the level of fixation is determined, the two-step challenge can then be used to determine how to adjust the fixation. If opposite sides of two adjacent vertebrae are challenged in a one-two sequence in two possible directions, one direction will result in a positive challenge. The direction of one sequence will be in an upward direction, with a challenge to the bottom vertebrae on one side, immediately followed by a challenge to the adjacent top vertebra on the other side (see diagram B). Using the same contacts, the other possible direction will be in a downward direction, simply reversing the order of the two step challenge.

-3-



Having established the contacts for the fixation from Diagram A, Diagram B and C, show the two possible two-step challenges for those contacts.

The fixation is then adjusted in a sequence identical to the two-step positive challenge. If three or more vertebrae are involved in a fixation each adjacent pair in the complex is evaluated with this two-step challenge. The direction of the positive challenge of each adjacent pair will be identical within a fixation.

If a positive two-step challenge occurs in an upward direction between the opposite sides of each adjacent pair, (when three or more vertebrae are involved in a fixation), then a two-step adjustment given in an identical sequence to the positive challenge to the top two adjacent vertebrae, appears to unlock the entire complex.

If a positive two-step challenge occurs in a downward direction between the opposite sides of each adjacent pair, (when three or more vertebrae are involved in a fixation,) then a two-step adjustment given in an identical sequence to the positive challenge to the bottom two adjacent vertebrae, appears to unlock the entire complex.

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PELVIC GLABELLA

by

Evan Mladenoff B.Sc., D.C., D.T.

Abstract: The kinesiological rationale for the existence of a pelvic glabella fault is presented as support for the clinical findings of its existence. A modus operandum is presented to diagnose the lesion and a corrective procedure is given.

We are all fortunate to have the opportunity to work with a living laboratory - man. It is our responsibility to approach our fellow man in a rational manner - to 'see with eyes that see'. Unfortunately as chiropractors, we Applied Kinesiologists occasionally continue to carry the reputation and the approach of being a 'Back Doctor'. In particular, we continually observe the patient as our 6th sense from posterior to anterior; our major manipulative thrust regarding pelvic lesions continues to be a 'back' perspective. In general, very little attention is given to the symphysis pubis region. It is this region that a portion of this paper will direct its attention to.

As a practitioner I have been able to successfully correct many glabella cranial faults. Recently I went through a series of patients where my glabella corrective procedures were not being maintained. In an effort to determine why, I carefully investigated the cranium for other possible faults. In many of these patients this proved to be the case (ie. other cranial faults existed). However, there still remained those glabella

faults that continually reoccurred regardless of other cranial fault procedues.

We are all familiar that pelvic lesions will produce Lovett Brother cranial lesions and, cranial lesions may exist without the corresponding pelvic lesions. The thought occurred to me that perhaps there was a Lovett Brother of the cranial glabella - a pelvic glabella lesion. What follows is a physiological rationale for the presence of such a lesion and a procedure to diagnose and correct it.

Cranial Glabella

The glabella cranial fault as reported by Walther (1) has the following characteristics:

Therapy Localization: 1 hand on glabella, 1 hand on EOP.

Challenge: pressure on glabella and coincident pressure on EOP with both hands pressing towards each other. A positive challenge is abolished with nasal or oral respiration. Goodheart (2) has reported and confirmed that nasal inspiration, abolishing a positive challenge is indicative of a glabellar fault; and oral inspiration abolishing a positive challenge indicates a C0-C1 countertorque fault is present and must be corrected first.

Correction: pressure on glabella and EOP towards each other with 4-5 pounds pressure coincidednt with nasal inspiration.

Correfation: frequently high or low blood pressure.

The normal motion of the occiput during inspiration is flexion and sacral apex moves anterior, sacral base moves posterior (see diagram #1). In the correction of the glabella fault we assist the motion of the occipital bone with inspiration. I reasoned that if we are also applying pressure at the glabella, then perhaps something could go wrong at the symphysis pubis on a respiratory basis.

During inspiration as the sacral apex moves anterior and superior the ASIS moves laterally while the PSIS move medially (3). The pivot point for this action is the symphysis pubis, which moves posterior and inferior with inspiration, the opposite being true for expiration. (see diagram #2)

This respiratory component of the iliac-innominate complex is associated with the iliac fixation-splenius capitis unilateral weakness and the piriformis as indicator for the iliac fixation in terms of respiration. (4)

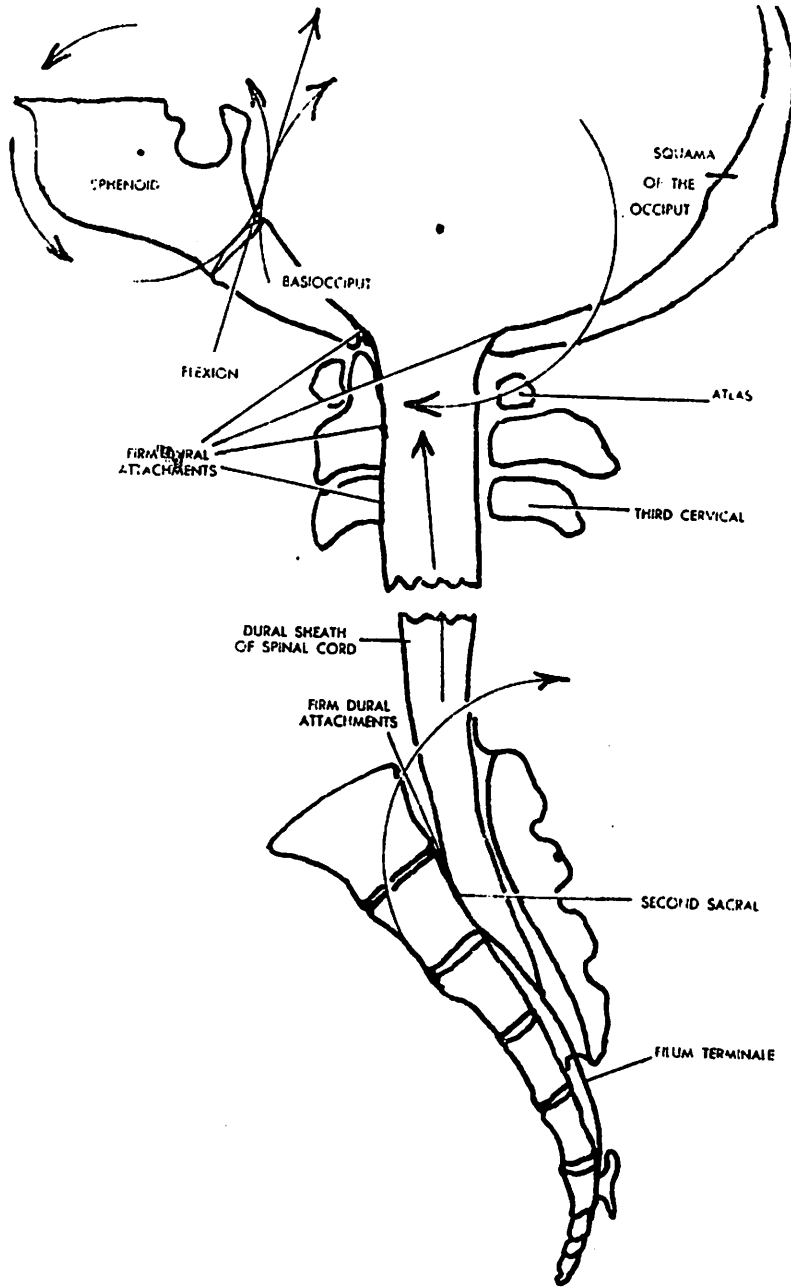
However we very rarely consider the respiratory motion that occurs at the symphysis pubis! We should now be able to visualize a parallel relationship of the respiratory motion of the glabella fault versus the sacrum-symphysis pubis action.

When a patient was found to have a recurrent cranial glabella fault and closer cranial corrections did not abolish the glabella fault, the following pelvic lesions were corrected and/or ruled out:

1. sacral inspiration assist.
2. TL to sacrum was negative.
3. TL to symphysis pubis was negative.

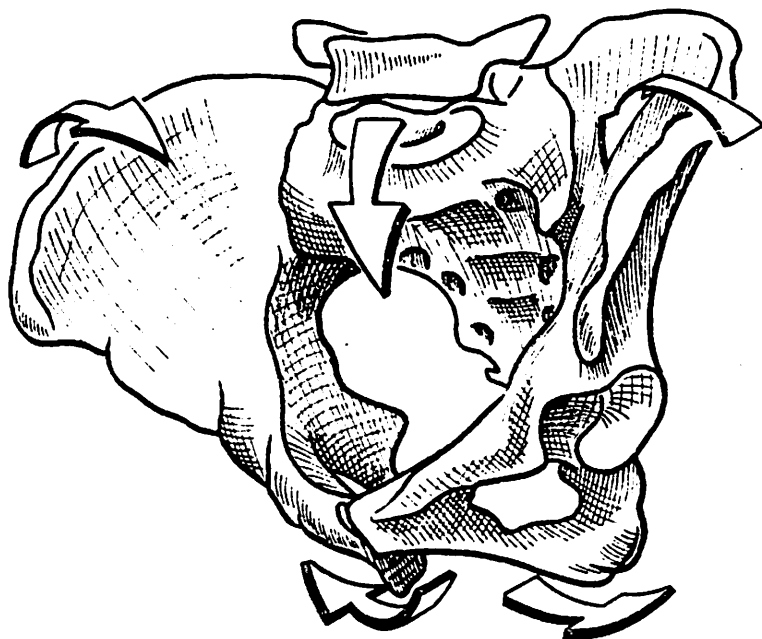
Diagram #1

THE PRIMARY RESPIRATORY MECHANISM



THE CRANIOSACRAL MECHANISM IN FLEXION.

Diagram #2



With all of the above criteria met or ruled out, the pelvic glabellar lesion would then be evaluated and located as follows:

1. TL to sacrum negative.
2. TL to symphysis pubis negative.
3. Simultaneous TL to the sacrum and symphysis pubis is positive.
4. Positive TL in step #3 is abolished by nasal inspiration
5. To correct the pelvic glabella lesion, place the patient in a side lying position. Doctor positions himself behind the patient, contact the sacral apex and the superior rim of the symphysis pubis. As the patient performs nasal inspiration - push the sacral apex anterior and superior while coincidentally pushing the symphysis pubis posterior and inferior. This is a very difficult correction in that it requires a lot of power. During the correction the forearms must be parallel to the floor (I will demonstrate this at our ICAK meeting). If you are able to generate enough power then it will take you 6 - 8 pumps to complete the correction.

Having found this 'new' lesion on those patients with the recurrent cranial glabella fault was exciting. I continued to monitor patients and repeatedly found that a recurrent cranial glabella fault would have a corresponding pelvic glabella fault. After correcting the pelvic and cranial glabellar faults, the cranial glabella fault didnot occur.

With the excitement and enthusiasm of 'discovering' something, I **failed to measure anything else.** We are all familiar that a

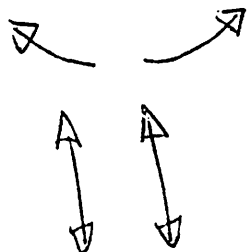
cranial glabella is associated with high or low blood pressure, at the time of writing this paper a BP analysis has begun but insufficient collection of data at this time does not indicate a positive or negative correlation to blood pressure involvement.

Conclusions

It appears that a pelvic glabella lesion does exist. However, this lesion has only been found when a cranial glabella lesion reoccurs. This is contrary to the clinical evidence that cranial faults may exist without pelvic faults and when there's a pelvic fault there is always a cranial fault.

Goodheart has described the decreasing dimensions of the abdomen by strengthening the rhomboids, McQueeney (5) has also reported a similar relationship between the suprahyoid muscles and the pelvic diaphragm. This may also be a mechanism of displacement that is transmitted to other parts of the body, at this point it is pure speculation on the part of the author to attempt an explanation of what he has found. The diagram presented below is an attempt to explain how the glabella cranial fault can produce a pelvic glabella fault. The arrows indicate the motion that occurs to create the lesion.

Cranial
Glabella
Lesion



Pelvic
Glabella
Lesion

production of an expansile force that will produce a chain reaction that ultimately affects CSF, CSF pressure and blood pressure

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7TH GAIT RECEPTOR "PANKU"

Dr. Ineon Moon, D.N.

ABSTRACT: There is a gait receptor besides the six points already known.

INTRODUCTION: Kinematic⁽¹⁾ gait testing shows the "failure" of correcting gait receptor faults if we correct only six (6) gait receptor points.

After we found the 7th point of gait receptor, I referred by Chinese text found the point is non-meridian point named "PANKU"⁽²⁾ which is located between GB41 and ST43. (I.e., between the 3rd and 4th metatarsal.)

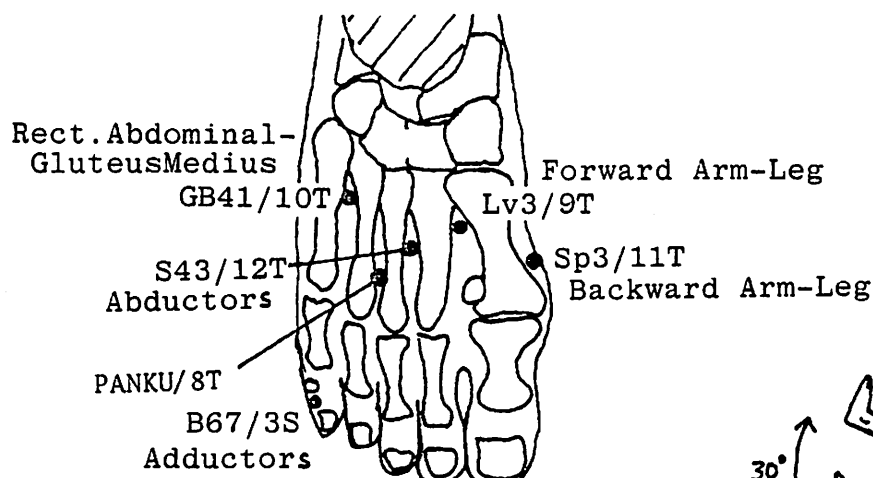


Fig. 1

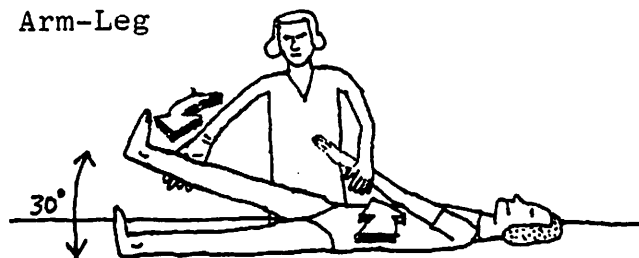


Fig. 2

- TESTING:
- (1) Muscle Testing Position - Arm and contralateral leg move forward straight 30° from the table.
 - (2) Muscle Testing Direction - Straight medial simultaneously.
 - (3) T.L. is possible.

CONCLUSION: Identifying "PANKU" point as a gait receptor helps us to understand gait problems better.

BACKWARD GAIT RECEPTOR

By Ineon Moon, DN, C.Ac.

ABSTRACT: Backward walking is examined by kinematic gait testing and receptors are identified and treated. Static muscle testings are available with odd T.L. T.L. is available with even T.L.

INTRODUCTION: In the Spring of 1979, Dr. Earl Column showed gait receptor test with a stress over the gait receptor points combined with crosserowl and phase of respiration. When he challenged gait receptor stress the patients had receptor fault problem with both feet. He corrected both feet with respiration and turning head in a certain direction.⁽¹⁾

Fixing the receptor fault on one foot corrects all the gait muscle testing problems, but the other foot still has the problem challenged by stress. Now what did we fix when we corrected the gait receptor on the other foot? Later on, I applied even T.L. on the other foot, then it showed S.I.M. weak which means that these points are excess.⁽²⁾ This result is very consistent. If patient has gait receptor fault on one foot, then that leg and contra-lateral arm test weak simultaneously and odd T.L. on gait receptor points make S.I.M. weak, which means the receptor points are deficient.

The exact same points on the other foot T.L.'s with even T.L. which means the points are excess. By energy conservation law,⁽³⁾ it makes perfect sense. Then our next question is, what does the excess do to the gait and if not to the gait, then to what? After I tried many things, I could not figure it out. Finally using kinematic gait testing, I found it was related with backward gait.

In other words, if a patient has forward gait receptor faults on one foot, then the patient will have backward gait receptor faults on the other foot that are located on the exact same corresponding point symmetrically. T.L. can be done on a contra-lateral hand by umbilical symmetry rule. ⁽⁴⁾

TESTING PROCEDURE: Kinematic Testing

1. Test S.I.M.
2. Have patient walk backwards.
3. Test S.I.M.

If weak, then the patient has backward gait receptor faults.

T.L. with Toe & Finger.

1. Cover one foot with the other foot.
2. T.L. the gait receptor points on contra-lateral hand with finger of other hand.
3. Test S.I.M (e.g., neck flexor).

This is an Even T.L. method. ⁽²⁾

ANOTHER EVEN T.I. METHOD:

1. Place two lead pieces over a gait receptor point.
2. Test S.I.M.

TREATING METHODS: Treat backward gait receptor point with heavy manipulation, demagnetize ⁽⁵⁾, or treat with circular motion of the finger tips. ⁽⁶⁾

Treatment can be done as excess acupuncture point.

CONCLUSION: When we find forward gait receptor faults on one foot, we will find backward gait receptor faults on the other foot. Forward gait receptor

points are deficient and backward gait receptors are excess.

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ENERGY CONSERVATION LAW

By In E Moon, D.N., C.A.

ABSTRACT: In this paper, we will examine and discuss the law of science which is universal with no exception, the LAW of ENERGY CONSERVATION, as one of major principles in Applied Kinesiology practice.

INTRODUCTION: Mathematics and physics are used to prove the scientific validity of natural sciences and social sciences as well. In fact, physics is the present day equivalent of what used to be called "natural philosophy" from which most of our modern sciences arose. Students of many fields find themselves studying physics because of the basic role it plays in all phenomena. Let us discuss the conservation of energy in physics to understand a clear concept of it, then discuss the application of the law in the science of applied kinesiology.

It is important to realize that in science today, we have no knowledge of what exactly energy is. It is an impossible job to define energy in physics, but it is interesting to note that the energy conservation is universal in any of the sciences. There is no known exception to this law. It is exact as far as we know. It states that there is a certain quantity which we call energy that does not change with the manifold change which nature undergoes. This is a most abstract idea because it is a mathematical principle. It also says that there is a numerical quantity that does not change when something happens to it. It is not a description of a mechanism or anything conscious, it is just a strange effect that we can calculate some numbers and when we are finished watching nature going through her tricks and we calculate the number again, it remains the same.

In order to verify the conservation of energy, we must be very careful that we have not put anything in or taken anything out. Secondly, energy comes in a great variety of different forms such as; gravitational energy, heat energy, potential energy, kinetic energy, elastic energy, electrical energy, chemical energy, radiant energy, nuclear energy, biological energy, mass energy, psychic energy and etc., etc., etc.....

We do not have a picture that energy comes in little blocks of definite amounts. It is not that way. However, there are formulars for calculating some numerical quantities of energy that we can add them all together and they will be consistant in giving us the same number before and after changes. It is abstract thing in that it does not tell us the mechanism or reasons for the various formulars. The conservation of ebergy can be understood only if we have the conversion formular for all of its forms.

In A.K., we have had much experience that the muscle strength change with various therapy identification methods. In order to make a muscle strong, some energy must be supplied from somewhere because the energy conservation law does not allow for the creation or destruction of energy, but only allows changes in its form and/ or place. Through those changes, the energy manifested in given muscle transfers and/ or transforms. There are two baic categories of changes in A.K. practice, they are AUTOLYSIS AND EXTRALYSIS.

Definition I : The phenomena in which energy transforms and/
AUTOLYSIS or transfers within the body.

Definition II : The phenomena in which the energy transforms
EXTRALYSIS and/ or transfers between the body and out-
side source and/ or sink.

List of examples for autolysis and extralalysis are in the appendix.

CONCLUSION: A.K. can not be an exception to the energy conservation law. If any new discoveries or new technique violate the energy conservation law, then they can not be right. The concept of energy conservation will lead us inevitably to find a scientific basis for our discoveries and techniques which are new or old.

APPENDIX: Examples of autolysis—most T.L. activities, nutrition holding on hand, looking at different colors, hearing different musical tones, reactive muscles, acupuncture needles, lead square on an acupuncture point, and etc.

Examples of extralysis—nutrient on tongue, electrode on the acupuncture point, moxibustion, laser beam on acupuncture point, touched by healing hand on acupuncture points, and etc.

GAIT WITH WEIGHTED LIMBS

By Dr. Ineon Moon, DN, C.Ac.

ABSTRACT: Weight on a wrist or ankle will cause a disturbance of the gait mechanism. Kinetic gait testing (1) can determine a fault and correction. Counter weights on wrists to compensate for the weight of athlete's shoes can be measured accurately by using kinematic gait testing.

INTRODUCTION: Many patients have gait fault problems by means of kinematic gait testing, even though their static gait test shows negative. According to the Post Olympic Conference in 1980 of the American Orthopedic Association, Sports Medicine Division, an individual has a prosthetic device in one leg that works with a certain twist. Computer analysis shows that 8 pounds of weight on the opposite arm causes a much smoother gait. (2)

Gait mechanism can be understood as a function with which the human body tries to keep spherical symmetry (radial symmetry) in motion. (3) (4)

I found that any weight on wrist or ankle will cause kinematic gait fault when the weights are not radially symmetrical. For example, wearing a wrist watch on one wrist will cause a kinematic gait fault. In this test, the relativity principle (5) is very important to keep in mind, but this gait fault can be corrected by putting another wrist watch on the opposite ankle. (This will not solve the hopping gait fault, (6) though).

Finally, I tried a wrist watch (you can use any comparable weight) on all four limbs. The result was that all the gait faults (such as walking forward and backward, hopping, rotating, flexing and extending) had disappeared.

Changing little weight at a time on both wrists simultaneously helps the kinematic faults that are caused by the weight of shoes.

- TESTING AND TREATING PROCEDURES:
- (1) Test S.I.M.
 - (2) Have patient walk barefoot with no wrist watch or any weight on wrists or ankles.
 - (3) Test S.I.M. If it is weak, treat the 7 gait receptor faults ⁽⁷⁾ forward and backwards ⁽⁸⁾.
 - (4) Have patient hop.
 - (5) Test S.I.M. If it is weak, treat the hopping gait fault. ⁽⁹⁾
 - (6) Have patient flex and extend their whole body.
 - (7) Test S.I.M. If weak, test flex and extend gait. ⁽¹⁰⁾
 - (8) Test for all gait faults, including forward and backward, hopping, flex and extend, rotating gait. When every gait fault test is negative, then proceed to measure the counter-weight for shoes on the wrists.

- (9) Test S.I.M.
- (10) Have patient put shoes back on and test each gait fault. You will find many gait faults with shoes on, such as, walking forward and backwards, hopping, but rotating should not be any problem.
- (11) In order to correct this fault we should apply a counter-weight to each wrist. Then gradually increase or decrease the counterweights simultaneously, to find the exact optimum weight on each wrist for kinematic gait with weight on all four limbs. This is especially important for the athlete who uses ankle and wrist weights to improve muscle strength.

When person wears shoes for a long time, he or she will not show gait faults because the body has compensated already. In order to find this fault, we must test gait fault with barefeet first and then have patient put shoes on right before the next gait test. This satisfies the relativity law and cerebella response.

According to the relativity principle, every test must be done immediately before or after any change or challenge applied to the body for the comparison.

CONCLUSION: Kinematic gait testing is very effective and accurate to determine the proper counterweight on wrists to compensate the weight of shoes to improve athletic performance, especially running and hopping.

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HOPPING GAIT

By Ineon Moon, DN, C.Ac.

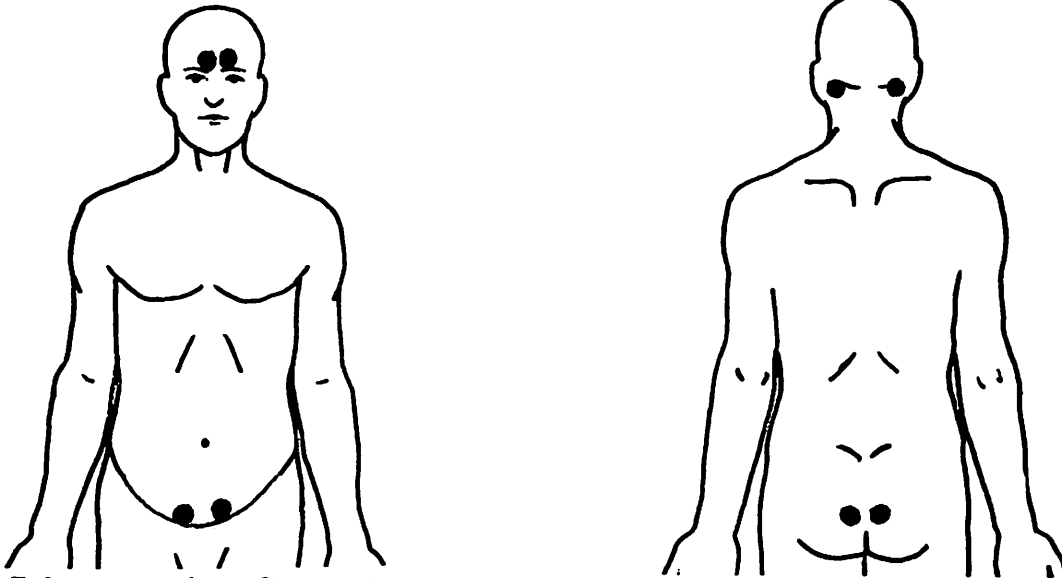
ABSTRACT: Hopping Gait receptor points are discussed with kinematic and static diagnosis and treatment methods.

INTRODUCTION: Hopping gait was discussed in other animals.⁽¹⁾ Hopping is not common human movement except in many sports such as long jump, tackle, high jump, gymnastics, etc. I attempted static and kinematic muscle testing for hopping in human movement.

TESTING METHODS:

1. Test position - Right arm and right leg stretched forward.
2. Direct force separating arm and leg. (I.e., Test hand muscle superior direction and simultaneously test leg muscle inferior direction.)
3. Direct force opposite direction of procedure #2.
4. Test left arm and left leg in the same manner of procedure #1, #2 and #3.
5. Test right hand and left leg in the same manner of procedure #1, #2 and #3.
6. Test left hand and right leg in the same manner of procedure #1, #2 and #3.

TREATMENT METHOD: Any weaknesses that happen simultaneously can be corrected by treating righting, labyrinth reflexes, cloaca reflexes.⁽²⁾



T.L. on each reflex point.

Hopping gait is not only a homo-lateral or ipsi-lateral muscle activity, but also flex and extend the trunk.

- TESTING METHOD:
7. Flex trunk
 8. Test S.I.M. immediately
 9. Extend trunk
 10. Test S.I.M. immediately

- T.L. on
1. Right GV26 Left GV26
 2. Right CV24 Left CV24 ⁽³⁾

- TREATING METHODS:
1. Heavy manipulation as we do N.L.
 2. Demagnetize the point as outlined in author's paper. ⁽⁴⁾
 3. Needle points and twist hard in both directions.
 4. Tap the points.

Kinematic hopping testing is also available.

1. Test S.I.M.
2. Have patient hop up and down
3. Test S.I.M. immediately before readjust or compensate the autolytic response. ⁽⁵⁾ ⁽⁶⁾

If S.I.M. is weak in Procedure #3, then the patient has a hopping gait problem.

CONCLUSION: Hopping and jumping are such complex movements that I am quite sure there are many more reflexes involved. In this paper, I have tried to demonstrate a few of these reflexes and their therapy points.

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KINEMATIC GAIT TESTING

By Ineon Moon, D.N., C.Ac.

ABSTRACT: A gait is a walking mechanism. It must be tested kinematically. Kinematic vs. static testing will be discussed in this paper.

INTRODUCTION: We have used the static testing methods of seven gait receptor faults on the examining tables in our office.⁽¹⁾⁽²⁾ Practically speaking, the gait mechanism acts while in motion. The gait is walking which is a moving state, not a static state. I became very interested in finding a method to reveal the kinematic state of gait condition. Here, I propose a method that I found and used for further investigation.

TESTING METHOD:

1. Test S.I.M.
2. Have patient walk
3. Test S.I.M. immediately

If S.I.M. is weak in Step #3, then the patient has a gait problem. Identifying which gait receptor is in trouble is usually done by testing muscles and Therapy Identification on gait receptor points.

NOTES FOR PROCEDURES:

Procedure #2) The patient wastes more energy with an inefficient gait mechanism than with correct gait. This extra energy should be supplied to

compensate for the inefficient gait mechanism. Apparently, there is no external energy source to supplement the need and as a result, the S.I.M. becomes weak by means of autolysis.⁽³⁾ In Procedure #2, have patient walk forward for forward gait test, walk backward for backward gait test⁽⁴⁾, hop for hopping gait test⁽⁵⁾, turn around in a circle for rotating gait test⁽⁶⁾ and flex and extend for the flex-extend gait test.⁽⁷⁾

Procedure #3) S.I.M. is tested before compensation against muscle's weakness due to autolysis.⁽³⁾⁽⁸⁾ The S.I.M. of Procedure #3 is tested and compared to the S.I.M. of Procedure #1 according to the relativity principle of A.K.⁽⁹⁾

CONCLUSION: This technique saves time for initial diagnosis and final checkup after treatments for gait receptor faults are done. Also, it is a more fundamental and functional test.

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LEAD SQUARE EFFECT AND MULTIJUNCTION THERAPY IDENTIFICATION

By Ineon Moon, D.N., C.Ac.

ABSTRACT: As we understand it, the lead square shields electromagnetic waves to and from any point. Lead square effect over any therapy points or over acupuncture needles has been explained with the shield effect of electromagnetic wave communications. This paper will introduce some interesting findings that cannot be explained by existing electromagnetic wave theory. As a result, one lead peice on an acupuncture point or any therapy point will work like a T.I. The shape of the lead does not change the response, but the number of pieces will change the pattern of response.

In 1977 I first learned of the Lead Square Effect from Dr. Colum, Dr. Morantz and Dr. Achilly. I was curious as to why putting a lead square over both ears will make all muscles strong while one lead square in one ear will make the muscles weak on that same side. So I tried putting two lead squares over the same ear and found that I got the same result as one square over each ear. Then I added one more square which made three pieces over one ear, this made muscles on that side weak. I continued to add layer after layer of lead squares and discovered that whenever there was an odd number of lead squares, the reaction was the same as single layer. However, bending a piece of lead to make two layers while the piece is still connected, worked like a single layer. There must be some electrical connection between thses plates or some mysterious energy conducted with this lead square. The theory which assumed that blocking or shielding

electromagnetic waves by lead square made muscles weak cannot explain the application of double layer lead squares over the ear making muscles strong again.

In 1978 and 1979 I discovered Multijunction T.L., rather Multijunction T.I. method. I experimented with the lead square effect over many different therapy points using Multijunction T.L. method. Time after time I found the lead square resonance to be exactly the same as T.L. This leads me to believe that the lead square effect is one of the Therapy Localization methods. Ceramic tiles respond the same way.

CONCLUSION: The lead square effect is very useful as a Therapy Identification method. This finding is very useful in clinical application, such as when a patient is unable to touch a certain point for a particular reason, pain, fat, etc., and when the surrogated test is not feasible. This method can eliminate possible errors that often occur in surrogated tests.

LIGAMENT RECOIL TECHNIQUE

By Ineon Moon, D.N., C.Ac.

Abstract: Restoring ligament recoil function improves the range of motion and muscle efficiency in human movements. The technique is very simple and the results last.

Introduction: In Beng Saltein's research regarding the fast and slow twitch fibers, athletes moved their fingers 24 times faster than they could possibly move them with their active muscles.⁽¹⁾ Using the elastic recoil power, the velocity becomes 24 times faster while the muscle retains the same composition. By simple formula of physics⁽²⁾,

$$\text{Kinetic Energy} = \frac{1}{2} \text{ Mass} \times (\text{Velocity})^2$$

Kinetic energy is 576 times more with the elastic recoil than with muscle only. This is almost 600 times! If an athlete uses only his muscle contraction, he will not run very far because he will use up 576 times more energy than necessary. It is easy to understand that a muscle becomes weak and painful from fatigue when the ligament recoil does not function due to reasons such as injuries, scars or other pathologies.

In a general sense, golgi tendon inhibits muscle contraction and spindle cell activity facilitates muscle contraction.⁽³⁾ We can easily understand what this means to elastic recoil activity. Golgi tendon activity facilitates elastic recoil, spindle cell activity inhibits elastic recoil because the more the muscle is stretched, the more elastic energy is stored in the elastic tissues.

(1)

A quote from G. Goodheart,⁽⁴⁾

" Under spindle reflexes there are stretch reflexes and then under that there are primary afferent responses, phasic and/or tonic, reciprocal activity and antagonistic synergist, secondary responses, supplementary facilitation of flexors, inhibition leading to co-contraction and joint stabilization and simple extensors, and here this allows better activity of the elastic fibers mentioned earlier."

If we have a technique or treatment method to restore elastic recoil function, then we will improve a great deal of muscle efficiency and reduce muscle fatigue in human movement. Here, I am presenting a technique which improves ligament recoil function of joints and is applicable throughout the entire body.

Technique and Procedure

Diagnosis: The testing range of motion can be done by visual or instrumental means. Here, I will use muscle testing which is very effective and accurate in revealing clinical and subclinical symptoms.

1. Test SIM
2. Move the joint maximum to one direction and hold it in that position with full stretch
3. Test SIM
4. Move the joint maximum to the other direction and hold it in that position with maximum stretch
5. Test SIM

If step #3 or #5 is weaker than #1, then the range of motion is limited to that

movement. This procedure satisfies the Relativity Principle.⁽⁵⁾

- Treatment:
1. Move joint in the maximum opposite direction of the direction which limits the patient's range of motion
 2. Manually stretch further and hold that position
 3. Ask patient to try to move to the other direction
 4. Quickly release (ligament recoil)
 5. Do this three times (Steps #1-#4)

Notes for treatment procedure:

Procedure #1 stores elastic energy by patient's normal muscle.

Procedure #2 increases elastic energy by the doctor.

Procedure #3 initiates and facilitates elastic recoil.

Procedure #4 activates ligament recoil into motion.

Conclusion: This technique improves the range of motion, increases muscle strength and efficiency of movement. It is extremely valuable to athletes and non-athletes, with or without injuries. It works for anyone, anywhere, anytime, if the procedure is done correctly⁽⁶⁾ as mentioned here. This technique is very simple and does not require special skills.

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MULTIJUNCTION THERAPY IDENTIFICATION

By Ineon Moon, D.N., C.Ac.

Abstract: Therapy Localization is one of the methods of THERAPY IDENTIFICATION. A grasp of topological concept is essential to understand the activity pattern of Multiple Therapy Identification and especially Multijunction and Multi-layer Therapy Localization, Multi-tapping, and Multi-challenge. Odd junction plays a different role from even junction in topology, as in Applied Kinesiology.

Introduction: Mathematics may seem unrelated to A.K. practice but in actuality it has always played an important role in everyday practice. The concepts of mathematics and its terminology have always been extremely useful in understanding and explaining many things scientifically. In this paper, we will adopt the concept of topology, which is just one branch of mathematics, ⁽¹⁾ to explain Multiple Therapy Identification. There is a certain rule in Multijunction T.I. All odd number of Multijunction T.I. work exactly the same as single T.L. and all even number of Multijunction T.I. work exactly like double T.I.

"KÖNIGSBERG BRIDGE PROBLEM

A classical problem in topology: The river in the Prussian city of Königsberg divided into two branches and was crossed by seven bridges in a certain arrangement. The problem was to show that it is impossible to walk in a continuous path across all the bridges and cross each one only once. There are more

than 5000 possible ways to try, but none of them works.

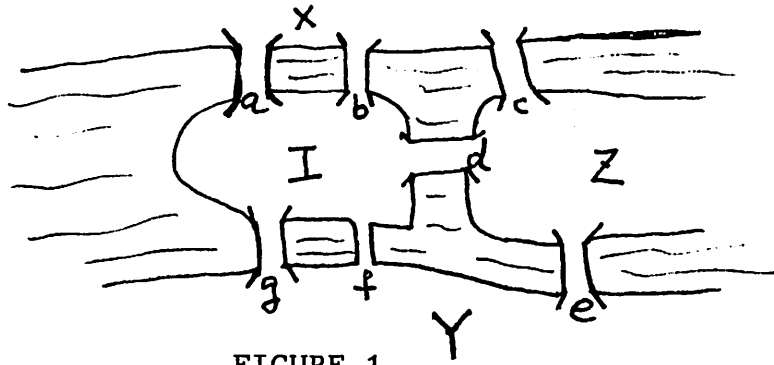


FIGURE 1

The problem was solved by Euler in the 18th century by replacing the arrangement with an equivalent number of lines and junctions.

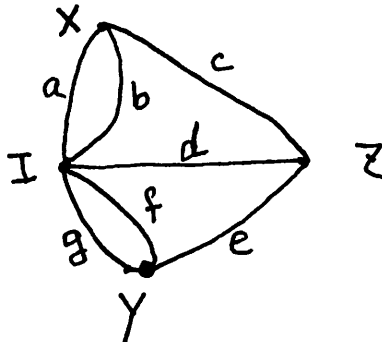


FIGURE 2

He showed that a network like this can be transversed in a path if and only if there are fewer than three junctions at which odd numbers of line segments meet. In this case there are four, so we cannot solve the puzzle.

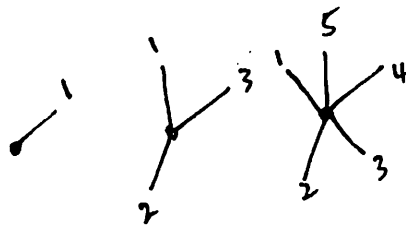


FIGURE 3—Odd junction
(Odd # of line segments meet)

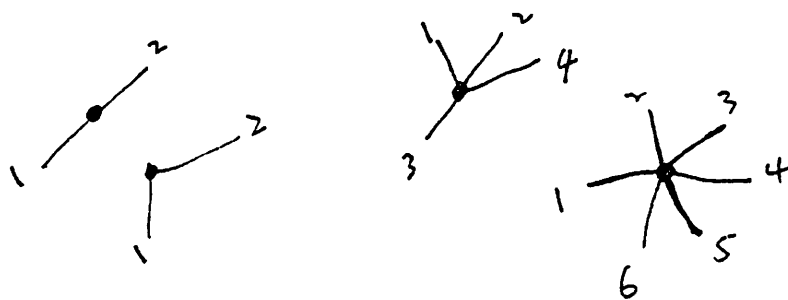


FIGURE 4-Even junction
(Even # of line segments meet)

Any number of even junctions won't interfere to transverse all this diagram because one line goes into the junction while another line leaves the junction. Each pair acts as matching entrance/exit going to/from the junction. However, an odd junction point leftover after pairing off entrance/exits (by twos) will inevitably leave a single exit or a single entrance with no counterpart. Because of this, we cannot have more than two odd junctions to transverse this kind of diagram. So clearly we can see the difference between odd and even junctions.

MULTIJUNCTION THERAPY LOCALIZATION

T.L. with one hand on a deficient point will make SIM weak,⁽⁴⁾ as well as 3,5,7,9, or any odd number of hands, but two hands on the same point will not make SIM weak, or 4, 6,8,10 or even number of hands. We call it odd junction T.L. when even number is used. This is a fact that I have found: Odd junction T.L. makes SIM weak when the point is excess. Not only even and odd junction T.L. will do this but also even or odd layer T.L. responds in the same way.

MULTIJUNCTION THERAPY IDENTIFICATION

any additional input of information counts as one factor. For example: When a patient has a liver meridian deficiency, when he/she looks at the color blue, which is wood color⁽⁵⁾ and T.L. is done on the llive point, this is even junction T.I.

because there are 2 factors involved. The same response will be gotten from two hand T.L. on liver point (again 2 factors). Therefore, touching one hand on the liver point makes SIM weak, but while the patient is looking at blue color and single T.L. on liver point, the SIM won't be weak. There are a variety of possible inputs of information such as: looking at a specific color, facing a specific direction, listening to a specific musical tone, pronouncing one specific consonant over and over again as in some rituals, etc. As a result, we must call these activities Multijunction T.I. instead of Multijunction T.L. T.I. can be a mechanical challenge, pushing bones or soft tissue to the direction which will help or worsen the existing abnormality. It can be done by odd or even challenge. Examples of T.I. are all T.L. activities, all mechanical challenges, tappings, multiple lead squares or ceramics, T.L. through different material layers, looking at five element color, listening to five element tones, consonants, vowels, facing different directions, etc. etc. All the activities are not related to localization only. Therefore, "Therapy Identification or T.I. should be a proper term here. Again, this fact must be examined with the Relativity Principle⁽⁶⁾ and the Energy Conservation Principle⁽⁷⁾ in mind.

Conclusion: This concept will help us understand many situations and clear up many controversial issues. It will also help us to develop new techniques for diagnosis and treatment.^{(8) (9)} T.I. (Therapy Identification) is a better and more general concept than T.L. (Therapy Localization).

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ROTATING GAIT FAULT

By Ineon Moon, D.N., C.Ac.

ABSTRACT: Using kinematic gait testing,⁽¹⁾ walking a small circle will show a gait fault without having other gait receptor faults. The testing and correction of rotating gait faults will be discussed in this paper.

TESTING METHODS:

1. Test S.I.M.
2. Have patient walk a small circle clockwise
3. Test S.I.M.
4. Have patient walk a small circle counter clockwise
5. Test S.I.M.

If S.I.M. is weak in Step #3 or #5, then the pivoting leg is short. (A pivoting leg is the leg that walks inside of the circle. For example, when the patient turns clockwise, the right leg will be the pivoting leg. This test is a kinematic short leg test. It may be different from short leg prone or supine, or static weight bearing. The reasons for a short leg could be anything, such as Cat I, Cat II, anatomical short leg, or short leg due to the muscular imbalance.⁽²⁾ Correction of short leg by any proper technique will take care of rotating gait fault.

CONCLUSION: Rotating gait fault is due to short leg.

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SEDATION AND TONIFICATION USING

ODD ACU-AID and EVEN ACU-AID

By Ineon Moon, D.N., C.Ac.

ABSTRACT: There is a fundamental principle to acupuncture meridian therapy: if the acupuncture point is deficient in energy, tonify it; if the acupuncture point is excessive in energy, sedate it. There are many methods which can achieve a sedation or tonification effect: thin-wire needle, magnet, electrical stimulation, ions, chemical injections, use of various metals, etc. In this paper we will discuss tonification and sedation using "acu-aids", i.e., metal balls 1/2 - 1/3 mm in diameter, held in place with a small adhesive bandage.

Acu-aids have been used for pain control by applying to the painful spot, regardless of proximity of an acupuncture point. They have also been used on meridians as a tonification treatment by applying to specific acupuncture point. However, it has not been used for sedation directly, although it could be used for sedation by tonifying the "father" element either on the father meridian or the father point on the meridian needing sedation.¹

According to the multi-junction therapy location method², single or odd-numbered therapy localization reveals the deficient point. Double or even-numbered therapy localization reveals the excess point.

Applying a single or odd number of acu-aids brings a response the same as single or odd-numbered therapy localization. Applying two or any even number of acu-aids on a point acts the same as double/even-numbered therapy localization.³

As a therapeutic method, we apply one acu-aid for tonification, two for sedation to a particular point (not necessarily

whole meridian). These can be applied to Five Element points, Back-Shu points, Front-Mu points, Beginning or End points, or any point which proves excessive or deficient by individual challenge.⁴

CONCLUSION

Utilizing acu-aids we can accomplish sedation and tonification where constant treatments are required.

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THERAPY LOCALIZATION THROUGH
MULTIPLE LAYERS OF DIFFERENT MATERIALS

by Ineon Moon

ABSTRACT: Therapy localization on the points is well established and reputable when it is done on bare skin.¹ There have been some controversial issues on T.L. over clothes even over air.² In this paper we will discuss the matter.

INTRODUCTION: T.L. over clothes sometimes works fine, but another times it responds opposite as if patient is switched. Why is that? What makes the difference? How different are they? (What exactly is the difference?) Is there any consistent pattern that occurs? Why is with T.L. plastic Q-tip different from wood Q-tip T.L. on ear acupuncture points? Why does Dr. G. Goodheart prefer to use wood Q-tips rather than plastic Q-tips for T.L. on ear points?³

INSTRUMENT: Multi-layer T.L. stick was used as in (Fig. 1) (Fig. 2) (Fig. 3)

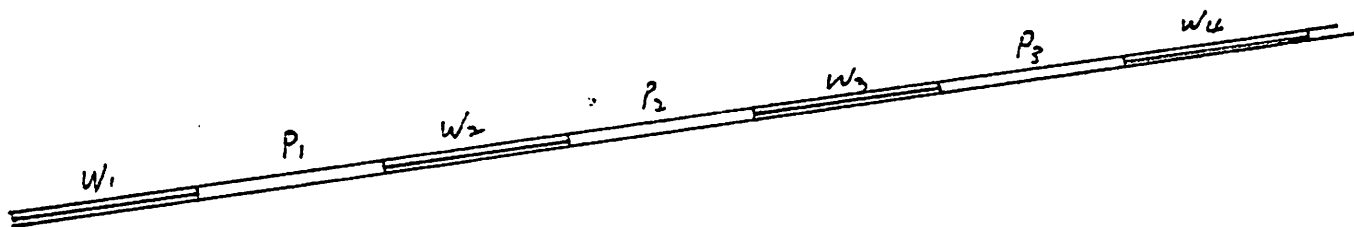


Figure 1

Instrument 1

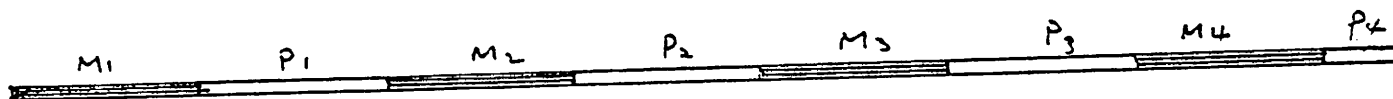


Figure 2

Instrument 2

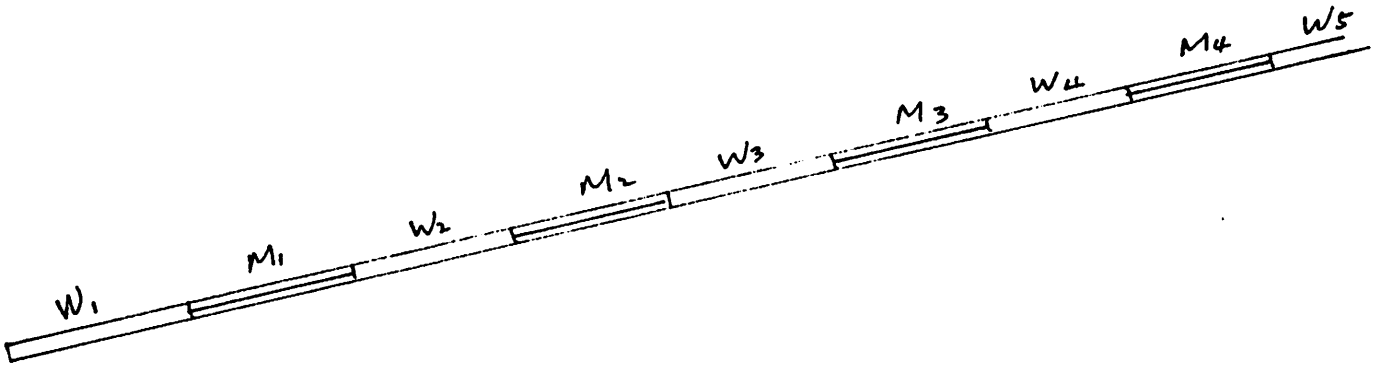


Figure 3

Instrument 3

METHODS AND OBSERVATION: Contact with wood tip of Instrument 1 on the deficient point on which T.L. makes S.I.M. weak. Then let patient hold W1 test S.I.M. Then let patient hold P1 test S.I.M. Then let patient hold W2 and so on.

Now, pull out the W1 from Instrument 1. Contact plastic tip P1 on the point 1st and then let the patient hold P1 then test S.I.M,

- then - - - - - " W2 " "
- then - - - - - " P2 " "
- then - - - - - " W3 " "

In the same manner, using Instrument 2, Instrument 3, we get similar results as in chart 1 and chart 2.

CHART 1 - T.L. on Deficient Point

POINT	INSTRUMENT	CONTACT THE POINT WITH	PART OF INSTRUMENT PATIENT HOLDS	S.I.M. RESPONSE	NOTE
	Instrument 1	(Wood)			
		W1	W1	Weak	
			P1	Strong	
			W2	Weak	
			P2	Strong	
			W3	Weak	
			P3	Strong	
			W4	Weak	

CHART 1 (continued)

POINT	INSTRUMENT	CONTACT THE POINT WITH	PART OF INSTRUMENT PATIENT HOLDS	S.I.M. RESPONSE	NOTE
		(Plastic)			
		P1	P1	Weak	
			W2	Strong	
			P2	Weak	
			W3	Strong	
			P3	Weak	
	Instrument 2	(Metal)			
		M1	M1	Weak	
			P1	Strong	
			M2	Weak	
			P2	Strong	
			M3	Weak	
			P3	Strong	
		Plastic			
		P1	P1	Weak	
			M2	Strong	
			P2	Weak	
			M3	Strong	
			P3	Weak	
	Instrument 3	Wood			
		W1	W1	Weak	
			M1	Strong	
			W2	Weak	
			M2	Strong	
			W3	Weak	
			M3	Strong	
		Metal			
		M1	M1	Weak	
			W2	Strong	
			M2	Weak	
			W3	Strong	
			M3	Weak	

CHART 2 - T.L. on Excess Point

POINT	INSTRUMENT	CONTACT THE POINT WITH	PART OF INSTRUMENT PATIENT HOLDS	S.I.M. RESPONSE	NOTE			
	Instrument 1	Wood W1	W1	Strong				
			P1	Weak				
			W2	Strong				
			P2	Weak				
		Plastic P1	P1	Strong				
			W2	Weak				
			P2	Strong				
			W3	Weak				
				P4	Strong			
				Instrument 2	Metal M1	M1	Strong	
						P1	Weak	
						M2	Strong	
		P2	Weak					
				M3	Strong			
	P4			Weak				
	Plastic P1			P1	Strong			
				M2	Weak			
		P2	Strong					
		M3	Weak					
			P3	Strong				
			Instrument 3	Wood W1	W1	Strong		
					M1	Weak		
					W2	Strong		
	M2	Weak						
	W3	Strong						
	M3	Weak						
	Metal M1	M1		Strong				
		W2		Weak				
		M2		Strong				
		W3		Weak				
			M3	Strong				

CONCLUSION: There must be some energy pattern to understand the experiment and the result of the observation. However: it has some characteristics which electricity does not have. There must be some fundamental life energy flowing and communicating throughout the body but it is not only electricity.⁴ As far as we know there are opposing kinds of responses. If we call one Yang, then the other becomes Yin. If we call one Yin, then the other becomes Yang.⁵

When we T.L. over the clothes, it is the matter what kinds of fabric and how many layers there are between touching finger and the point of body.^{6,7}

By Relativity Principle, we do not change the clothes or remind the patient to compare with other fabric or no fabric between the finger and the point, patient's muscle may not respond as I described in this paper. Applying relativity principle of A.K. is very important.⁸

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SWITCHING OBSERVATIONS

Lail F. Horlock, D. D.

Abstract

Identifying a possible pattern to the switching phenomenon.

Fifty switched adult patients were checked over a period of two months. Any form of switching was then correlated with handedness. Handedness was defined as being right eyed, handed, and footed or left eyed, handed, and footed. Of the fifty switched patients only one was found to be a true eyed, handed and footed. All the rest showed some combination of crossed or mixed dominance.

With the above information, I have screened patients by simply asking them:

- a) Which hand do you write with?
- b) Point or aim at an object on the wall with your index finger. Then observe which eye is dominant.
- c) Ask them to kick an imaginary object on the floor to determine foot dominance.

Conclusion:

A quick screening using the above method can facilitate identifying switching problems.

AN APPLIED KINESIOLOGY STUDY OF COPPER
INTERACTIONS WITH IRON AND FOLIC ACID

Richard A. Mowles, D.C.

ABSTRACT: This paper will examine the role that copper plays in iron and folic acid metabolism. The application of these facts will allow us to see a pattern of interplay between these two important minerals in Applied Kinesiology. The utilization of Hair Trace Mineral Analysis (Analytical Research Labs, Phoenix, Arizona) was employed to observe tissue levels of iron and copper.

INTRODUCTION

Chiropractic physicians who utilize Applied Kinesiology are finding more and more the interplay of biochemistry with the nervous system. One of the important minerals that has gained a lot of attention in Applied Kinesiology has been iron. (1,2,3,4,5) Iron has been shown to have significant effects on many parameters of the nervous system with Applied Kinesiology.

The idea that prompted me to write this paper was the observation that minerals interact with each other in biochemical reactions. Biological interactions among trace minerals have been reported to alter the metabolism of other nutrients and metabolites. Dietary deficiencies or excesses of some micronutrients create secondary disorders in the absorption, plasma and tissue levels, and excretion of other minerals and metabolites. (6,7,8,9) Such interactions between minerals may occur in the diet, at the intestinal level, at the site of excretion via the lungs, intestine, kidneys or within body tissues. (10) One such interaction is that between iron and copper. I have observed this principle in manual muscle testing and have correlated these patterns with hair analysis. I have come to the conclusion that nutritional requirements as demonstrated by muscle testing may be misconceptions after reviewing mineral levels on hair analysis.

HAIR ANALYSIS AND AK

Anemia is a common clinical condition that is seen routinely in every office. A lot of these patients may relate a past history of

N APPLIED KINESIOLOGY STUDY OF COPPER
INTERACTIONS WITH IRON AND FOLIC ACID...Mowles
Page 3

anemia that was corrected with iron supplementation. These patients may outright complain of anemia or the condition is found during the routine examination. The CBC in the past has been the routine diagnostic procedure utilized in picking up iron deficiency anemia. We know that deficiencies in the tissue may be early signs that won't reflect blood changes. Hochfeld⁽¹¹⁾ stated that only in the late stages of iron deficiency anemia are changes observed in the CBC. In Applied Kinesiology testing procedures, we may find a patient needs iron, but this doesn't necessarily mean the patient is anemic. In a study by Schmitt,⁽¹²⁾ a high percentage of those patients who showed a need for iron also showed one or more of three factors to be below normal limits. These factors include lowered RBC count, or lowered hematocrit or lowered hemoglobin. But these three factors may all be normal. By giving this patient iron, based on muscle testing, we could also possibly be deceived. There is an important relationship between iron and copper that must be met or problems will develop in the body.

I started to do Hair Analysis on all patients with chronic problems. Certain patterns started to present themselves in patients who showed a need for iron supplementation. This was seen in such patterns as recurrent retrograde lymphatic problems, right/left brain activity, aerobic muscle problems, and iron deficiency anemia. These patterns seemed to revolve around copper and its relationship to iron.

The first pattern as depicted in Figure 1 involved toxic levels

SEX: _____ AGE: _____ DATE: _____ LAB NO.: _____ CLIENT ACCT. NO.: _____
 PATIENT NAME: _____ REQUESTED BY: _____

NUTRIENT MINERAL LEVELS

CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (K)	IRON (Fe)	COPPER (Cu)	MANGANESE (Mn)	ZINC (Zn)	CHROMIUM (Cr)	SELENIUM (Se)	PHOSPHORUS (P)
136 ***	20	85	34	11.9	8.5 ***	0.68	68	0.40	0.60	54.4
128 ***	19 **	80	32	11.2	8.0 ***	0.64	64	0.38	0.57	51.2
120 ***	18 ***	75	30	10.5	7.5 ***	0.60	60	0.36	0.54	48.0
112 ***	17 ***	70	28	9.8	7.0 ***	0.56	56	0.34	0.52	44.8
104 ***	16 ***	65	26	9.1	6.5 ***	0.52	52	0.32	0.48	41.6
96 ***	15 ***	60	24	8.4	6.0 ***	0.48	48	0.30	0.45	38.4
88 ***	14 ***	55	22	7.7	5.5 ***	0.44	44	0.28	0.42	35.2
80 ***	13 ***	50	20	7.0	5.0 ***	0.40	40	0.26	0.39	32.0
72 ***	12 ***	45	18	6.3	4.5 ***	0.36	36	0.24	0.36	28.8
64 ***	11 ***	40	16	5.6	4.0 ***	0.32	32	0.22	0.33	25.6
56 ***	10 ***	35	14	4.9	3.5 ***	0.28	28	0.20	0.30	22.4
48 ***	9 ***	30	12	4.2	3.0 ***	0.24	24	0.18	0.27	19.2
40 ***	8 ***	25	10	3.5	2.5 ***	0.20	20	0.16	0.24	16.0
32 ***	7 ***	20	8	2.8	2.0 ***	0.16	16	0.14	0.21	12.8
24 ***	6 ***	15	6	2.1	1.5 ***	0.12	12	0.12	0.18	9.6
16 ***	5 ***	10	4	1.4	1.0 ***	0.08	8	0.10	0.15	6.4
8 ***	4 ***	5	2	0.7	0.5 ***	0.04	4	0.08	0.12	3.2
527.00	18.00	7.00	3.00	1.10	21.40	0.04	5.00	0.02	0.03	8.00

TOXIC METALS

ADDITIONAL MINERALS

LEAD (Pb)	MERCURY (Hg)	CADMIUM (Cd)	ARSENIC (As)	ALUMINUM (Al)	NICKEL (Ni)	COBALT (Co)	MOLYBDENUM (Mo)	LITHIUM (Li)	SILICON (Si)
2.5	0.5	0.10	1.75	3.0	0.40	8.8	0.44	0.8	11.2
2.0	0.4	0.08	1.40	2.7	0.35	7.7	0.33	0.7	9.8
1.5	0.3	0.06	1.05	2.4	0.30	6.6	0.22	0.6	8.4
1.0	0.2	0.04	0.70	2.1	0.25	5.5	0.11	0.5	7.0
0.5	0.1	0.02	0.35	1.8	0.20	4.4	0.00	0.4	5.6
0.50 ***	0.05	0.03 ***	0.01	0.9	0.15 ***	3.3		0.3	4.2
				0.6	0.10 ***	2.2		0.2	2.8
				0.40	0.05 ***	1.1		0.1	1.4
					0.00 ***	0.0		0.0	0.0
					0.20	0.11		0.01	0.14

MIXED OXIDIZER

FAST OXIDIZER

SLOW OXIDIZER

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of tissue copper to low tissue iron. Iron supplementation alone in these cases is a temporary measure, at the most in correcting the need for iron. Until the high copper is brought down, the need for iron will show up persistently or in the future. Another interesting thing in this case is that when copper is actively being detoxified from the tissues, the iron will usually be decreased in the body which shows an inhibitory effect of copper on iron metabolism. During this interim in which copper is being detoxified, I have found recurrent right/left brain patterns as reflected in some very interesting clinical changes in the patient.

The patient will show a tendency for recurrence of hyoid laterality. This pattern seems to reappear after the patient has been supplemented with folic acid.⁽¹³⁾ The need for folic acid seems to come back which suggests that high copper may interfere with the action of folic acid on the nervous system. Since copper and iron are "long term set points" in the electron poisoning curve, there may be interactions between them to display very complex neuromuscular patterns. Goodheart,⁽¹⁴⁾ for example, has shown that iron has effects on muscle testing when both right brain and left brain activity are involved in the patient. If one places 2 mgs. of chelated copper into the oral cavity, there is pronounced muscle weakness in the patient during manual testing. As the copper tissue levels decrease to normal, we see where its inhibitory effects on muscle strength disappear during muscle testing. At the same time we see the iron tissue levels elevate to normal. We also

see disappearance of the hyoid laterality and a need for folic acid. In a pattern as seen in Figure 1, iron is supplemented to counteract the suppressive effects of copper detoxification.

The second pattern as depicted in Figure 2 involves low levels of copper and iron on initial hair analysis. These patients will show a need for iron as reflected in AK procedures. After a period of biochemical treatment, discussed in a previous paper,⁽¹⁵⁾ a pattern emerges as shown in Figure 3, where the copper has elevated and the iron goes down. This type of patient will show a need for iron kinesiolegically; however, the suppressed high copper has to be lowered to allow elevation and stabilization of the tissue iron. This patient, upon testing of 2 mgs. chelated copper, will not show any adverse effects on muscle strength. However, when the tissue pattern in Figure 3 shows up after treatment, oral testing of 2 mgs. chelated copper will have a pronounced weakening effect on many muscles. When this pattern occurs, there will also be a tendency for hyoid laterality and a need for folic acid supplementation. Again, supplementation of folic acid will not negate its requirement through muscle testing until the high copper has lowered to normal levels. As in Figure 1, high copper apparently has some inhibitory effect on folic acid.

I feel that the body, in some ways, may suppress toxic elements and compensate for these elements biochemically. The nervous system also compensates as revealed through AK testing. This type of pattern can be very misleading to the physician who is relying totally on

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 PATIENT NAME: _____ REQUESTED BY: _____

NUTRIENT MINERAL LEVELS

136	20	85	34	11.9	9.5	0.68	68	0.40	0.50	54.4
128	19	80	32	11.2	8.0	0.64	64	0.38	0.57	51.2
120	18	75	30	10.5	7.5	0.60	60	0.36	0.54	48.0
112	17	70	28	9.8	7.0	0.56	56	0.34	0.52	44.8
104	16	65	26	9.1	6.5	0.52	52	0.32	0.48	41.6
96	15	60	24	8.4	6.0	0.48	48	0.28	0.45	38.4
88	13	55	22	7.7	5.5	0.44	44	0.26	0.39	35.2
80	12	50	20	7.0	5.0	0.40	40	0.24	0.36	32.0
72	11	45	18	6.3	4.5	0.36	36	0.22	0.33	28.8
64	10	40	16	5.6	4.0	0.32	32	0.20	0.30	25.6
56	9	35	14	4.9	3.5	0.28	28	0.18	0.27	22.4
48	8	30	12	4.2	3.0	0.24	24	0.16	0.24	19.2
40	7	25	10	3.5	2.5	0.20	20	0.12	0.18	16.0
32	5	20	8	2.8	2.0	0.16	16	0.10	0.15	12.8
24	4	15	6	2.1	1.5	0.12	12	0.08	0.12	9.6
16	3	10	4	1.4	1.0	0.08	8	0.06	0.09	6.4
8	2	5	2	0.7	0.5	0.04	4	0.04	0.06	3.2
89.00	14.00	37.00	2.00	0.90	1.80	0.01	11.00	0.01	0.09	12.00
CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (K)	IRON (Fe)	COPPER (Cu)	MANGANESE (Mn)	ZINC (Zn)	CHROMIUM (Cr)	SELENIUM (Se)	PHOSPHORUS (P)

TOXIC METALS

ADDITIONAL MINERALS

2.5	0.5	0.10	1.75	3.0	0.40	8.8	0.44	0.8	11.2
2.0	0.4	0.08	1.40	2.4	0.30	6.6	0.33	0.6	8.4
1.5	0.3	0.06	1.05	1.8	0.25	5.5	0.22	0.5	7.0
1.0	0.2	0.04	0.70	1.2	0.15	4.4	0.11	0.4	5.5
0.5	0.1	0.02	0.35	0.6	0.10	3.3	0.09	0.3	4.2
0.50	0.13	0.05	0.10	0.30	0.05	2.2	0.06	0.2	2.8
LEAD (Pb)	MERCURY (Hg)	CADMIUM (Cd)	ARSENIC (As)	ALUMINUM (Al)	NICKEL (Ni)	COBALT (Co)	MOLYBDENUM (Mo)	LITHIUM (Li)	SILICON (Si)

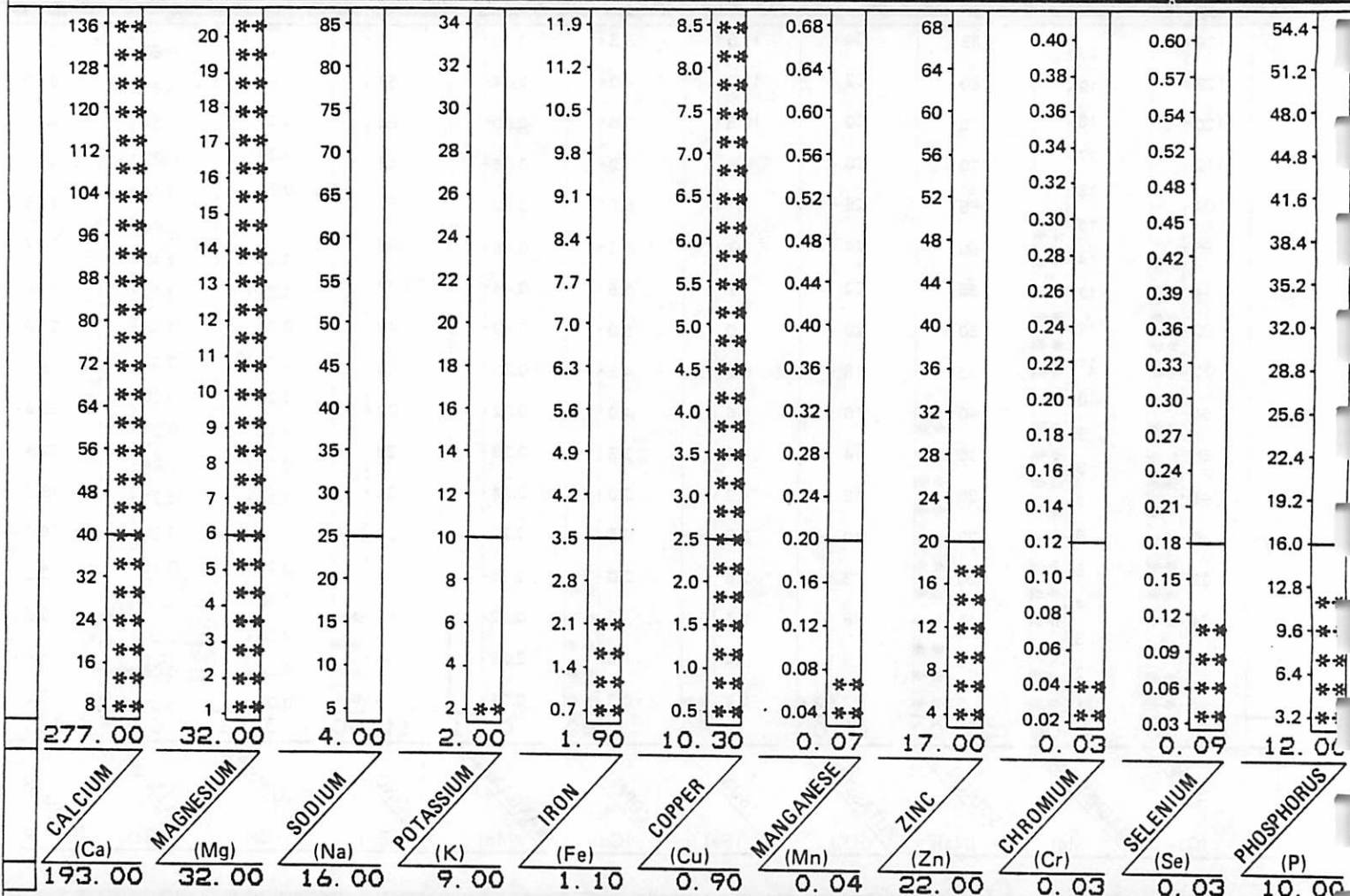
MIXED OXIDIZER

FAST OXIDIZER

SLOW OXIDIZER

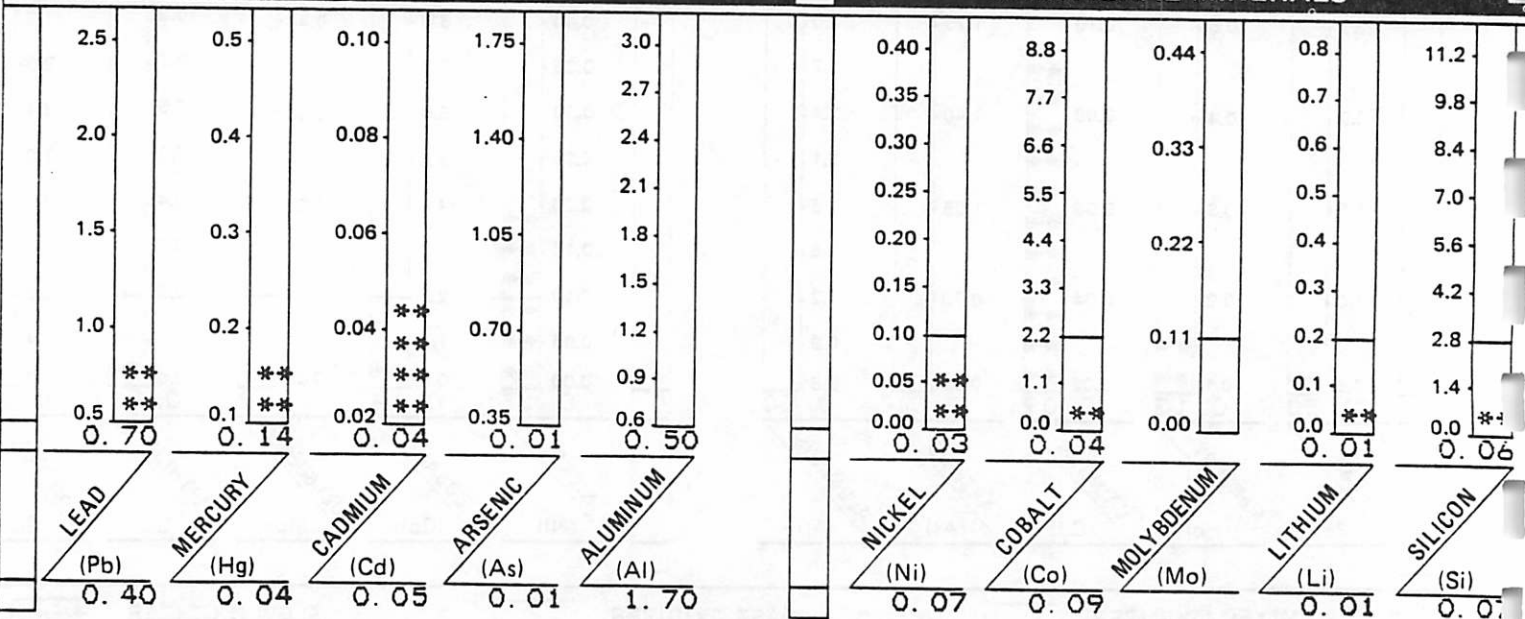
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PATIENT NAME:			REQUESTED BY:	

NUTRIENT MINERAL LEVELS



TOXIC METALS

ADDITIONAL MINERALS



MIXED OXIDIZER

FAST OXIDIZER

SLOW OXIDIZER

muscle testing. A biochemical compensation can reflect into the nervous system a need for iron that may be suppressed by a hidden copper toxicity.

The third pattern as depicted in Figure 4 shows a low tissue copper and iron. In these patients there is actually a deficiency of copper and iron. These patients will need iron and/or copper supplementation. Oral testing of copper and iron will show strengthening of muscles without any adverse systemic effects. In this pattern, a folic acid requirement as seen in recurring hyoid laterality doesn't seem to be a common situation. Follow up studies on hair analysis of both minerals showed elevation to normal levels. The AK elevation on these patients showed elimination of those findings requiring iron supplementation.

DISCUSSION

This paper has attempted to show some interesting patterns with iron and its relationship to copper. It appears that high copper or low copper plays an important role in iron metabolism. Copper participates in iron metabolism either by competing with iron or through the action of various cuproenzymes. It appears that the site of this interaction will determine if copper has an inhibitory or enhancing effect on iron. There is much controversy in the literature as to copper's exact mode of action on iron. The exact biochemical interaction of copper on folic acid isn't exactly known. Kinesiologically, there appears to be an inhibitory effect of high copper on folic acid metabolism.



SEX: _____ AGE: _____ DATE: _____ LAB NO.: _____ CLIENT ACCT. NO.: _____
 PATIENT NAME: _____ REQUESTED BY: _____

NUTRIENT MINERAL LEVELS

136	20	85	**	34	**	11.9	8.5	0.68	68	0.40	0.60	54.4
128	19	80	**	32	**	11.2	8.0	0.64	64	0.38	0.57	51.2
120	18	75	**	30	**	10.5	7.5	0.60	60	0.36	0.54	48.0
112	17	70	**	28	**	9.8	7.0	0.56	56	0.34	0.52	44.8
104	16	65	**	26	**	9.1	6.5	0.52	52	0.32	0.48	41.6
96	15	60	**	24	**	8.4	6.0	0.48	48	0.30	0.45	38.4
88	14	55	**	22	**	7.7	5.5	0.44	44	0.28	0.42	35.2
80	13	50	**	20	**	7.0	5.0	0.40	40	0.24	0.36	32.0
72	12	45	**	18	**	6.3	4.5	0.36	36	0.22	0.33	28.8
64	11	40	**	16	**	5.6	4.0	0.32	32	0.20	0.30	25.6
56	10	35	**	14	**	4.9	3.5	0.28	28	0.18	0.27	22.4
48	9	30	**	12	**	4.2	3.0	0.24	24	0.16	0.24	19.2
40	8	25	**	10	**	3.5	2.5	0.20	20	0.14	0.21	16.0
32	7	20	**	8	**	2.8	2.0	0.16	16	0.12	0.18	12.8
24	6	15	**	6	**	2.1	1.5	0.12	12	0.10	0.15	9.6
16	5	10	**	4	**	1.4	1.0	0.08	8	0.08	0.12	6.4
8	4	5	**	2	**	0.7	0.5	0.04	4	0.06	0.09	3.2
69.00	4.00	124.00		35.00		1.60	1.20	0.07	14.00	0.10	0.03	11.00
CALCIUM	MAGNESIUM	SODIUM		POTASSIUM		IRON	COPPER	MANGANESE	ZINC	CHROMIUM	SELENIUM	PHOSPHORUS
(Ca)	(Mg)	(Na)		(K)		(Fe)	(Cu)	(Mn)	(Zn)	(Cr)	(Se)	(P)

TOXIC METALS

ADDITIONAL MINERALS

2.5	0.5	0.10	1.75	3.0	0.40	8.8	0.44	0.8	11.2
2.0	0.4	0.08	1.40	2.7	0.35	7.7	0.33	0.7	9.8
1.5	0.3	0.06	1.05	2.4	0.30	6.6	0.22	0.6	8.4
1.0	0.2	0.04	0.70	2.1	0.25	5.5	0.15	0.5	7.0
0.5	0.1	0.02	0.35	1.8	0.20	4.4	0.11	0.4	5.6
1.00	0.03	0.05	0.01	1.5	0.15	3.3	0.08	0.3	4.2
				1.2	0.10	2.2	0.05	0.2	2.8
				0.9	0.05	1.1	0.03	0.1	1.4
				0.6	0.00	0.0	0.00	0.0	0.0
				1.20	0.03	0.10	0.01	0.15	
LEAD	MERCURY	CADMIUM	ARSENIC	ALUMINUM	NICKEL	COBALT	MOLYBDENUM	LITHIUM	SILICON
(Pb)	(Hg)	(Cd)	(As)	(Al)	(Ni)	(Co)	(Mo)	(Li)	(Si)

MIXED OXIDIZER

FAST OXIDIZER

SLOW OXIDIZER

When we see high copper in the system, as related to low iron, the mechanism of inhibition has been postulated in two locations. The first place is with iron absorption, where high copper has been shown to inhibit the absorption of iron.^(16,17) The second place is the effect copper has upon re-utilization of iron within the spleen. Normally, old erythrocytes are phagocytosed by the reticulo-endothelial cells, mainly in the spleen and to a lesser extent, in the liver. The iron from catabolized erythrocytes was released to the plasma in two stages. There is a rapid phase in which the intracellular form of iron is unknown, and a slow phase in which the iron passes through ferritin.⁽¹⁸⁾ A block in the rapid phase of iron re-utilization as in an acute infection would result in decreased plasma iron concentration, decreased total iron-binding concentration, and decreased transferrin saturation.⁽¹⁹⁾ These events have not been observed with an excess of copper, indicating that the rapid phase was not blocked. The accumulation of iron and copper in the spleen; however, suggested that copper interfered with the slow phase of iron re-utilization in the spleen. The exact mode of copper's action on iron re-utilization is not known.

The effects of copper deficiency upon iron metabolism appears quite a bit in the literature. We find that iron absorption is impaired with copper deficiency.⁽²⁰⁾ In this situation, a deficiency of copper causes a decrease in ceruloplasmin, a copper containing enzyme. It is postulated in the literature that the ceruloplasmin helps transport iron from the duodenal mucosal lining and from

hepatic parenchymal cells into the plasma.⁽²¹⁾ Since 1928, it has been known that copper deficiency produces an anemia in rats due to impaired iron mobilization.⁽²²⁾ Again the evidence reflects anemia and increased hepatic iron levels due to inadequate ceruloplasmin for the mobilization of iron from the liver.^(23,24)

CONCLUSION

This paper has examined the interplay of two important minerals, copper and iron, in findings with Applied Kinesiology. The interplay of copper with folic acid has also been examined in AK clinical situations. The review of the literature shows much controversy as to the actual biochemical inhibitory or enhancing effect of copper to iron metabolism. The actual biochemical action of copper on folic acid hasn't been established. This could possibly be an interesting area of further investigation.

The aim of this paper is to emphasize the interaction of these minerals and how they are reflected in AK muscle patterns. The physician must respect the complexity of overlap between the biochemical and nervous components of the body. When a specific indication for iron is found such as with reoccurrence of retrograde lymphatic problems, or in right brain/left brain activity, we have to take into consideration that the need for iron may be a compensatory phenomena. The utilization of Hair Tissue Analysis gives the physician another parameter to break down the complex code of body language and to see these compensations. If we treat the patient by giving iron or folic acid, without consideration to copper, then symptoms may be alleviated

but balance won't be obtained. Future problems that may appear
could be different symptomatic reflections of a pre-existing problem
inadequately evaluated.

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A CLINICAL INVESTIGATION OF PRE-MENSTRUAL
SYNDROME AND THE CORRELATION WITH COPPER

Richard A. Mowles, D.C.

ABSTRACT: Dysmenorrhea and Pre-menstrual Syndrome are conditions which we see often as Chiropractic Physicians utilizing Applied Kinesiology. This paper will examine a clinical study of these two conditions with emphasis to the chemical side of the triad of health. A clinical theory will be presented based on clinical observations and the laboratory data regarding copper and its relationship to estrogen/progesterone levels.

INTRODUCTION

Pre-menstrual Syndrome (PMS) is a relatively new term in the United States, looked upon with skepticism by many, and of course highly controversial in scientific circles. It has come to signify a collection of physical symptoms which include headaches, abdominal bloating, clumsiness, breast pain, joint pains, constipation, acne and sinusitis, as well as emotional symptoms including depression, fatigue, tension, anxiety, irritability, schizophrenic behavior and even criminal behavior. In fact, one study looked into cyclical criminal acts in Pre-menstrual Syndrome.⁽¹⁾ Dysmenorrhea or painful menstruation is included in the whole group of bizarre symptoms collectively called the Pre-menstrual Syndrome.

The American Journal of Obstetrics and Gynecology in 1981, reported that 20% - 40% of American women were afflicted with some mental or physical incapacitation during their period.⁽²⁾ Dr. Katharine Dalton, a London physician who has been treating PMS for 30 years, believes as many as five and a half million American women, (about 10% of the population of child-bearing age), have the disorder to a degree that calls for professional help. The usual treatment for PMS has been the prescribing of natural progesterone. This has created a turmoil of controversy because of the known and established effects of synthetic progestogens on the fetus when they were taken during the first trimester of pregnancy.

In Europe, where natural progesterone has been used for years to treat PMS, there are no studies showing adverse effects. Most doctors

are still reluctant to prescribe natural progesterone, provided that they are even aware of the treatment, because of the widespread confusion between it and the synthetic progestogens.

This paper is going to look at the involvement of copper with the syndrome. An explanation will be given in treating this condition in a more natural and wholistic manner without the administration of progesterone.

SUBJECTS AND METHODS

Forty-nine caucasian females were studied ranging from 15 to 45 years of age. These subjects were chosen due to their presenting complaints (fatigue, headaches, abdominal bloating, irritability, depression, menstrual irregularity and fluid retention). Their course of treatment was followed over a nine month period, beginning in March 1982, to October 1982. These forty-nine females underwent a complete Applied Kinesiology examination and had hair samples taken for analysis (TMA). This test was performed at Analytical Research Labs, 2338 W. Poyal Palm Rd., Suite F, Phoenix, Arizona 85021. The subjects had no dyes on their hair. They only utilized common hair sprays which were eliminated by solvents at the laboratory prior to testing. The hair analysis was done by Atomic Absorption Spectrophotometry. Thirty-six subjects had been on oral contraceptives at sometime in their lives for an average period of six months. Six of the subjects were still on oral contraceptives. Eighteen of the subjects were on intrauterine devices of copper consistency, (IUD-Cu⁺⁺) at the initial start of the study. Three of the subjects had never been on oral contraceptives or intrauterine devices. Thirteen of the subjects had complete hysterectomies,

and five of the subjects had incomplete hysterectomies. The most common reason for hysterectomy was endometriosis.

RESULTS

The results of the HTMA showed two interesting patterns with copper. Figure 1 was the most typical pattern seen in this study. Twenty-nine subjects exhibited this pattern initially. The most significant aspect of this pattern is the extremely high calcium, magnesium, and copper and the low potassium, iron and manganese. Figure 2 was a pattern seen in eleven subjects. This pattern showed an above average calcium and magnesium, but below normal copper, potassium and sodium. The interesting fact with these eleven subjects was that after an average of three months of biochemical therapy, their HTMA showed what was seen in Figure 3. The copper goes up while the calcium, magnesium, potassium, iron and zinc would go down. In these cases, it was felt that copper was very deep in the system initially. As proper mineral elements such as potassium, manganese and zinc were restored to the system, then these deep reservoirs of copper were uprooted and brought out of the tissue to be detoxified by the system.

The Applied Kinesiology evaluation of these subjects showed all forty-nine subjects to have a weak pectoralis major sternal and tensor fascia lata respectively. These muscles were either weak, in the clear, or 51%. These subjects were also prone to an open ileocecal valve. There was also retro and anterograde lymphatic problems. These subjects showed right and left brain involvement as well as a tendency for things to reoccur after correction. The temporomandibular joint persistently showed misalignment. There were also trends of multiple cranial and pelvic misalignments.

SEX: _____ AGE: _____ DATE: _____ LAB NO.: _____ CLIENT ACCT. NO.: _____
 PATIENT NAME: _____ REQUESTED BY: _____

NUTRIENT MINERAL LEVELS

136	20	85	34	11.9	8.5	0.93	68	0.40	0.60	54.4
123	19	80	32	11.2	8.0	0.84	64	0.38	0.57	51.2
120	18	75	30	10.5	7.5	0.60	60	0.36	0.54	48.0
112	17	70	28	9.8	7.0	0.58	56	0.34	0.52	44.8
104	16	65	26	9.1	6.5	0.52	52	0.32	0.48	41.6
96	15	60	24	8.4	6.0	0.48	48	0.30	0.46	38.4
88	14	55	22	7.7	5.5	0.44	44	0.28	0.39	35.2
80	13	50	20	7.0	5.0	0.40	40	0.24	0.36	32.0
72	12	45	18	6.3	4.5	0.36	36	0.22	0.33	28.8
64	11	40	16	5.6	4.0	0.32	32	0.20	0.30	25.6
56	10	35	14	4.9	3.5	0.28	28	0.18	0.27	22.4
48	9	30	12	4.2	3.0	0.24	24	0.14	0.21	19.2
40	8	25	10	3.5	2.5	0.20	20	0.12	0.18	16.0
32	7	20	8	2.8	2.0	0.16	16	0.10	0.15	12.8
24	6	15	6	2.1	1.5	0.12	12	0.08	0.12	9.6
16	5	10	4	1.4	1.0	0.08	8	0.06	0.09	6.4
8	4	5	2	0.7	0.5	0.04	4	0.04	0.06	3.2
528.00	73.00	18.00	6.00	1.80	17.50	0.20	39.00	0.01	0.04	14.00
CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (K)	IRON (Fe)	COPPER (Cu)	MANGANESE (Mn)	ZINC (Zn)	CHROMIUM (Cr)	SELENIUM (Se)	PHOSPHORUS (P)

TOXIC METALS

ADDITIONAL MINERALS

2.5	0.5	0.10	1.75	3.0	0.40	8.8	0.44	0.8	11.2
2.0	0.4	0.08	1.40	2.4	0.35	7.7	0.33	0.7	9.8
1.5	0.3	0.06	1.05	2.1	0.30	6.6	0.33	0.6	8.4
1.0	0.2	0.04	0.70	1.8	0.25	5.5	0.22	0.5	7.0
0.5	0.1	0.02	0.25	0.9	0.15	4.4	0.11	0.4	5.6
4.00	0.05	0.07	0.01	1.50	0.10	3.3	0.09	0.2	4.2
LEAD (Pb)	MERCURY (Hg)	CADMIUM (Cd)	ARSENIC (As)	ALUMINUM (Al)	NICKEL (Ni)	COBALT (Co)	MOLYBDENUM (Mo)	LITHIUM (Li)	SILICON (Si)
MIXED OXIDIZER <input type="checkbox"/> FAST OXIDIZER <input type="checkbox"/> SLOW OXIDIZER <input checked="" type="checkbox"/>									



(FIGURE 2)

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EX: _____ AGE: _____ DATE: _____ LAB NO.: _____ CLIENT ACCT. NO.: _____
PATIENT NAME: _____ REQUESTED BY: _____

NUTRIENT MINERAL LEVELS

CALCIUM (Ca)	192.00	MAGNESIUM (Mg)	34.00	SODIUM (Na)	35.00	POTASSIUM (K)	18.00	IRON (Fe)	4.90	COPPER (Cu)	1.30	MANGANESE (Mn)	0.03	ZINC (Zn)	16.00	CHROMIUM (Cr)	0.05	SELENIUM (Se)	0.05	PHOSPHORUS (P)	11.00
136	20	85	34	11.9	8.5	0.68	68	0.40	0.60	54.4											
128	19	80	32	11.2	8.0	0.64	64	0.38	0.57	51.2											
120	18	75	30	10.5	7.5	0.60	60	0.36	0.54	48.0											
112	17	70	28	9.8	7.0	0.56	56	0.34	0.52	44.8											
104	16	65	26	9.1	6.5	0.52	52	0.32	0.48	41.6											
96	15	60	24	8.4	6.0	0.48	48	0.30	0.45	38.4											
88	14	55	22	7.7	5.5	0.44	44	0.28	0.42	36.2											
80	13	50	20	7.0	5.0	0.40	40	0.26	0.39	32.0											
72	12	45	18	6.3	4.5	0.36	36	0.24	0.36	28.8											
64	11	40	16	5.6	4.0	0.32	32	0.22	0.33	25.6											
56	10	35	14	4.9	3.5	0.28	28	0.20	0.30	22.4											
48	9	30	12	4.2	3.0	0.24	24	0.18	0.27	19.2											
40	8	25	10	3.5	2.5	0.20	20	0.16	0.24	16.0											
32	7	20	8	2.8	2.0	0.16	16	0.14	0.21	12.8											
24	6	15	6	2.1	1.5	0.12	12	0.12	0.18	9.6											
18	5	10	4	1.4	1.0	0.08	8	0.08	0.09	6.4											
8	4	5	2	0.7	0.5	0.04	4	0.06	0.06	3.2											

TOXIC METALS

ADDITIONAL MINERALS

LEAD (Pb)	0.40	MERCURY (Hg)	0.04	CADMIUM (Cd)	0.03	ARSENIC (As)	0.01	ALUMINUM (Al)	1.00	NICKEL (Ni)	0.07	COBALT (Co)	0.10	MOLYBDENUM (Mo)	0.00	LITHIUM (Li)	0.01	SILICON (Si)	0.05
2.5	0.5	0.10	1.75	3.0	0.40	8.8	0.44	0.8	11.2										
2.0	0.4	0.08	1.40	2.7	0.35	7.7	0.38	0.7	9.8										
1.5	0.3	0.06	1.05	2.4	0.30	6.6	0.33	0.6	8.4										
1.0	0.2	0.04	0.70	2.1	0.25	5.5	0.28	0.5	7.0										
0.5	0.1	0.02	0.35	1.8	0.20	4.4	0.22	0.4	5.6										
0.40	0.04	0.03	0.35	1.5	0.15	3.3	0.18	0.3	4.2										
			0.35	1.2	0.10	2.2	0.14	0.2	2.8										
			0.35	0.9	0.05	1.1	0.10	0.1	1.4										
			0.35	0.6	0.03	0.7	0.07	0.0	0.9										
			0.35	0.3	0.02	0.4	0.04	0.0	0.6										
			0.35	0.1	0.01	0.2	0.02	0.0	0.3										

MIXED OXIDIZER

FAST OXIDIZER

SLOW OXIDIZER



(FIGURE 3)

2378

427

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SEX: _____ AGE: _____ DATE: _____ LAB NO.: _____ PATIENT NAME: _____ REQUESTED BY: _____ ORIENT ACCT. NO.: _____

NUTRIENT MINERAL LEVELS

122.00	10.00	9.00	2.00	0.70	7.20	0.01	14.00	0.04	0.01	11.00
CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (K)	IRON (Fe)	COPPER (Cu)	MANGANESE (Mn)	ZINC (Zn)	CHROMIUM (Cr)	SELENIUM (Se)	PHOSPHORUS (P)
192.00	34.00	35.00	19.00	4.90	1.30	0.03	15.00	0.05	0.05	11.00
129	20	86	34	11.9	3.5	0.38	38	2.0	0.50	54.4
128	19	80	32	11.2	3.0	0.64	34	2.3	0.57	51.2
120	18	75	30	10.5	7.5	0.90	30	2.5	0.54	48.0
112	17	70	28	9.3	7.0	0.58	28	2.4	0.52	44.8
104	16	65	26	9.1	6.5	0.32	26	2.2	0.48	41.6
96	15	60	24	8.4	6.0	0.48	24	2.0	0.46	38.4
88	14	55	22	7.7	5.5	0.44	22	1.9	0.42	35.2
80	13	50	20	7.0	5.0	0.40	20	1.8	0.39	32.0
72	12	45	18	6.3	4.5	0.36	18	1.7	0.37	28.8
64	11	40	16	5.6	4.0	0.32	16	1.6	0.35	25.6
56	10	35	14	4.9	3.5	0.28	14	1.5	0.33	22.4
48	9	30	12	4.2	3.0	0.24	12	1.4	0.31	19.2
40	8	25	10	3.5	2.5	0.20	10	1.2	0.18	16.0
32	7	20	8	2.8	2.0	0.16	8	1.0	0.15	12.8
24	6	15	6	2.1	1.5	0.12	6	0.8	0.12	9.6
16	5	10	4	1.4	1.0	0.08	4	0.6	0.09	6.4
8	4	5	2	0.7	0.5	0.04	2	0.4	0.06	3.2
3	3	3	2	0.7	0.5	0.04	2	0.4	0.06	3.2

TOXIC METALS

ADDITIONAL ELEMENTS

2.5	0.5	0.10	1.75	3.0	0.40	9.3	2.4	0.3	11.2
LEAD (Pb)	MERCURY (Hg)	CADMIUM (Cd)	ARSENIC (As)	ALUMINUM (Al)	NICKEL (Ni)	COBALT (Co)	MOLYBDENUM (Mo)	LITHIUM (Li)	SILICON (Si)
2.0	0.4	0.08	1.40	2.4	0.35	7.7	2.2	0.7	9.3
1.5	0.3	0.06	1.05	2.1	0.30	6.3	2.0	0.6	8.4
1.0	0.2	0.04	0.70	1.5	0.25	5.3	1.8	0.5	7.0
0.5	0.1	0.02	0.35	0.9	0.20	4.3	1.6	0.4	5.6
0.30	0.03	0.01	0.30	1.2	0.15	3.5	1.4	0.3	4.2
0.40	0.04	0.03	0.01	1.00	0.10	2.2	1.1	0.2	2.8

MIXED OXIDIZER FAST OXIDIZER SLOW OXIDIZER

TREATMENT

These forty-nine subjects were treated with a combination of factors emphasizing mental, chemical and structural elements. The chemical aspect of their treatment focused on supplementations and dietary alterations based on the research of Dr. Eck, Ph.D.⁽³⁾ Dr. Eck has researched minerals and their interrelationships in biochemical metabolism. The most interesting thing that Dr. Eck has done is in metabolic typing. Dr. Eck drew upon Dr. George Watson's idea of oxidation types⁽⁴⁾ to use hair analysis to type metabolism based on how that system oxidized glucose. This oxidation type is determined by the ratios of Ca/K and Na/Mg. (See Figure 4). Once the subject's oxidation pattern was known, then a diet could be devised to either speed up or slow down the metabolic process. Supplementation can be given to support the imbalances characteristic of each metabolic oxidation pattern.

Every three months, a comparative analysis was performed to monitor biochemical changes. At that time, the subject's supplementation and diet was sometimes altered.

All these subjects were initially found to be slow oxidizers. These subjects were given potassium, manganese and zinc to counteract the high calcium, magnesium and copper. Their diet was primarily high complex carbohydrates (fruits and vegetables), no dairy and very low fat. The reason for this specific diet is that dairy products with their high calcium content tend to slow down metabolism by their inhibitory effect on thyroid function.

The course of treatment showed several interesting points.

FIGURE 4

SLOW OXIDIZER

Ca/K.....greater than 4 to 1 - Hypothyroid

Na/Mg.....less than 4 to 1 - Hypoadrenal

FAST OXIDIZER

Ca/K.....less than 4 to 1 - Hyperthyroid

Na/Mg....greater than 4 to 1 - Hyperadrenal

MIXED OXIDIZER

Ca/K.....less than 4 to 1 - Hyperthyroid

Na/Mg....greater than 4 to 1 - Hypoadrenal

MIXED OXIDIZER

Ca/K.....greater than 4 to 1 - Hypothyroid

Na/Mg.....less than 4 to 1 - Hyperadrenal

All the subjects showed an exacerbation of their symptoms when treatment was started or within the first two months of treatment. Those twenty-nine subjects with the initial elevation of copper (Figure 1) showed the most acute detoxification symptoms (headaches, skin rashes, mental confusion, etc.). The eleven subjects who initially exhibited a low copper (Figure 2) but later showed an elevation of copper, actually had a deep copper toxicity. In other words, the copper was so deep in their system, that it wasn't detected initially on tissue analysis. The body appears to compensate in some cases for high copper by elevation of tissue calcium and magnesium. As these subjects were treated for four to six weeks, they would start to show the detoxification symptoms. Comparative analysis on these subjects at three months would show the calcium and magnesium tissue levels to have dropped, and the copper level to have elevated.

Kinesiological testing of these subjects showed interesting patterns. Those twenty-nine subjects demonstrating a pattern as Figure 1 showed systemic weakness upon testing when copper was placed on the tongue. Those eleven subjects demonstrating a pattern as Figure 2 showed no effects of copper initially when tested orally. However, as treatment persisted (4 to 6 weeks), then these subjects would show pronounced systemic muscle weakness, in manual muscle testing, to copper when it was placed in the oral cavity. In regards to this, I feel that the nervous system in some way compensates as the body compensates biochemically, so that a toxic substance may not show up as a problem until certain changes have been made in the body to allow detoxification. We know that excess copper is stored first in the liver, and then in the

brain.⁽⁵⁾ These subjects persistently showed a weak pectoralis major sternal. As the copper levels decreased, the pectoralis major sternal would hold strength. As these subjects detoxified, there would be periodic ileocecal valve occurrences and bouts of constipation. The menstrual cycle would change as treatment progressed. Initially the menstrual cycle would be very unpredictable, but as treatment progressed it would become more regular in frequency and duration.

The subjects, on the average, could tell significant improvement within a five month period of treatment. Those nine subjects who never showed a copper elevation responded very quickly and had less dramatic detoxification problems. Those subjects who demonstrated an initial elevation of copper (Figure 1) were the most difficult to treat. These subjects could not tolerate detoxification at a very rapid rate. Any detoxification reaction could be stopped when supplementation was discontinued.

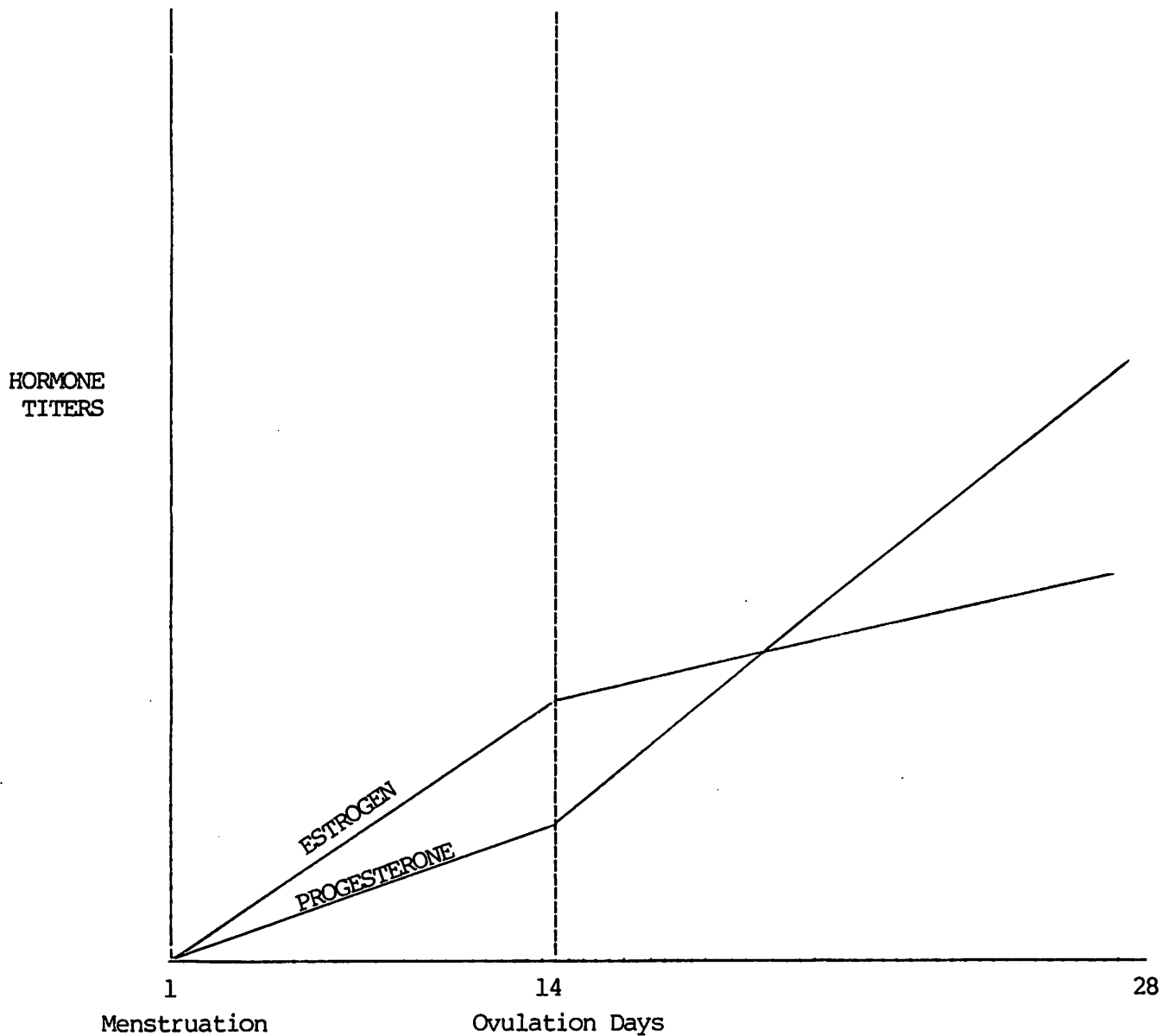
DISCUSSION

Schmitt⁽⁶⁾ discusses the normal menstrual cycle and its relationship to the estrogen/progesterone ratio. The normal menstruation cycle is 28 days with day 1 being the first day of menstruation, day 14 being the time of ovulation and day 29 the first day of the next menstruation.

As shown in Figure 5, from day 1 to ovulation or day 14, estrogen levels are elevating more rapidly than progesterone levels. After day 14, estrogen levels start to decrease while progesterone levels are elevating until menstruation starts again. This is the normal relationship of estrogen to progesterone.

These are several factors which affect the menstrual cycle by way of

(Figure 5)



their effects on female hormones. These factors include the liver, the large intestine and the thyroid. All steroid hormones are detoxified in the liver. This means that an excess of any steroid hormones is catabolized by proper liver function. If the liver is not breaking down excess steroid hormones, then the estrogen/progesterone ratio will be thrown out of balance, creating catastrophic effects on the menstrual cycle.

High estrogen has been associated with high copper in the literature.^(7,8,9,10) We also know that during pregnancy, with the levels of estrogen rising, there is also an elevation of copper and ceruloplasmin. The toxic effects of copper from intrauterine devices (IUD) has also been well documented.^(11,12) Some reference is made to local effects of copper on the binding of estrogen at sites on the myotrium estrogen binding protein.⁽¹³⁾

From this study, I feel the liver is the main problem. High copper is one powerful substance in creating liver dysfunction. This liver dysfunction results in an excess of estrogen or progesterone. This estrogen/progesterone ratio imbalance creates a disruption throughout the system. Restoration of normal liver function allows a homeostatic balance to be obtained in the estrogen/progesterone levels. Nine of the subjects in this study showed no toxic elevation of copper, however; they did show functional liver problems. In this study, those subjects with the high copper levels were the most difficult to treat and took the longest period of time for stabilization.

The oral administration of synthetic or natural progesterone is treating a symptom, but not the cause, of the problem. It would be much more natural to treat the liver than to try to replace something

which is low secondary to something else which is high.

The utilization of Applied Kinesiological techniques and the natural approach in the treatment and management of Pre-menstrual Syndrome allows the body to return to homeostasis. This approach cuts out the possibility of harmful side effects from oral hormones and gives the female patient answers to many bizarre symptomatic pictures put forth to the treating physician.

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How to use Index Medicus, MeSH and Medline

Gerard Poortinga, D.C.

The purpose of writing a paper like this is to share information. This is best done by being as simple and clear as possible. Despite this premium on brevity, a well-written paper also provides as much information as possible.

In scientific writing, papers begin with a "review of the literature," which is a brief description of other significant papers that have been published on the subject being discussed. The review not only helps inform the reader, it also shows that the author has done the work of becoming well-informed and is probably knowledgeable.

Becoming well-informed means finding and reading other papers on the subject of interest. Mountains of paper are present in modern-day society. It is not always easy to find the best papers on the subject desired.

To help solve this problem and simplify the task of becoming well-informed, the federal government has computerized an index that has been around a long time, Index Medicus. By visiting, calling or writing a scientific library, anyone can ask the computerized version, Medline, to be searched for papers on any subject desired. A small fee is usually charged.

The problem of being simple and clear must still be addressed. For instance, a paper like this one you are reading could also be called an "article," as appears in a magazine. It could also be called a "citation," since future authors may "cite" it. (refer to it.) Fortunately, the reference librarians who speak to the Medline computer are generally down-to-Earth and helpful. Still, if you request a Medline search, you may be asked how many "citations" (references to scientific articles) you want on your topic.

The reference librarian will need to know if you want all articles, even those written in a foreign language, or those in English only. Do you want a few pertinent articles, the most recent, or do you want to pay for an extensive list?

Index Medicus 2

To simplify the problem of language, the computer prefers to use the words printed in a book titled MeSH. (Medical Subject Headings) They may call it a "headache" in Ohio, a "migraine" in Las Vegas, and a "hum-dinger" in North Carolina, but the computer prefers to call it "cephalgia."

To avoid mountains of computer print-out, the trick in requesting a Medline search is to think of at least two terms that will probably both appear in the title or abstract of articles on the subject desired. For example, there are at least a zillion articles that mention "cephalgia." However, if you ask for articles that mention both "cephalgia" and "floride poisoning," only a certain type of citation would appear.

The other computer instruction is or, which means "synonym." It is used in case the author used a synonym in the title or abstract of an article.

A Medline request using both these instructions would be: Please give me articles on "cephalgia or headache or migraine and floride poisoning or floridation." As I said earlier, reference librarians are very helpful. In this example, a reference librarian would probably add "floride toxicity," especially if the search was not producing very many citations.

The print-out will give citations in the usual form: author. title. journal. year; volume (issue): pages. You can select the titles that sound good and go to a scientific library and read them, or send an assistant to get a xerox copy for you, or ask your local library to get them for you.

An even better way to make yourself well-informed on a subject is to search for articles using Index Medicus. This index is simply a big list, in the form of a yearly set of books, on all the articles published in the scientific journals. (A new book comes out every month during the current year.) Index Medicus is prominently located and easy to find in any scientific library, usually near the reference librarian. Articles are listed by subject in the "subject" section of Index Medicus, so that is where to look for articles on the subject of interest. The subjects are arranged alphabetically. A MeSH book is always close at hand to help find the best subject headings. A dictionary is usually easy to find if needed.

Index Medicus 3

Since a cumulated (whole year) Index Medicus has so many citations on some subjects, subheadings are used to make searching easier. English translations of the titles of articles written in foreign languages are put at the end, and in brackets.

The arrangement is really very simple. Just sit down, pull out the subject section of a recent year, and look up the subject you want. Just reading the titles of articles being published on a subject of interest is informative and enjoyable.

Another section of Index Medicus, used less often, is the author section, where articles are listed by author. There is another section that lists the names (and abbreviations) of all journals indexed. (Virtually all dental journals are indexed, but JMPT is the only chiropractic journal included.)

Yet another section, which is very handy, is the index of review articles. A review article is one that broadly discusses a subject, by someone who is particularly well-informed about what has been published on that subject.

Having obtained a list of the citations of articles whose titles sound good, the articles can be obtained. Writing down the journal, volume and pages is enough to get the article if that library has the journal cited. If the journal is not in that library, the author, title and year are also necessary to get a copy on interlibrary loan through that library, or through your local library. Scientific libraries are generally very courteous to all health care professionals.

One good recent review article can be very informative. Many articles are baloney, but may have good "review" or "discussion" and "reference" sections.

The information that is now being published will not be in textbooks for years. Reading some of the old stuff can be surprising.

What has been published is, by definition, what is scientifically "proven" on that subject, what is "known." On many subjects, very little has been published. Contributing to the published knowledge is a noble endeavor. Finding out what is there, the process of becoming well-informed, has its rewards. It can be enlightening.

CONCUSSION TECHNIQUES USED IN SPINAL THERAPEUTICS #1---X---Dr. L.E. Rarey, D.C.

ABSTRACT: These concussion techniques demonstrate a specific procedure that can be used as an adjunct to kinesiology methods.

DISCUSSION: Spinal concussion techniques have been used for many years in all of the therapeutic fields. The techniques to be discussed in this paper are but a few that are available (1) Further techniques will be discussed in future papers. The following techniques are based on the findings of Drs. Albert Abrams and George Starr White./ The explanation and conclusion of this paper will be a duplication of the first paper given in the summer 1982 meeting. The list of reflexes will be different as the reflexes are too numerous to put in one paper. The remainder of the reflexes will be listed in the 1984 summer meeting paper.

TO EVOKE: To evoke the reflex named, concussion is to be made on the tip or preferably, on both sides of the spinous process of the indicated vertebra. Successful elicitation of Sympathetic-Vagal reflexes through the stimulation of spinal nerves by concussion, depends largely upon the quality and rate of the concussion-blows. Instead of being delivered as dull thuds, the blows should be rebounding-and-sudden, and must be punctuated by sufficient pause to allow the influenced viscera time to recoil. An average of 60 strokes per minute seems to produce best results. Always adapt both the firmness and the rate of the concussion-blows to the degree of each patients reflex activity. Having selected the indicated spinous process, concuss for about five seconds, pause and equivalent period of time and repeat. The number of repetitions also is to be determined by the quality of the patients reflexes, but treatment on any given center should not be prolonged beyond two minutes, since over-stimulation produces sedation and finally exhaustion. Whenever two or more centers are to be concussed, pass alternately from one to the other, but avoid miscellaneous or immoderate concussion. Repeatedly consult the below list of reflexes, in order to constantly keep in mind what viscera are being influenced and how. Should any condition not listed be encountered, plan treatment according to the reflexes given. Otherwise concuss origin of nerve-supply to the affected parts. Vertebral concussion is by no means a panacea, but if intelligently employed, will prove a most valuable adjunct to any form of therapeutics. Such eliminative efforts as catarrhal or suppurative discharges must under no circumstances be thwarted by counteractive concussion. Painful symptoms should be palliated with discretion and caution---if at all for the suppression of pain leaves a false sense of security, and removes the incentive on the part of the system to rectify the causative condition.

CONSUSSION TECHNIQUES USED IN SPINAL THERAPEUTICS #2 CONTINUED---BY--L.E. Rarey, D.C.

TO EVOKE: In short, it interrupts the series of reflex arcs that culminate in "the struggle for existence." The most gratifying auxiliary methods in any diseased condition are those which aim at the promotion of compensation on the part of the eliminating organs. However, even these safe forms of symtotherapy should never lead to the neglect of such measures as will attempt to remove the underlying causes----both primary and secondary.

See following pages for conclusion.

CONCUSSION TECHNIQUES IN SPINAL THERAPEUTICS #2----BY---Dr. L.E. Rarey, D.C.

ARTERIAL SYSTEM

- ANEURISM-----6, 7 C
- NEUROSIS-----6, 7 C or 3-4 T.
- PARALYSIS-----6, 7 C
- SCLEROSIS-----10 to 12 T.
- SPASM-----10 to 12 T.
- Vaso-constrictors:
 - General-----6, 7 C
 - Splanchnic-----5, 8 T.
- Vaso-dilators:
 - Peripheral-----3-4 T.
 - Central-----10 to 12 T.

- ASCITES-----6, 7 C. 5 to 8 T.
- ASPHYXIA-----6, 7 C.
- ATAXIA, LOCOMOTOR-----6, 7 C. 10 T. 1-5 L.
- AUTO INTOXICATION-----6, 7 C. 1,2,3L. 4-6 T, 10 T.

BLADDER.

- Enuresis-----12 T. 5 L.
- Irritability-----12 T. 5 L.
- Prolapsis-----5 L.

BLOOD

- Anemia-----10 to 12 T.
- Chlorosis-----10 to 12 T.
- Leukemia-----1, 2, 3 L.
- Pressure, high-----10-12 T. 3-4 T. 6,7 C.
- Pressure, low-----6, 7 C.

CALCULI

- Biliary-----4 to 6 T. or 9 T.
- Pancreatic-----4 to 6 T. or 10 T.
- Renal-----6, 7, 10, 11 T. or 12 T.

CHILBLAIN-----6, 7 C

COLD EXTREMITIES-----6, 7 C

COLIC

- Biliary or Hepatic-----9 T.
- Gastric-----11 T.
- Intestinal-----11 T.
- Renal-----6, 7, 10, 11 T.

DEAFNESS (nervous)-----6, 7 C

DIABETES MELLITUS-----6, 7 C, 4-6, ICT. 1,2,3 L.

DROWNING-----6, 7 C.

EDEMA

Cardiac-----6, 7 C.
 Renal-----10 T.
 ERYTHROMELALGIA-----6, 7 C.
 ESOPHAGUS
 Neuroses-----6, 7 C.
 Spasm-----3-4 T.
 Stenosis-----3-4 T.

EYE

Amblyopia-----6, 7 C. or 3-4 T.
 Asthenopia-----6, 7 C. or 3-4 T.
 Congestion-----6, 7 C.
 Nervous affections-----6, 7 C.
 Pupil contracts-----6, 7 C.
 Pupil dilates-----3-4 T.

GOITER

Exophthalmic-----6, 7 C.
 Simple-----6, 7 C.

HEADACHE (SICK)-----5 T.

HEART

Angina Pectoris
 Cardiectatic-----6, 7 C.
 Cardiotoxic-----3-4 T. 10 to 12 T.
 Arythmia-----6, 7 C.
 Dilatation-----6, 7 C.
 Hypertrophy-----6, 7 C.
 Insufficiency-----6, 7 C.
 Myocarditis-----6, 7 C.
 Palpitation-----6, 7 C.
 Senile-----10 to 12 T.
 Spasm-----10 to 12 T. 3-4 T.
 Stonosis-----10 to 12 T.
 Tachycardia-----6 to 7 C.
 Weakness-----6 to 7 C.

HEMORRHOIDS-----3 to 5 L. Sacrum

HYSTERIA-----6, 7 C.

INTESTINES

Appendicitis-----11 T.
 Colic-----11 T.
 Constipation
 Atonic-----1, 2, 3 L.
 Spastic-----11 T.
 Nervous-----11 T. 1, 2, 3 L.

Enteralgia-----11 T.
 Enteroptosis-----6, 7 C. 7-8 T. 1, 2, 3 L
 Hemorrhage-----5-8 T. 1,2,3 L.
 Indigestion-----4-6, 10 T.
 Neurosis-----6, 7 C.
 Obstruction-----11 T.

THE LASER BEAM

Therapeutic effect on reflex points

by MARIO A. SABELLA D.C.

ABSTRACT: This is a preliminary report in an experiment designed to study the effects of the laser beam and its potential use in Applied Kinesiology procedures.

The foundations of light therapy are briefly discussed, as are the fundamentals of laser. The difference between laser and normal light are pointed out, as well as the effect of the laser on biological systems. Conclusions are drawn as to the clinical applications of the laser beam in the treatment of reflex points.

INTRODUCTION

Experiments by various researchers regarding the use of laser therapy in acupuncture are well documented. This report discusses the preliminary results obtained from the use of the laser beam on neurolymphatic and neurovascular reflex points.

Biological effects of light -

Looking back in history, the favourable effect of sunlight on certain disorders was already well known to physicians of ancient Greece. In modern times light therapy has been used in the treatment of several conditions, as the connection between light of a certain wavelength and biological effects was being understood.

The pre-requisite for a biological effect of light is the absorption of energy. Non-absorbed light, that is, light transmitted by reflection has no effect. The most significant

The laser beam

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biological effect occurs as a result of active absorption. In certain cases where the number of absorbed photons is decisive in releasing a reaction the process is independent of wavelength, e.g. heat dependent reactions. However selective absorption results in resonance. Here the energy levels of the photons correspond to the energetic levels of the absorbing material. On the molecular level, different elements or compounds have different absorption characteristics depending on the energy of the photons (color), they are subjected to.

On the surface of the body, the structure of the skin determines the optic behaviour to a large extent. Ultraviolet light is absorbed in the uppermost cell layers. The permeability then increases as the wavelength increases, reaching an optimum value in the red range between 600-800 nm. This is because only light in this range reaches the deeper lying capillary network, with absorption declining past the 800 nm wavelength.

According to a study by Nueckel, Schreiber, Rajewsky and Langdorf, in addition to its general effect, light of the perceptible red spectrum has a direct action on the neural terminal network of the skin hence its influence on the autonomic nervous system, both sympathetic and parasympathetic.

The fundamentals of the laser -

The laser beam differs from normal light in the following characteristics: (1) intensity (2) monochromatism (3) alignment and (4) coherence. The intensity of the laser light is reduced by the tissue that is being irradiated, as well as the depth of travel. As the intensity of the laser increases, the following sequence of events occurs:

(1) linear absorption (2) thermal effects (3) photochemical effect (photosensitizer) and (4) dielectric breakdown at highest energies.

The laser beam
Sabella page 3

Pre-requisite for selective absorption is that the wavelength of the irradiating light is suited to the absorbing material. Fluorescence, breakdown into small molecules and or temperature rise may occur. A photosensitiser is a molecule which has a maximum absorption in the wavelength of the irradiating light and transfers the absorbed energy to an acceptor molecule. This usually results in oxidation.

EXPERIMENTAL PROCEDURE

For the purpose of this experiment a neon-helium laser with a 5 mW was used. The transmitted beam has a wavelength of 632 nm. After a reduction of intensity from the beam's travel through the photoconductor cable to the applicator tip, it is estimated that the actual output of the beam is about 2 mW.

Four groups of ten patients each were selected at random. The main criteria to be determined were the effects of laser beam irradiation on neurolymphatic and neurovascular reflexes, and the importance of the time factor in achieving consistent therapeutic results.

The need for stimulation of reflex points was firstly determined by therapy localisation and testing of appropriate muscles, in the standard fashion. Once the points were found on a particular patient, some were irradiated by holding the tip of the probe in light contact with the skin while others were done with the probe held at a distance of a few millimeters from the skin. This was done to determine the possibility of results being affected by mechanical stimulation of skin receptors. All points were rechecked using therapy localisation and muscle testing, after therapy was administered.

The laser beam
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The four groups of patients were treated for 15 seconds, 30 seconds, 45 seconds and one minute respectively. To minimise the possibility of enhancement therapeutic effect, two neurolymphatic and two neurovascular points were chosen on each patient. One NL and NV points were irradiated using skin contact with the probe while the second set of points were done with the probe held away from the skin. The following results were obtained.

Irradiation time (seconds)	Positive response(# of patients)	
	NL	NV
15	5	7
30	8	9
45	10	10
60	10	10

No unusual effect from direct skin contact of the probe was observed.

CLINICAL RESULTS

For the last six months we have been using the laser beam for the treatment of neurolymphatic and neurovascular reflex points, in addition to the classic electro-dermal points. Results have been consistent and rewarding. In fact some patients who had a tendency to have frequent recurrences of reflex point involvement, showed no recurrence after a maximum of three treatments using the laser. In addition we have the added benefit of a non painful technique and the response from patients with a low threshold for pain has been very enthusiastic.

Results of this experiment were communicated to two other colleagues whose independent clinical results over the past three months have been consistent with ours.

The laser beam
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CONCLUSION

From the foregoing results it seems that an irradiation time of 45 seconds on a reflex point is adequate. Since at this point in time we do not have any practical method of measurement to determine the optimum time needed for individual cases, a 45-60 seconds figure should be adequate. Future research will be directed towards finding a practical method of measuring the effect of and optimum irradiation time necessary to obtain maximum benefit from laser therapy.

In the meantime I feel that we may have a tool that could be of great value both therapeutically and acceptability to the patients (especially due to its painless application).

INSPIRATION AND EXPIRATIONCRANIAL FAULT SCAN

Julius L. Sanna, M.S.,D.C.

Abstract: The observation of inspiration and expiration cranial patterns determined by respiration challenge.

The procedure employed and generally accepted in applied kinesiology has been to therapy localize cranial faults and challenge them individually. It has long been observed in applied kinesiology that cranial faults of inspiration and expiration can be assisted by having the patient place their tongue to the roof of the mouth during nasal inspiration and to the floor of the mouth during nasal expiration. Therefore, I felt if this mechanism could assist in correction, it was then possible to challenge and determine if, in fact, a cranial fault of this variety did exist.

METHOD:

The patient is instructed to place their tongue at the roof of the mouth while inspiring and then an intact muscle is challenged (usually the pectoral clavicular) while pinching the muscle prior to the actual test. This is a direct test for cranial inspiration faults.

The second phase of the scan would be to have the patient place their tongue on the floor of the mouth during nasal expiration and once again challenge an intact muscle and pinching prior to testing.

Inspiration & Expiration
Cranial Fault Scan (continued)

Page -2-

PROCEDURE:

If this method does indicate a positive response in either phase, then proceed to identify the specific cranial fault by challenging in the usual applied kinesiology procedure for an inspirational or expirational pattern.

CONSLUSION:

The general examination should allow us to direct our attention to specific areas of evaluation and yet be inclusive for detailed observations when necessary. I feel that after having consistently reproduced this scan and cross referencing it with the usual applied kinesiology procedure, that this method would enhance our present procedure.

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Goodheart Published Papers
Personal clinical observation

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THE CRANIAL-SPINAL TORQUE PATTERN

by

Walter H. Schmitt, Jr., D.C.

and

Stephen C. Tolen, D.C.

ABSTRACT : The entire cranial-spinal mechanism, from the mastoid processes down to the sacrum, can become involved in a compensatory torquing pattern, as the result of a subluxation (or occasionally a fixation) of one (or two) vertebra(e). This cranial-spinal torque is identified by simultaneously challenging cephalward on one side/ caudalward on the other. Challenging the mastoid processes, PSIS's, and all but one vertebra will cause indicator muscle weakness. The one vertebra which does not challenge in this torquing manner is termed the "trigger vertebra." It should be challenged and adjusted in the standard fashion. Correction of the subluxation (or fixation) corrects the compensatory cranial-spinal torquing pattern throughout the spine.

An interesting pattern emerged over three years ago which has become a fundamental clinical tool to be used on most patients and which may represent a basic link in the relationship of the neuromusculoskeletal system and the body chemistry.¹ The cranial-spinal torque pattern was first observed when one of the authors (ST) was examining the other (WS). Dr. Tolen had found it necessary to correct an upper cervical fixation on Dr. Schmitt on several recurrent occasions.

There is an established relationship between upper cervical fixation and the universal (intraosseus) cranial fault pattern.² Universal cranial faults may cover up hidden upper cervical fixations. Correction of the universal cranial fault will sometimes expose a hidden upper cervical fixation and gluteus maximus weakness. Similarly, a recurrent upper cervical fixation may be caused by the universal cranial fault. Dr. Tolen reasoned that this might be the case in this instance. A universal cranial fault was found and corrected with the spontaneous strengthening of the gluteus maximus and correction of the upper cervical fixation. However, this same pattern of upper cervical fixation (bilateral gluteus maximus weakness) and universal cranial fault also recurred on several occasions.

Dr. Tolen felt that the recurrence of the universal cranial fault challenge (cephalward on the right mastoid process and caudalward on the left) might have recurred due to still another underlying structural fault. Because of the Lovett Brother relationship of the innominate bones to the temporal bones during respiratory function, Dr. Tolen challenged the posterior superior iliac spines (PSISs) in the same directions as the positive challenge on the mastoid processes (i.e., simultaneously cephalward on the right PSIS and caudalward on the left PSIS). Weakness of an indicator muscle was observed.

Further challenging elicited an interesting pattern which we now call the cranial-spinal torque. Challenging on an individual segment in a similar fashion - that is, cephalward on the right and caudalward on the left - weakened the indicator muscle. Challenging groups of several vertebrae up on the right and down on the left also produced indicator

muscle weakness. This pattern was observed from the mastoid processes all the way down to the PSISs EXCEPT at one segment. This vertebra, now termed the "trigger vertebra," was individually challenged and adjusted in the standard fashion with the result that the mastoid process challenge (universal cranial fault) was corrected, the spinal and PSIS challenge was corrected, and the upper cervical fixation and bilateral gluteus maximus weakness was corrected. It appears that one specific subluxation (or fixation) will be of such primary importance that the entire cranial-spinal and pelvic structure will compensate to it in a torquing (up on one side - down on the other) pattern.

Since that time, the cranial-spinal torque as a compensatory pattern has been checked for and observed thousands of times by a simple challenge cephalward on one side/caudalward on the other along the course of the spine until challenging one group of vertebrae does not weaken the indicator muscle. Within this group, each individual segment is then challenged in the same up on one side/ down on the other pattern until one (occasionally two) segment(s) is found to be negative to this challenge pattern. This segment is called the "trigger vertebra" since it triggers the torquing pattern in the rest of the spine. This trigger vertebra is then challenged through all normal ranges of motion and corrected in the direction which produces weakness. Occasionally, two vertebrae may be involved, and these vertebrae are usually found to be fixated in the usual applied kinesiology sense of the word.

Adjusting the trigger vertebra corrects the entire cranial-spinal torque pattern. The trigger vertebra may be anywhere in the spine from the atlas to L-5. No consistent pattern of any particular segment has stood

out during the three years of checking for this phenomenon. On rare occasions, the PSISs will not show positive challenge and the mastoid processes and the entire spine will challenge in the cranial-spinal torque pattern. In these cases, the sacrum acts as the trigger vertebra. Sometimes, this pattern correlates with a Yaw #2 pattern described by Goodheart³ and Walther, but this has been seen so rarely that it has not been significantly correlated.

Another rare pattern is when the entire spine (including the PSISs and the mastoid processes) challenges in a cranial-spinal torque pattern and no trigger vertebra is found. On these occasions, a sphenoid tilt cranial lesion has been found via the naso-sphenoid challenge technique.⁴ Correction of the sphenoid tilt in these cases abolishes the entire cranial-spinal torque from mastoids to PSISs.

Identification and correction of the cranial-spinal torque pattern has been extremely useful in eliminating recurrent fixation and subluxation patterns in our patients. Any time you must correct a fixation or subluxation more than once or twice, the cranial-spinal torque pattern should be investigated in order to determine the trigger vertebra which may be causing the adaptive spinal pattern. It has become a top priority procedure in our examination and treatment of patients, since many secondary or compensatory faults disappear automatically upon adjustment of the trigger vertebra.

It is possible, and in fact, probable, in difficult cases, that several patterns of cranial-spinal torquing may be superimposed one upon another. In these patients, correction of one trigger vertebra subluxation will result in another cranial-spinal torque challenge in the same or

opposite direction. Some of the possible reasons for this will be discussed in the accompanying paper.¹ When no cranial-spinal torque pattern is present, identification and correction of fixations and subluxations proceeds in the standard fashion.

PROCEDURE : (patient prone)

1. Challenge cephalward on the right and caudalward on the left :
 - a) on the mastoid processes
 - b) on the PSISs
 - c) over the transverse processes of the entire spine in groups of three or four vertebra.
2. If no weakness is found in 1 a), b), and c), challenge cephalward on the left and caudalward on the right as in 1 a), b), and c) above.
3. Identify one group of vertebra which does not produce weakness on the cranial-spinal torque challenge. Challenge each segment in this group until one vertebra is found which does not cause weakness on challenging. This is the trigger vertebra.
4. Challenge and adjust the trigger vertebra in the usual fashion.
5. Recheck cranial-spinal torque pattern as in 1. and 2. above, to verify correction.

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- ⁴IBID, p. 46.

AN OBSERVATION: RELIEF IN ROOT CANAL SURGERY

by

Raymond A. Seugling, Jr., D.C.

ABSTRACT

It was observed that therapy localization of K27 and the neurolymphatic areas of the cervical flexors caused a strong indicator to weakness in cases of recent root canal surgery.

DISCUSSION

In an attempt to aid a patient in misery just following root canal surgery, I began searching for some form of help. I found that the patient therapy localized to K27 and the cervical flexors unilaterally. Extensive digital stimulation provided relief, it is felt, due to increased lymphatic drainage in the neck region.

I started testing patients with recent root canal work over the next few years. Although this does not represent a large number of cases, the results are interesting. A therapy localization to either of the areas does have other meaning -- namely an acupuncture problem or a "51 per center." But, it was interesting to note that the TL usually occurred on the side of canalization and if it didn't, the patient would demonstrate it on the other side and was switched. Some attempt was made to observe any history of acupuncture or cervical flexor involvement in these patients. But, it was

Page 2 AN OBSERVATION: RELIEF IN ROOT CANAL SURGERY
Raymond A. Seugling, Jr., D.C.

felt that this was of marginal value, due to the fact that they could have the problem now. Usually the patient only exhibited unilateral rather than bilateral weakness. Finally, the results appeared to be helpful to the patient when stimulation of these two areas provided varying degrees of relief in hours. It is my feeling that in this situation K27 is really an expansion of the NL activity of the cervical flexors as opposed to an acupuncture effect.

CONCLUSION

Digital neurolymphatic stimulation of the K27 and cervical flexor NL areas on the side of root canal involvement appear to be helpful in providing relief of root canal swelling and related symptoms.

QUICK RELIEF FROM ACUTE MUSCLE SPASM

by

Raymond A. Seugling, Jr., D.C.

ABSTRACT

Simple, quickly performed hyperextension of a muscle or muscle group provides immediate relaxation of acute spasm.

DISCUSSION

Dr. Goodheart's observation that most muscular imbalances are a result of weakness rather than of muscle spasm is well known. Needless to say, this is predominantly what is seen and treated in the applied kinesiology practice. Further, the use of golgi tendon and spindle cell technique for hypo or hypertonicity is readily understood. In weakness the origin and insertion of the muscle is pressed towards each other, using 4 or 5 pounds of pressure. This stimulates the golgi tendon apparatus. The belly of the same muscle is spread apart to stimulate the spindle cell mechanism. In the hypertonic muscle, normalization is achieved through pushing the origin and insertion away from each other while approximating the belly of the muscle.¹

However, patients will complain of occasional acute muscle spasm. By this I am not referring to persistent intermittent or chronic spasm. These deserve more detailed investigation. Acute cramping is particularly seen in athletes. The waste products of metabolism and muscle fatigue send the

muscle into acute spasm. This is seen in the occasional skier (once or twice a year) or occasional jogger, weekend once a year softball player and so on.

If a patient brings this to your attention, you can advise him of this simple procedure for immediate relaxation of the spasm. By placing the muscle in its hyperextended state, the spasm will immediately dissipate. For example, a hamstring cramp will immediately relax if the thigh is flexed on the abdomen or performing thoracolumbar flexion (bending over). This is probably seen on every soccer field on any given day. But, this can be utilized for nearly any other muscle, particularly the extremities. A quadriceps spasm, usually seen in the occasional skier, will relax quickly hyperflexing the lower leg and holding the heel firmly against the buttock. A spasm of the gastrocnemius or soleus is easily and rapidly relaxed by dorsiflexing the foot.

CONCLUSION

Hyperextension of a muscle in acute spasm is one method of rapid relief. Patients who describe having an acute spasm can easily be taught this method of immediate relief for future occurrences.

¹Goodheart, George, Applied Kinesiology, Workshop Procedure Manual, 1975, privately published, P 45

THE USE OF LIGHT TO INCREASE SPINAL FLEXIBILITY

By Sheldon A. Sinett, D.C.

Joseph K. Askinasi, D.C.

Abstract:

The concentration of white light to the glabella for one minute will increase the flexibility of the spine as well as increase the flexibility of the hip joint.

It has been established that "vertebral fixation is a muscular locking together of multiple vertebrae, almost always three in pattern." The subsequent correction of fixation has not only shown a relaxation of spinal structure and re-establishment of neuro-muscular strength, it has also shown that spinal fixation and the degree of freedom of the hip joint are indirectly related; as the degree of spinal fixation increases the degree of hip freedom decreases, the opposite also holds true.

Diagnosis of spinal fixation is determined by special muscle patterns:

Occipital Fixation.....Bilateral Psoas

Upper Cervical Fixation..... Bilateral G. Maximus

Lower Cervical Fixation..... Bilateral Popliteus

Cervico-Dorsal Fixation..... Bilateral Deltoid

Dorsal Fixation..... Bilateral T. Major

Lumbar Fixation..... Neck Extensors tested together Bilaterally

Sacral Fixation..... Neck Extensors tested individually

Following the procedure we check for pitch, this is done prior to any correction. At this time we employ the fixation technique set by Dr. Sheldon Deal. The patient concentrates on a black object, preferably black paper, held close enough to fill his/her visual field. If a strong indicator weakens a fixation is present. Using flexibility as a parameter, the patient

will attempt to touch their toes and the results marked. The doctor will then abduct the extended leg to a point of most resistance bilaterally and mark the results.

Once the parameters have been established: 1.) Black visual field strong to weak indicator. 2.) Degree of forward flexion. 3.) Degree of abduction, the corrective procedure is applied. Using a pen light, bright light, direct the beam at the glabella for approximately one minute. The source of light should be within 1 inch of the glabella, it is unnecessary for the patient to look at the light. Upon completion, the parameters are re-tested and the increase of hip range of motion recorded.

After this procedure if you are not satisfied with the range of motion recorded, check for pitch and correct accordingly. It has been our experience that a greater degree of flexion will be achieved. We do this procedure only if the light hasn't corrected the pitch pattern.

The advantage of the light technique is that the patient may actively participate by using a light out of the office prior to athletic activity or average daily work. Use of the light will aid in recovery and maintenance of flexibility.

An hypothesis as to what is being stimulated to lead to correction involves the pineal gland. The gland has been called "The Third Eye" of the body. Using light sensitivity of the skin over an area receptive to the pineal gland, i.e. glabella, the gland is stimulated and may, in fact, aid in the production of hormones which will act to relax spinal and/or hip muscular and ligamentous adhesions. At present, we are using the light and finding correlation to pineal involvement. Structural correction and nutritional support are being applied, final results have not been examined.

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Holographic Memory And Therapy Localization

By: Paul T. Sprieser, B.S., D.C.

Abstract: the connection of the
Holographic Memory Theory to
The explanation of Therapy
Localization Phenomena.

We have been concerning ourselves with the mechanism of Therapy Localization for the past seven or eight years.

I did a paper in 1979 on the pathways of Therapy Localization which showed the connections and regions of the brain that this process would most likely occur over.

Since that advent of the Holographic Memory Theory and its connection to right and left brain activity, and now front and hind brain activity; it has become more apparent to me that the pathways and mechanisms are more likely associated with this theory than any other synaptic connection.

As Dr. Goodheart points out in the 1982 Research Manual. on page 69 That Pibram work and the connection of the work on motion by Bernstein in the 1930 using the same method of describing motor-activity as Chm. George Simon Ohm and suggested that the brain cell in the auditory system are frequency analyzers for sound, and that the same mathematical principle that Gabor had used to invent the hologram.

Pribrams said that " if Bernstein can do a Fourier analysis on the movements why can't the brain do it, and if his brain can do it, so can mine, and perhaps this is the way everybody's brain analyzes movement into their frequency components".

Then if this principle was right then maybe "touch, sight, sound, taste and smell all are hologramic representations, and the brain literally receives them that way and does a Fourier Transform measuring the crest of the wave components on the impulses that are received, and then acting on them.

In Sir John Eccles work he states "that when synaptic potentials, that the brain exchanges between brain cells don't occur alone. Every time an impulse comes, every nerve branch get a message that goes down the branches. Sort of a ripple or a wave front is formed, something like the "pebble dropped in the pond idea". When other wave fronts intersect and set up an interference pattern similar to the vactory of the ripples that form when pebble are thrown into a pond.

To find out, Stanford University's Dr. Karl Pribram began cutting out parts of the cerebral cortex in monkeys in order to study the effects of the operation on the monkeys' ability to open a complex latchbox containing a peanut reward. Pribram discovered that unilateral or even bilateral, removal of the monkeys' motor cortex failed to destroy their learned ability to open the box. Instead, the time required to carry out the task doubled or even tripled. But the most illuminating aspect of the experiment came from studying slow motion movies of the monkeys' postsurgical movements. In all cases, Pribrams failed to observe any impairment of any movement or sequence of movements. In a phrase, the defect created by removing the motor cortex was task specific, not muscle or movement specific. "Neither muscle nor movements are present as such in the cortex" says Pribrams. "Instead, action with specific outcome are represented".

This conceptual breakthrough that acts, not movements or muscles, are represented in the brain provides an explanation for a long standing puzzle: how is it that a person can perform the same act in a variety of different ways? If the brain is organized around muscle movements, there should be only a limited number of ways to carry out a particular action. Instead, as we know, our actions can be carried out in an almost infinite variety of ways which draw on different muscle patterns.

Pribrams said, "It seemed plausible to me that if there are interfering wave fronts from the brain, that those fronts might have the same properties as the hologram. Both the hologram and the brain tissue can be cut up without it ruining the image-processing capabilities. Holograms are resistant to damage, like the memory in the brain. The persistent puzzle of a distributive memory might therefore be solved bringing the head to behave in part like the hologram.

Pribrams: Once we saw where to look it became clear that on test that could readily be made was whether the behavior of single cell in, for instance, the visual system would obey the mathematical laws that comprise hologram. The physical hologram stores the interference pattern of light reflected from objects. Therefore the question become whether those cells of the brain respond to the interference pattern sensory input. In short do they act as frequency analyzers: that is, do the cells resonate to different frequencies".

As Dr. Goodheart states on page 71 of 1982 Manual " it is just as if you have a microdot of your spine or your pelvis or your upper cervical atlas or axis in three dimensions. That is our hologramic "Perfect Picture". If that microdot in three dimensions doesn't fit your actual physical sacroiliac joint or your physical atlas-axis,

you have something similar to a parallax.

So when a patient localizes an area, take for example the iliocecal valve and there is a problem present. A wave front is created from the skin over laying the structure back to the post central gyrus region from the trunk. Sensation of touch must also be sent back from the region of McBurnies point. When both arrive back at the somatic-sensory region of the brain they would certainly be a ripple or wave front formed and an interference pattern set up.

Since Dr. Pribrams idea that memory is not cell specific but rather action or task specific it certainly would be compared to the normal memory pattern present which would differ from that of the localized area and cause a muscle weakness in the test muscle.

Holographic memory also gives explanation for the more elaborate methods to bring out hidden problems, such as E.I.D., Temporal Tap, Cerebella Therapy Localization, etc. Since the pathways are all present by the storage of the memory is in the entire brain structure is a holographic form.

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CHANGES IN THE DELIVERY OF HEALTH CARE

By

John F. Thie, D.C.

The International College of Applied Kinesiology is a group that is on the leading edge of health care delivery. I believe it needs to think about what is happening in the way that Health Care will be delivered in the future. The majority of members of this group have been chiropractors. The chiropractic profession has been one of the leading alternative health care delivery mechanisms. Chiropractors have been inhibited in their use of new and different approaches to enhancing the health of the public due to the restriction of the medical practice acts. We members of the ICAK who are chiropractors, or others having limited licenses in the jurisdiction where they practice have not been able to avail themselves of the methods that have been developed in Applied Kinesiology due to the restrictions of the medical practice acts of the states which they practice.

In California, for the past three years or more, there has been a study going on which may affect, in the future, the practice of Applied Kinesiology to a great extent, if the changes which may be recommended by the Board of Medical Quality Assurance (the former board of Medical Examiners) to the state legislature are passed into law. I believe that we as a group need to look at the proposed changes and formulate policies which will be in the best interest of the health of the people of the world as well as our own.

I have personally written and spoken about how I feel that the health care licensing laws are not accomplishing what the public assumes they should accomplish, when monopoly has been given to groups of health care practitioners. The medical doctors are the majority and they freely admit when confronted privately and in some cases publicly, that the true purposes of the laws have not been met.

What are the true purposes of the medical practice act and other health care licensing acts? It is to eliminate unqualified persons from practicing their professions and to stop unethical practices from taking place. This certainly has not been accomplished. In fact, the very opposite seems to have taken place. When I have spoken to individual chiropractors about this problem and dentists and clinical psychologists they also agree that the boards are unable, even if willing, to be able to police their professions to keep out the unethical, dishonest and incompetent. Harm is done to patients by the licensed professional and the remedies seem at best to occur in the civil courts rather than in the boards of examiners.

The study committee has written a report which can be summarized as follows. The legislature to redefine medicine as follows that "only physicians will be authorized to engage in the use of surgery, prescribe controlled drugs, use ionizing radiation, apply instrumentation beyond bodily orifices, and provide a medical diagnosis. These procedures would be considered the "practice of medicine."

Narrowing the definition of the practice of medicine would expand the range of activities/procedures which could be performed by state license practitioners such as nurses, physician assistants, chiropractors and others. The act would remove the current prohibition against unlicensed practitioners such as midwives, herbalists, nutritionists, and naturopaths who would become Registered Health Practitioners (RHP).

In order to combat fraud and to enable consumers to make informed choices, RHP's would be required to give consumers a Disclosure that describes their training and the techniques they practice. Consumers would sign a Consent to Treatment form which summarizes the services to be provided and declares that the State of California assumes no responsibility for the training or competence of the RHP.

This proposal in my opinion will, if passed, have great effects on the ICAK. It will be changing the area of responsibility to a great extent to the consumer for the choices that the consumers will make for the type of practitioner they choose. It will also create new types of practitioners, which have been proliferating for the past several years in this country and others. Some of the practitioners we have studied as members of the ICAK are Alexander teachers, Rolfers, Traeger practitioners, Heller practitioners, Homeopaths, Naturopaths, Acupuncturists, Feldenchrist teachers, to name only a few of the better known practitioners and methods that have been discussed at our meetings. These proposals have a broad base of support and I expect that because of the disaffection the medical profession has been having with the general public and the strong governmental pressures to reduce the cost of health care that this if passed in California will spread rapidly across the U.S. This opening up of health care to alternatives will create more competition. It is being promoted under the concept of "health democracy" which refers to "a system which enables citizens to participate in the decisions about their own health care. Active participation in the decisions and in the therapies that affect one's health is in itself therapeutic. Although the decisions that some people make may be different from those of the majority, democratic forms of government respect the rights of the minority. To prevent the government from over extending its power, there are and there must continue to be laws that grant citizens the right to make fundamental and personal decisions in their own lives. Since health is an intrinsically personal issue, the government should limit its role to providing information to citizens to help them make the best choices. This health democracy approach protects the individual's constitutional right of privacy and fosters self-determination." (From Coalition for a Health Democracy newsletter.)

You may recognize in the above argument that it sounds familiar to you from many standpoints. I believe that it is an issue whose time has come and one which all of us should confront and support.

In the report, which is available from the California Board for \$5.00, the following statements are made:

"ON PHYSICIANS

For licensed physicians themselves, little would change. The proposal would make no change in the requirements of education, examination, licensure or scope of practice. The significant change for physicians would be that they no longer would have exclusive right to practice numerous activities which currently are reserved to them by Section 2052.

ON OTHER LICENSED HEALTH PROFESSIONS AND OCCUPATIONS

The biggest impact on currently licensed health practitioners would be to remove certain statutory constraints on their scopes of practice. This proposal would not change any of the requirements for licensure of other occupations, and those would continue in force. However, if a licensed practitioner performed some act which now would be considered a violation of Section 2052, it would be illegal only if it fell within one of the prohibitions proposed. The only limitations on their ability to provide treatment would be specific prohibitions within their own practice acts.

ON UNLICENSED "ORTHODOX" OCCUPATIONS

Under current law, many activities commonly done by unlicensed employees in hospitals, clinics and nursing homes are technically illegal. Such groups as hemodialysis technicians, respiratory therapist, operating room technicians, orthopedic technicians and many others are performing diagnostic tests, treatment, and patient care activities which are subsumed under the existing prohibitions of Section 2052. By removing those prohibitions, hospitals and

other employers would gain the flexibility to train and utilize technicians efficiently without concern that they may be violating the law.

ON UNLICENSED "UNORTHODOX" OCCUPATIONS

The biggest change for unlicensed practitioners will be decriminalization of their activities. They would no longer risk arrest for practicing medicine (i.e. violating Section 2052). The proposal does not give them freedom to practice without regard for patients, other practitioners or the government. In return for the privilege of being permitted to practice openly, they would be compelled to disclose fully and honestly what credentials - if any - they have to practice, what they propose to do to or for patients, and that the state makes no guarantees that they are competent to do anything at all.

For those few who are truly bent on gulling the public, the need to come out of the shadows, expose their qualifications or lack of them, and be subject to discipline for their activities, may control to some extent the harm which is caused.

ON PATIENTS

The argument has been raised frequently that the poorest, least educated, and (presumably) most gullible, would become the victims of charlatans preying on their (assumed) weakness. That argument is not supported by any evidence that we are able to discover. The most critical determinant of who cares for the poor is money. That money comes from two primary sources: Medicare and Medicaid (Medi-Cal). It is unlikely that either of the governmental insurers would radically alter its standards for payment to include "unorthodox" practitioners who are not licensed, since both programs may legally pay only for services which are accepted medical practice. The same would be true for private insurers. Absent reimbursement, the truly poor would have limited ability to pay for alternative care, although some practitioners are willing to accept low fees or barter for their services.

A frequent argument for opposing alternative health practices is that patients will be harmed by the treatments. There is no doubt that there would be serious incidents brought on by such care, and that there will be occasional deaths. It must be remembered, however, that patient injury and wrongful death occur in the current system and the law has not been able to eliminate it. The state generally learns about illegal practice only at the point when disaster strikes, when someone dies or is badly harmed. If the practitioner is unlicensed, then the state must rely on local civil or criminal courts to prosecute. By registering practitioners, the state would know who and where they are, and may be able to intervene to prevent recurring harm.

There are traditional healers in other minority cultures in the state who will continue to treat their counterparts surreptitiously regardless of whether the state permits them to or not. The proposal described above would decriminalize their activities. It would not greatly affect who those practitioners treat, nor will it change the nature of their services.

ON HEALTH FACILITIES

The next few decades will undoubtedly bring an acceleration of technological change, just as the past three decades have done. Not only do physicians rely on technical experts to operate and maintain the machines, they usually have only superficial knowledge of how they work. Certainly, it would be absurd to maintain that only physicians should be allowed to use these tools, to analyze and interpret the information they generate, and make decisions about that information. Physicians inevitably will have to rely on the knowledge and judgement of unlicensed technicians who are trained and skillful in the new technologies.

This proposal would give hospitals a clearer legal basis for training and utilizing support staff to meet the needs of the institution and the community."

-7-

As you can see from the report the term diagnosis is now being modified to being medical diagnosis and other diagnosis. This has significant impact upon the way that we as Applied Kinesiologists will need to look at what we are doing. I bring this to your attention because I feel that now is the time to start to think and act on these issues. It is my strong opinion that the California BMQA has done a great job in coming up with a solution to the health care crisis which is facing our country. I urge you to lend your support to these changes taking place throughout the country and limiting what is considered the practice of medicine to allow the knowledge of how health can be obtained to greater numbers of our people.

* * * * *

DOES STRESS INFLUENCE THE BODY'S IMMUNE SYSTEM?

by Otis F. Thomas, D. C.

ABSTRACT:

According to Dr. George Solomon, a researcher of stress at Stanford University, you are more likely to avoid cancer if you don't mask your emotions. "I worked for over a decade at Stanford showing that emotional stress and, particularly depression, can reduce the body's immunity. If something makes you feel better psychologically, there is a chance that this great optimism can help result in improvement in some individuals with cancer".¹

This paper deals with methods that reduce stress and assist in better health, naturally.

INTRODUCTION AND EXAMPLES:

The meridian energy fields introduced by the ancient Chinese have a uniquely and fascinating history. It is said that the Chinese healers were supposed to have unusually developed intuitive and extra sensory preception. The historical charts showing the meridians were drawn by these learned healers who were said to be able to see the energy fields on their patients and recorded them for posterity.

In the book, Kirlian Aura, William Tiller of Stanford University discussed the work started in 1967 by Professor Kim Bong Han, a Korean researcher, who injected radio-active phosphorous into the alarm points of the known meridians and discovered to his bewilderment that the dye followed the exact pathway through the skin as was indicated by the ancient Chinese charts. To his surprise, when the professor had finished the dye studies through the alarm points, his chart was an exact replica of the charts that were drawn over 5,000 years ago.

Western medicine in particular had ignored the meridians that the ancients called the Unknown Nervous System, but after President Nixon's visit to China in the mid 60's the American public got its first view of one healing use and their curiosity and interest has enjoyed a progressive growth. Chiropractors, working with energy flow was naturally right from its beginning, so meridian energy is only a compliment to its effectiveness.

Today natural healing is able to utilize this knowledge in a most effective non-invasive manner. We see clinical evidence that

stress is the culprit that blows the meridian circuits open. The stress may be structural from traumas, chemical or nutritional or from emotional stress or a combination of all the above. An interesting method to check the body for a meridian blown out circuit is to have the patient do right or left brain activity or frontal or occipital lobe activities and if either of these activities causes a strong, intact muscle to weaken, you have a circuit blown out that can be further monitored through the pulse diagnosis. You then identify the exact circuit that is involved.

When this is accomplished you proceed to adjust the associated point for the circuit involved (Ex. pancreas circuit would be the 11 and 12 thoracic vertebra) further verified by the vertebral challenge, adjust the segment indicated and you will see an immediate improvement in the brain neuronal firing as well as the disappearance of the pulse indicator and the muscle indicator will be strong again. The nutritional support that's needed will enhance the circuit not to blow out again. Emotional influence is frequently helped by pulsing in the NV ². We usually suggest our patients read the current best seller "Love" by Buscalgia. It has been a most effective tool for really helping emotional stressors.

In a book entitled "The Complete Book of Longevity" ⁵ Rita Aero lists many ideas that are related to good health and good health habits. I believe good health habits enhance a good immune system.

TO LENGTHEN LONGEVITY

<u>Tends to lengthen life</u>	<u>Tends to shorten life</u>
1. Moderate underweight	1. Overweight
2. Regular meals	2. Skipped meals and gulped food
3. Balanced diet	3. Fats, sugar, junk food
4. Vitamins and fiber	4. Absence of these
5. Moderate alcohol use	5. Total abstinence or excessive drinking
6. Proper sleep	6. Less than five or more than nine hours
7. Not smoking	7. Heavy smoking
8. Exercise	8. Sedentary living
9. Mental activity	9. Boredom

- | | |
|---|--------------------------------------|
| 10. Contentment | 10. Worry and guilt |
| 11. Being calm and easygoing | 11. Being competitive and aggressive |
| 12. Enjoyable, challenging, or strenuous work | 12. Insecure or stressful life |
| 13. Enough money | 13. Too much or too little money |
| 14. Non-urban environment | 14. Urban environment |
| 15. Education | 15. Lack of it |
| 16. Normal blood pressure (120/80) | 16. High blood pressure |
| 17. No drug dependencies | 17. Frequent drug use |
| 18. Annual health check-ups | 18. No check-ups |
| 19. Living with someone or a pet | 19. Living alone |
| 20. Good sex life | 20. Bad sex life |

CONCLUSION:

In an article published in 1979 entitled "Coping with Stressors",³ it was stated that the final chapters on stress have not been written. The following ideas continue to be recommended:

Develop a "positive mental attitude", including forgiveness. A young cancer specialist from Ft. Worth, Texas, Dr. Carl Simonton, is gaining national attention by using psychotherapy along with all other methods of dealing with cancer patients. He states that "the cancer personality is prone not to be able to forgive and hold deep-seated resentments".

Many stress researchers point out that prolonged stress screws up immunological system.

Develop a "sense of humor". It is a must in today's world.

Learn to relax.

Take regular chiropractic adjustments. It positively helps relieve stress.

Practice good nutrition.

Take regular exercise.⁴

Rest, recreation and sleep (Shakespeare referred to sleep as "Nature's Healing Balm").

Most teachers of meditation advise us to "center ourselves" in order to achieve the Alpha state in relaxation.

Correcting the meridian circuits described here assists in becoming "CENTERED" and is a definite plus for patients to achieve better function and at the same time improve their ability to relax. It can well be the needed antidote to cope with our stressful modern world's most insidious pollution, namely emotional stress.

Allow at least 20 minutes per day to relax to the Alpha state.

And finally, a simple, but profound truth is from a quote by a good friend with a bright spirit and a great life style:

"If I want to do something and my full will is with me-- there is NO STRESS. However, if I try to force my actions against my will, there is always MUCH STRESS."

We are fortunate to be engaged in work that is rewarding and allows us to render good service to others. This, too, is a tremendous tool in dealing with the stresses of life and maintaining a HEALTHY IMMUNE SYSTEM.

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BOOK REVIEW
APPLIED KINESIOLOGY, VOL. II
Head, Neck and Jaw Pain - The Stomatognathic System

David S. Walther, D.C.
Diplomate, ICAR

Volume II of Applied Kinesiology by Walther is limited to examination and treatment of the stomatognathic system as broadly defined by Shore.² The text consists of three sections, with the first devoted to the cranial-sacral primary respiratory mechanism. The second section covers the stomatognathic area which includes the jaws, occlusion, the hyoid mechanism, and other subjects closely related to that area. Section three is devoted to correlation of the stomatognathic area with the cranial-sacral primary respiratory mechanism, the correlation within the stomatognathic system and, finally, the stomatognathic system's correlation with total body function.

In this text applied kinesiology is introduced to the use of the Mandibular Kinesiograph, developed by Myo-tronics Research,¹ and Photocclusion(R), developed by Vishay Intertechnology, Inc., Medical Systems Group,³ to evaluate the stomatognathic system. These instruments effectively evaluate the dynamic movement of both the mandible and occlusal forces. These are important evaluations in determining the function of the stomatognathic system as dealt with in applied kinesiology.

Volume II completes the coverage of most applied kinesiology techniques; additional techniques of the meridian and related systems will be covered in Volume III. Orthopedic and systemic conditions will be covered in Volumes IV and V.

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INTRODUCTION TO APPLIED KINESIOLOGY

David S. Walther, D.C.
Diplomate, ICAK

ABSTRACT

This presentation has been prepared to introduce applied kinesiology to groups unfamiliar with the subject. It has been effectively used at state conventions, with dental groups, and in modified form to lay audiences.

The attention of the majority of doctors in the healing arts has been directed toward pathology and trauma which are demonstrated by significant abnormalities observed in the laboratory, on x-ray, and by standard physical diagnosis. The great strides that have been made in these fields are commendable, yet there remains the patient who complains of headaches, chest pain, or joint disturbance - among numerous other symptoms - but is pronounced "healthy" after a thorough diagnostic work-up. These subjective symptoms are often diagnosed as psychosomatic or frankly ignored because no objective findings are present. Limited diagnostic procedures cause the physician to only occasionally be able to evaluate the cause of these symptoms. There is an absence of laboratory findings because these conditions are usually functional rather than pathological. Although it has been difficult to evaluate this type of condition in the past, a system is rapidly developing which gives the physician an ability to look into the functional patterns of the body, enabling him to find the basic underlying cause of these previously enigmatic symptomatic complexes about which a large percentage of the population complains. This system, called applied kinesiology,

allows the physician to "ask questions of the body," to be interpreted by observation of objective testing procedures. The method used is primarily that of manual muscle testing of the various muscles of the body. There is a specific protocol as to how the nervous system controls muscle function. The physician applies various parameter changes to the testing procedure, evaluating possible change in muscle function.

The system of applied kinesiology was developed through the observations of George Goodheart, Jr., D.C., of Detroit, Michigan. He first used manual muscle testing to evaluate structural imbalance, having primarily an orthopedic objective in mind. Continued application of these testing procedures revealed a clinical association of various types of muscle dysfunction with many types of health problems. It was observed that when the health problem was corrected by whatever therapeutic means applicable, the muscular dysfunction also returned to normal. It became obvious that the evaluation of muscle function as observed by manual muscle testing could be a method to aid diagnosis, especially when conditions are functional and have not yet manifested as a pathological entity.

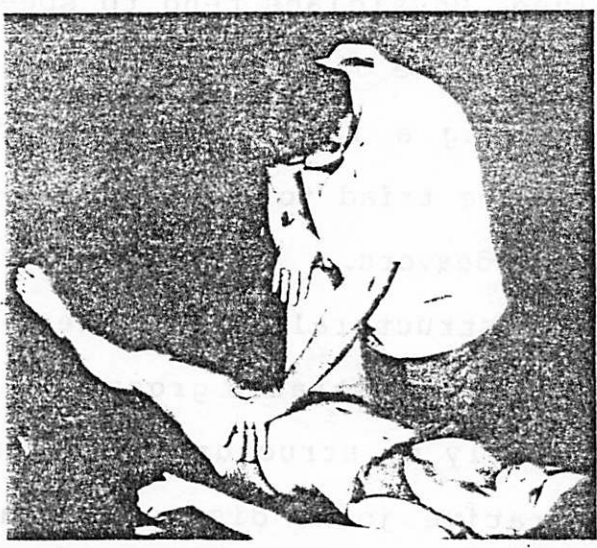
Muscle dysfunction as observed by this testing procedure appears to be an inability of the muscle to adapt to the testing procedure. Manual muscle testing requires that a muscle contract against the examiner's initial testing pressure. In the first stage of the test the muscle is in isometric contraction, leading to the second stage where the examiner continues to increase force to overcome the muscle's maximum isometric contraction. The third stage of the test occurs when the examiner's force over-

comes the isometric contraction, placing the muscle in eccentric contraction; this means the muscle is contracting but being elongated by a stronger force.

There are two important factors which govern the examiner's perception of the patient's muscle strength. First is the speed with which the examiner applies force to take the muscle out of isometric contraction into eccentric contraction. Second is the ability of the patient's nervous system to cause the muscle to adapt to the changing force of the muscle test. When the nervous system is functioning at an optimum level, the muscle can rapidly adapt to the examiner's changing pressure; it is limited in doing so when there is abnormal function. In reality, then, the muscle test is not a test of muscle strength; it is, rather, a test of the nervous system's ability to adapt to the testing procedure.

To be proficient in muscle testing, the physician must be thoroughly familiar with the anatomy and physiology of the muscle being tested, as well as the activity of synergistic, fixator,

Fig. 1. The psoas muscle test position shown here represents the examiner applying force in a vector aligned with the psoas major muscle fibers. This vector is between the rectus femoris and the adductor group of muscles. The patient may attempt to change the test by rotating the pelvis to elevate the opposite side, thus aligning the adductor group for synergistic action, or by adducting the thigh to better align the rectus femoris muscle. These are important actions to evaluate in addition to evaluating the activity of the psoas muscle itself.



and antagonist muscles. Much information can be gained as the

examiner observes efforts of the patient's body to subconsciously recruit synergistic muscles by changing the testing position and other parameters which influence the test. It is, then, concluded that manual muscle testing is a combination of science and art, and the physician must be proficient in both.

TRIAD OF HEALTH

It was observed early in applied kinesiology development that the factors adversely influencing the strength perceived on manual muscle testing fell into three categories: structural, chemical, and mental. These are known as the triad of health in applied kinesiology. It is observed that most health problems develop from a disturbance in one of the three categories. With chronicity, usually all three categories are involved. Physicians tend to specialize in one of the three areas, often using a factor on another side of the triad to aid in therapeutic endeavors.

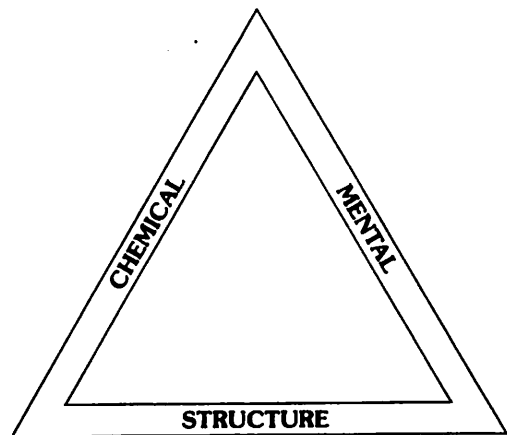


Fig. 2. Triad of health.

Fig. 2
Triad of Health

The structural side of the triad is most often represented by trauma, illustrated grossly by auto accidents and falls, and insidiously by structural imbalance ultimately developing into degenerative joint disease. Treatment in this area is by an orthopedic surgeon, a chiropractor, or a manipulating osteopath, as well as with rolfing, massage, physical therapy, etc.

Disturbances to health as a result of the chemical side of the triad of health result from nutritional deficiencies, poisons in the environment, and improper function of the various systems of the body such as the digestive and elimination systems. Correction is obtained by nutritional support and eliminating the toxins from the environment. The various chemicals in pharmacology also apply to the chemical side of the triad of health. Often it is necessary to improve digestive function or function of the organs of elimination to return chemical balance of the body to normal. These are functional disturbances which may not be recognized by the patient or his physician as being abnormal. Interestingly, the patient may think the problem is simply "normal acid indigestion."

An excellent example of how health is influenced by the mental side of the triad is the general adaptation syndrome described by Selye.¹³ In his model the body goes through three stages of reaction to stress: alarm, resistance, and exhaustion. As an individual transitions from resistance to exhaustion, the adrenal gland comes into a state of dysfunction, which ultimately influences the balance of the nervous system. If the stress is from the mental side of the triad, treatment may require psychotherapy or various forms of counselling. Medication in the form of tranquilization and antidepressants is often used. Those working in the natural health field most often find this chemical approach to be ineffective in treating the basic underlying cause of the health problem. Many find that the more natural approach of orthomolecular medicine and generally returning the body to

normal physiology builds a stronger foundation for elimination of the mental problem.

The imbalances characterized in the triad of health are observable by manual muscle testing. A disturbance on any side of the triad adversely stimulates nerve receptors in the body, changing the predictable manner in which the body functions. In the process of evaluating body function by muscle testing, the physician changes the parameter of the test by altering some factor which is suspected to either adversely or favorably influence function.

To illustrate the physical side of the triad there are many examples of evaluating the effect of position change or various forces applied to the body. One is a maneuver to put pressure on a neurovascular bundle, such as Adson's test¹ for evaluation of the scalenus anticus syndrome. In the presence of a positive test there is paresthesia or diminished pulse volume in the upper extremity. More definitive information can be obtained by manual muscle testing. If there is adverse influence on the nerve there will be change in the muscle's adaptability observed on manual muscle testing. The advantage of the manual muscle test is that it will always determine dysfunction when there is a positive Adson's test; it will also find dysfunction when present but not yet observable by Adson's test or other procedures such as nerve conduction studies, plethysmography, Doppler, etc. These early positive findings are important because they correlate with the patient's symptomatic pattern and find the condition when it is less severe and easier to correct. It is important to find sub-clinical conditions as well as frank pathological disturbances.

A chemical example is when a patient chews a nutritional product and a muscle which is functionally associated improves in adaptability and apparent strength. On the other hand, a food or chemical product adverse to body function will cause an associated muscle to decrease in adaptability, as observed by the manual muscle test. Examples of chemicals immediately influencing the body are seen in Coca's pulse test⁵ and other forms of provocative food testing. Sheinkin and Schachter¹⁵ report on the use of manual muscle testing to evaluate the reaction of food in the body.

Certain thought patterns or mental attitudes will cause certain muscles to lose the ability to adapt adequately to a manual muscle test in some individuals; thus the examiner perceives the muscle to be weak. In other thought patterns, the same muscle is perceived to be strong. The influence of an adverse thought pattern on the muscle can be confirmed by evaluating the nervous system through pulse rate, galvanic skin response, and respiration monitoring.

Over the years a correlation of clinical observations and laboratory studies has shown manual muscle testing to be a viable method in aiding the physician to more accurately diagnose functional disorders. Although the primary purpose at this stage of applied kinesiology development is functional evaluation, it is also valuable in helping find pathological conditions which are ultimately confirmed in the laboratory. The role of applied kinesiology in evaluating pathological conditions is not as important because they can be observed in the laboratory. Eval-

uating functional disturbances and understanding their ubiquitous nature are the greatest values of this system.

MANUAL MUSCLE TESTING PHYSIOLOGY

There are two working hypotheses regarding why a muscle appears to change strength during manual muscle testing. Both deal with the nervous system's inability to effectively cause the muscle to adapt to the changing pressures of the test. The first is the direct cause of peripheral entrapment of the nerve supplying the muscle being tested. The second is indirect, but still relates to the nervous system inadequately controlling the muscle.

Peripheral nerve entrapment can develop throughout the body; it relates to a force impinging on the nerve. There have been many studies that reveal how small an impingement will alter nerve conduction.^{14,16} In a classic experiment, Granit et al.⁹ demonstrated the creation of fiber interaction within a nerve from compression. This artificial synapse was produced by a pressure so gentle that it did not impair conduction of the original impulse. Another important factor of this investigation was that the nerve returned to normal after being decompressed and irritated with a saline solution.

An example of evaluation for peripheral nerve entrapment with applied kinesiology can be observed in the carpal tunnel syndrome, when there is impingement on the median nerve as it traverses the carpal tunnel. The carpal tunnel is partially formed by the carpal bones and is completed by the covering of the flexor retinaculum.^{11,12,17} Within this confine the median

nerve can be impinged upon by neoplasms or at the border of the flexor retinaculum.

In all cases of carpal tunnel syndrome, the muscles innervated peripherally to the entrapment will weaken on manual muscle testing. The muscle most often tested is the opponens pollicis.

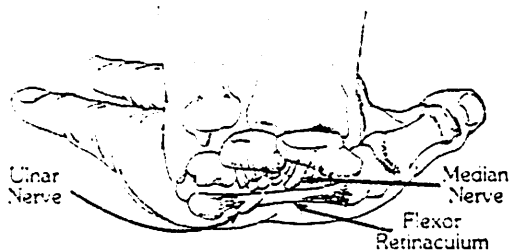


Fig. 3. Carpal tunnel.

It must be isolated from its synergists - the flexor pollicis brevis and the adductor pollicis - which are innervated by the ulnar nerve. There are occasions when a patient demonstrates the symptomatic complex

of a carpal tunnel syndrome, although nerve conduction studies do not show peripheral nerve entrapment at the carpal tunnel. This is an excellent example of a functional condition which is not yet of a magnitude to be objectively observed by standard laboratory methods, although the patient may complain of numbness, circulatory disturbances, dropping items which are held, etc.

Evaluation of the condition with applied kinesiology methods reveals numerous correlating findings which support the diagnosis of functional carpal tunnel syndrome. The first observation is that the muscles innervated by the median nerve distal to the carpal tunnel test weak. Peripheral nerve entrapment at that location is confirmed by holding the carpal bones and distal ends of the radius and

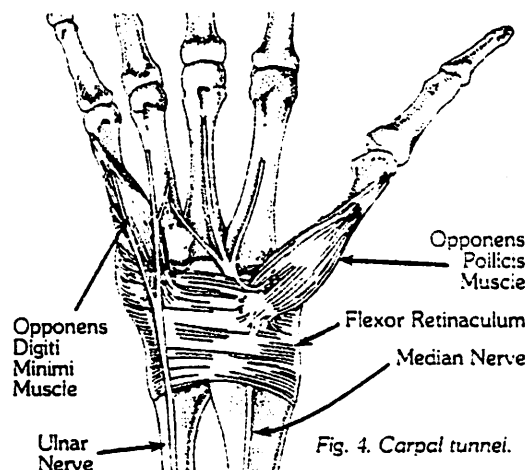


Fig. 4. Carpal tunnel.

ulna in such a position that tension on the flexor retinaculum is



Fig. 5. Opponens pollicis muscle test.



Fig. 6. Pressure applied to the distal ends of the radius and ulna, as well as the carpal bones, to take pressure off the flexor retinaculum causes the previously weak muscle to test strong.

eliminated. If this support to the structure eliminates the weakness observed on the muscle test, there is positive evidence of nerve entrapment at that area. It also indicates that the problem is not due to a space-occupying lesion because reforming the tunnel would probably not eliminate that type of entrapment. Treatment is manipulation of the articulations and possibly wrist immobilization for approximately two weeks. This condition responds very well to this conservative treatment. Many patients have been treated successfully who had previously been recommended for surgery, which is to incise the flexor retinaculum to decompress of the area. In some cases decompression surgery fails to relieve the condition. It is believed that unsuccessful surgery is due to incomplete section of the ligament.¹² There are cases where the conservative approach of applied kin-

esiology has been successful in relieving the entrapment after surgical section of the flexor retinaculum failed.

A similar type of peripheral nerve entrapment is observed in vertebral dysfunction. In this case the mechanism is more complex and will be discussed only briefly here. Denslow et al.^{6,7} observed by electromyography that the intrinsic spinal muscles are hyper-reactive in areas of vertebral dysfunction. As an individual moves, it is hypothesized that the hyper-reactive muscles are stimulated, causing aberrant motion of the vertebral complex, irritating the nerve within the intervertebral foramen and causing a type of peripheral nerve entrapment. The vertebral complex is tested for hyper-reactive muscles by the examining physician rotating the vertebra in such a manner as to stretch the hyper-reactive muscle, causing it to contract or rebound when the examiner's force on the vertebra is released. This rebound is not present in the normally functioning vertebral complex. If a rebound is present, the nerve is impinged and disturbed function results. This is very similar to the impingement of the neurovascular bundle as observed by Adson's test or the impingement of the nerve in the carpal tunnel syndrome.

The force applied to the vertebra is termed a "challenge" in applied kinesiology. When the challenge is applied to an abnormally functioning vertebra, a skeletal muscle associated with the dysfunction will become temporarily weak, as observed on manual muscle testing, for a period of many seconds to minutes. The time

Length correlates to the hyper-reactivity observed by Denslow on electromyography. It appears that the stimulus to the hyper-reactive muscle causes additional peripheral nerve entrapment at the intervertebral foramen, disturbing the neurological control of the muscle being tested.

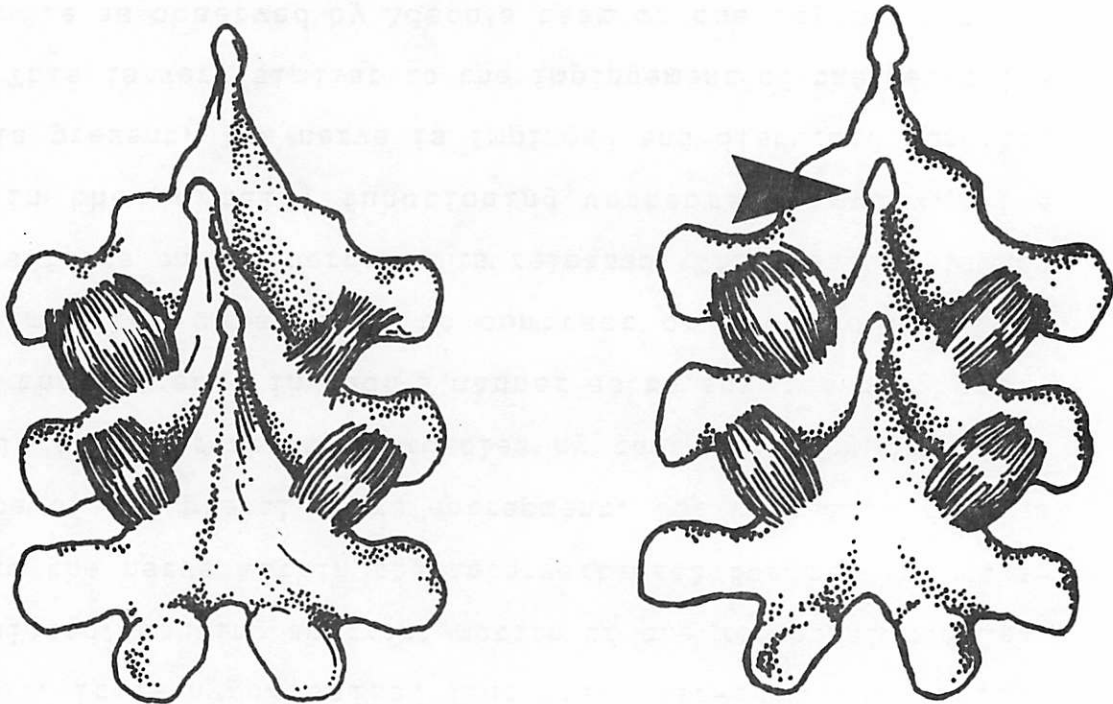


Fig. 7. Illustration represents a rotatory brevis muscle which is hyper-reactive. Pressure is applied on the spinous process in the direction of the arrow.

Fig. 8. Apply force and re-lease. The hyper-reactive rotatory brevis contracts, disturbing vertebral position to irritate the spinal nerve root.

The second type of muscle change observed by applied kinesiology testing is indirect. The working hypothesis for this clinically observed entity is that nerve receptors of various types are stimulated by functional or pathological disturbances so that the afferent system provides information to the higher centers of the spinal cord and brain which does not correlate

with the homeostasis of body function. The receptors that initiate this improper activity are those listed in standard physiology¹⁰ and include mechanoreceptors, thermoreceptors, nociceptors, chemoreceptors, and electromagnetic receptors. Usually the electromagnetic receptors are considered to be only the rods and cones of the eyes. Those experienced in acupuncture will recognize that the meridians of the body have many electromagnetic receptors known as acupuncture points which significantly influence function. Also added to this list should be mental receptors to include that aspect of influence on function.

Stimulation of receptors produces specific effects. These effects are mediated by spinal cord reflexes or by higher centers. A model of normal activity is seen in figure 9. The recep-

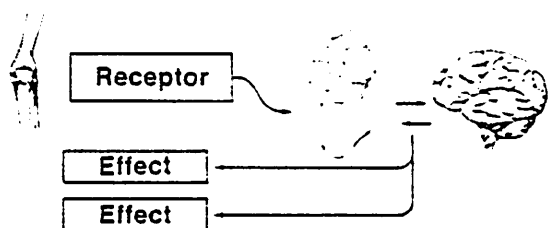


Fig. 9

tors are evidenced by the proprioceptors of the knee which send information over afferent pathways to the cord and higher centers. Reflex arcs and interpretation by higher centers cause impulses to be sent over the efferent pathways to cause speci-

fic effects. If the proprioceptors of the knee are stimulated by active knee flexion, the effects will be continued facilitation of the prime movers and synergists, which are the hamstrings, gracilis, sartorius, and gastrocnemius muscles. The antagonist - which is the quadriceps group - will be inhibited. These effects are normal for the action taking place.

If an abnormal condition is present in the knee or the

afferent nerve, so that improper information is sent to the central system, these effects - or the proper timing of them - will not take place. Instead, other effects based on the improper information that the central system is receiving would be observed. This in itself could possibly cause health problems which are primarily structural.

Unfortunately, the scenario does not end here. These new inappropriate effects in turn stimulate receptors, and the afferent system transmits additional improper information to the central nervous system for interpretation and action. New effects develop as illustrated in figure 10, and the vicious circle can

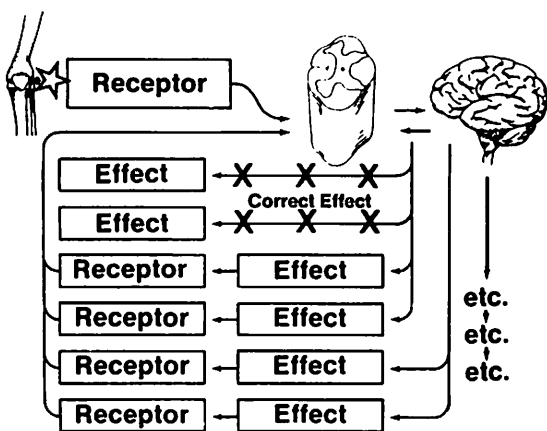


Fig. 10

continue until something stops the initial improper information from being sent to the central nervous system. An analogy would be the management of a large steel plant trying to effectively control production, stock, and labor when it is receiving improper information. If management receives reports that there are 100 tons of steel in stock when, in reality, there are 250 tons, it is obvious that effective planning for correct action will not be taken.

The knee, with its receptors and effects, is only one example of thousands which take place in the body. In the illustra-

tion the knee could be replaced with dysfunction in the stomatognathic system, such as the temporomandibular joint or proprioceptors in the periodontal ligament. The problem could arise from the baroreceptors in the lymphatic or blood vascular system, in the chemoreceptors of the digestive system, proprioceptors of the foot, equilibrium proprioceptors of the eyes, neck, and labyrinthine reflexes - and on and on. These neurologic disturbances can easily be recognized with applied kinesiology techniques developed in the past eighteen years. Most of the abnormal activities can be traced through standard neurophysiology; some can be explained only on a clinical basis, as the data base of physiology is not adequate to understand some of the phenomena observed.

Among the observations which are inadequately explained are some of the reflex treatments used in applied kinesiology. These therapeutic approaches were not developed within the framework of applied kinesiology; rather, they were developed by various clinicians on an empiric basis.^{2,3,4} The reflex techniques acquired some following in the healing arts, but unfortunately there was limited ability to diagnose their need and it was difficult to observe the therapeutic effects. Applied kinesiology has helped put these techniques into perspective, and they are found to be a valuable tool in certain clinical conditions, usually of a functional nature. The reflex techniques appear to be correlated with the common ectodermal origin of the nervous and dermal tissues.

THERAPY LOCALIZATION

An examination tool unique to applied kinesiology is therapy localization. This phenomenon was first observed by Goodheart.⁸ Combined with other diagnostic procedures it has made a significant contribution to understanding body function. Goodheart noticed that when a patient's hand touches an area which is functioning improperly, the results of the manual muscle test change. For example, if the knee articulation is dysfunctioning, thus causing the proprioceptors to be adversely stimulated, the quadriceps group of muscles may test weak. When the patient places his hand over the knee, the quadriceps which previously tested weak will immediately regain normal function. Although some understanding is developing about the physiology of therapy localization, the exact reasons for the phenomenon remain an enigma. Because therapy localization tells only that something is dysfunctioning in an area, not what is dysfunctioning, the findings must be correlated with other diagnostic factors to arrive at a final diagnosis. Therapy localization is only a tool to help guide the examination; it should not be used to arrive at a final conclusion.

It is not necessary for a patient to actually touch the area of dysfunction with his hand; he can hold an electrode connected to an electric wire, with the other end of the wire connected to another electrode which is touching the area of dysfunction. The results of the muscle test will change just as if the patient were touching the area with his hand. In other words, there is some type of energy travelling over the electric wire from the hand to the area of dysfunction, or from the area of dysfunction

to the hand. There is a directional nature to this activity which can be observed by interrupting the wire with a circuit which allows electrical flow in only one direction. The direction is controlled by a switch, and it will be observed that the therapy localization is present when the flow is in one direction but not in the other. In some instances the flow must be away from the area of dysfunction; in other instances it must be toward the area of dysfunction, indicating that energy is either being added to or subtracted from the area. It remains to be discovered by further electrophysiological evaluation exactly what is present in the phenomenon of therapy localization.

When the area of dysfunction indicated by therapy localization and other means is corrected, the therapy localization will no longer cause a previously strong indicator muscle to weaken. This tool has been a valuable asset in finding areas of disturbance, as well as determining when correction has been obtained. It must be re-emphasized that positive therapy localization by itself does not provide adequate information to make a final diagnosis.

Applied kinesiology is primarily a tool of investigation of functional disturbances. Some of these functional disturbances are found by AK methods when they are not chronic enough to manifest in laboratory tests. If the condition is allowed to remain long enough, pathological conditions and laboratory demonstration will probably develop. It is obvious that early discovery and correction of any disturbance not only relieves a patient of the symptomatic picture more rapidly, but also prevents the

disturbance from being magnified into frank pathology.

Most of the treatment approaches used in applied kinesiology are those currently being used in various disciplines of the healing arts. Although applied kinesiology uses these various techniques of treatment and is primarily diagnostic, some unique therapeutic approaches have been developed as a result of better understanding body physiology. It is expected that as more information develops about body function, the cause of various disease processes will be better understood. Applied kinesiology is a significant step toward better understanding of function.

SUMMARY

A presentation has been given to introduce AK to audiences who have no previous knowledge of the subject. It has been successfully used with those who have knowledge of anatomy and physiology, and helps put into perspective therapy localization, challenge, and the use of manual muscle testing as methods of evaluating body function.

Slides of the illustrations in this paper, as well as others pertinent to the subject, are available from the author.

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REACTIVE MUSCLES

by

Dr. C. Lance West, D.C.

During this past year, I have been working with Dr. Norman Epstein, D.C., and his assistant Jay Sandweiss of Ann Arbor, Michigan.

Ann Arbor is the home of the University of Michigan and other universities and colleges, therefore it is a city filled with young athletes.

It has been a pleasure and privilege for me to aid in the educational process of these young people and other professionals in and near Ann Arbor in learning Applied Kinesiology.

One of the most interesting challenges is to check the young patients who are in far better condition than most of the other patients I see. A common problem among many of these beautiful young people is reactive muscles.

Dr. Goodheart was the first to discover this phenomenon when he found the muscle spindle cell of one muscle is set too high in relation to another muscle, and by using the spindle cell technic of setting the offending muscle lower, he was able to bring about a balanced strength in the antagonist synergist or whatever muscle was showing weakness because of this reactivity.

In teaching "hands on" classes, I found it very helpful to compile a list of the most frequently involved muscles, so those people I'm teaching could have a "possibility" list to begin working from when checking for reactive muscles.

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Jay Sandweiss is a student at the University of Michigan, preparing for a career in Chiropractic. He is also an instructor in the Martial Arts, at a private club and he also has a class of 50 students that form his own club at the University of Michigan. Jay has studied Martial Arts for more than 10 years, and has a number of black or brown belts. I have observed him as he demonstrated the importance of balance while teaching Martial Arts and as he does this it makes me realize the true importance of correcting any factor in the body that disturbs that balance, whether it be Lymphatic, Neurovascular, Cerebro Spinal Fluid, Acupuncture, Neurologic, Endocrine, Emotional or Chemical.

In my association with Jay and in sharing with him the things I learn in Applied Kinesiology, I have also realized he has a very great understanding of the balance of power of the various muscles and how even very minute disturbances can cause hidden or recurrent problems which are not always easily found.

The primary purpose of my paper is to present to those practicing Applied Kinesiology or teaching Applied Kinesiology a comprehensive list of reactive muscles which they can easily have duplicated and pass out to their students who are in the continuous process of learning Applied Kinesiology.

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As Dr. Goodheart always says "any muscle can be reactive to any other muscle" but in the following list you will have a quick reference to those most commonly found.

This list has been taken from all Dr. Goodheart's manuals, and from Dr. David Walther's textbooks on Applied Kinesiology, also added are others that Jay Sandweiss, Dr. Epstein and I have found in our work together.

In the list of reactive muscles those listed in the first column are set too high and cause weakness in those in column two. In this particular list, the muscles are arranged alphabetically. The lists are on separate sheets from this introduction for easy duplication as "hand outs" for your classes.

REACTIVE MUSCLES

<u>COLUMN I</u>	<u>COLUMN II</u>
ACONEUS.....	BRACHIALIS
ADDUCTORS.....	PSOAS
ADDUCTORS.....	TENSOR FASCIA LATA
ADDUCTORS POLLICUS.....	OPPENIS POLLICUS
ANTERIOR DELTOID.....	PECTORALIS MAJOR CLAVICULAR
ANTERIOR DELTOID.....	PECTORALIS MAJOR STERNAL
ANTERIOR DELTOID.....	TERES MINOR
ANTERIOR NECK FLEXORS.....	OPP. PSOAS
ANTERIOR TIBIAL.....	EXTENSOR HALLICUS LONGUS
ANTERIOR TIBIAL.....	PERONEUS
ANTERIOR TIBIAL.....	POSTERIOR TIBIAL
ANTERIOR TIBIAL.....	SARTORIUS
BICEPS.....	BRACHIORADIALIS
BICEPS.....	TRICEPS
BICEPS.....	UPPER TRAPEZIUS
BRACHIORADIALIS.....	ANCONEUS
BRACHIORADIALIS.....	BICEPS
BRACHIORADIALIS.....	PRONATOR TERES
CORACOBACHIALIS.....	POSTERIOR DELTOID
CORACOBACHIALIS.....	TERES MAJOR

REACTIVE MUSCLES

<u>COLUMN I</u>	<u>COLUMN II</u>
DELTOID.....	INFRASPINATUS
DELTOID.....	PECTORALIS MINOR
DELTOID.....	RHOMBOID
DELTOID.....	SUPRASPINATUS
DIAPHRAGM.....	PSOAS
EXTENSOR HALLICUS LONGUS.....	ANTERIOR TIBIAL
GASTROCNEMIUS.....	OPP. GLUTEUS MEDIUS
GASTROCNEMIUS (LAT HEAD).....	POPLITEUS
GASTROCNEMIUS.....	QUADRICEPS
GLUTEUS MAXIMUS.....	PECTORALIS MAJOR CLAVICULAR
GLUTEUS MAXIMUS.....	QUADRICEPS
GLUTEUS MAXIMUS.....	SACROSPINALIS
GLUTEUS MEDIUS.....	OPP. GASTROCNEMIUS
GLUTEUS MEDIUS.....	OPP. RECTUS ABDOMINIS
HAMSTRINGS.....	OPP. LATISSIMUS DORSI
HAMSTRINGS.....	POPLITEUS
HAMSTRINGS.....	QUADRICEPS
HAMSTRINGS.....	SACROSPINALIS
HAMSTRINGS.....	SARTORIUS

REACTIVE MUSCLES

<u>COLUMN I</u>	<u>COLUMN II</u>
ILIACUS.....	PIRIFORMIS
INFRASPINATUS.....	DELTOID
INFRASPINATUS.....	SUBSCAPULARIS
LATISSIMUS DORSI.....	OPP. HAMSTRING
LATISSIMUS DORSI.....	PECTORALIS MAJOR CLAVICULAR
LATISSIMUS DORSI.....	PECTORALIS MAJOR STERNAL
LATISSIMUS DORSI.....	UPPER TRAPEZIUS
LEVATOR SCAPULA.....	PIRIFORMIS
LOWER RECTUS ABDOMINUS.....	UPPER RECTUS ABDOMINUS
LOWER TRAPEZIUS.....	PECTORALIS MAJOR STERNAL
NECK EXTENSORS.....	RECTUS ABDOMINUS
NECK FLEXORS.....	RECTUS ABDOMINUS
NECK FLEXORS.....	WRIST EXTENSORS
OPENS POLLICUS.....	ABDUCTOR POLLICUS
PECTORALIS MAJOR CLAVICULAR.....	ABDUCTOR POLLICUS
PECTORALIS MAJOR CLAVICULAR.....	ANTERIOR DELTOID
PECTORALIS MAJOR CLAVICULAR.....	LATISSIMUS DORSI
PECTORALIS MAJOR CLAVICULAR.....	TERES MAJOR

REACTIVE MUSCLES

<u>COLUMN I</u>	<u>COLUMN II</u>
PECTORALIS MAJOR STERNAL.....	ANTERIOR DELTOID
PECTORALIS MAJOR STERNAL.....	LATISSIMUS DORSI
PECTORALIS MAJOR STERNAL.....	LOWER TRAPEZIUS
PECTORALIS MINOR.....	DELTOID
PECTORALIS MINOR.....	SERRATUS ANTERIOR
PECTORALIS MINOR.....	SUPRASPINATUS
PERONEUS.....	ANTERIOR TIBIAL
PERONEUS.....	POSTERIOR TIBIAL
PERONEUS TERTIUS.....	TENSOR FASCIA LATA
PIRIFORMIS.....	ILIACUS
PIRIFORMIS.....	OPP. SPLENIUS CAPITUS
PIRIFORMIS.....	LEVATOR SCAPULAE
POPLITEUS.....	GASTROCNEMIUS
POPLITEUS.....	HAMSTRING
POPLITEUS.....	UPPER TRAPEZIUS
POSTERIOR DELTOID.....	CORACOBACHIALIS
POSTERIOR TIBIAL.....	ANTERIOR TIBIAL
POSTERIOR TIBIAL.....	PERONEUS
PRONATOR TERES.....	BRACHIORADIALIS
PRONATOR TERES.....	SUPINATOR
PSOAS.....	ADDUCTORS

REACTIVE MUSCLES

<u>COLUMN I</u>	<u>COLUMN II</u>
PSOAS.....	OPP. ANTERIOR NECK FLEXOR
PSOAS.....	DIAPHRAGM
QUADRICEPS.....	GASTROCNEMIUS
QUADRICEPS.....	GLUTEUS MAXIMUS
QUADRICEPS.....	HAMSTRING
QUADRICEPS.....	RECTUS ABDOMINUS
QUADRICEPS.....	SARTORIUS
RECTUS ABDOMINUS.....	NECK FLEXORS
RECTUS ABDOMINUS.....	NECK EXTENSORS
RECTUS ABDOMINUS.....	QUADRICEPS
RECTUS ABDOMINUS.....	OPP. GLUTEUS MEDIUS
RHOMBOID.....	DELTOID
RHOMBOID.....	SERRATUS ANTERIOR
RHOMBOID.....	SUPRASPINATUS
SACROSPINALIS.....	GLUTEUS MAXIMUS
SACROSPINALIS.....	GLUTEUS MEDIUS
SACROSPINALIS.....	HAMSTRING
SACROSPINALIS.....	TRANSVERSALIS
SARTORIUS.....	ANTERIOR TIBIAL

REACTIVE MUSCLES

<u>COLUMN I</u>	<u>COLUMN II</u>
SARTORIUS.....	HAMSTRINGS
SARTORIUS.....	QUADRICEPS
SERRATUS ANTERIOR.....	PECTORALIS MINOR
SERRATUS ANTERIOR.....	RHOMBOID
SPLenius CAPITUS.....	OPP. PIRIFORMIS
SUBSCAPULARIS.....	INFRASPINATUS
SUPINATOR.....	PRONATOR TERES
SUPRASPINATUS.....	DELTOID
SUPRASPINATUS.....	PECTORALIS MINOR
SUPRASPINATUS.....	RHOMBOID
TENSOR FASCIA LATA.....	ADDUCTORS
TENSOR FASCIA LATA.....	PERONEUS TERTIUS
TERES MAJOR.....	CORACOBRACHIALIS
TERES MAJOR.....	PECTORALIS MAJOR CLAVICULAR
TERES MAJOR.....	TERES MINOR
TERES MINOR.....	ANTERIOR DELTOID
TERES MINOR.....	TERES MAJOR
TRICEPS.....	BICEPS
TRICEPS.....	TERES MAJOR
TRANSVERSALIS.....	SACROSPINALIS

REACTIVE MUSCLES

COLUMN I

COLUMN II

UPPER RECTUS ABDOMINUS.....	LOWER RECTUS ABDOMINUS
UPPER TRAPEZIUS.....	OPP. UPPER TRAPEZIUS
UPPER TRAPEZIUS.....	BICEPS
UPPER TRAPEZIUS.....	LATISSIMUS DORSI
UPPER TRAPEZIUS.....	POPLITEUS
WRIST EXTENSORS.....	NECK FLEXORS

THE ADRENAL GLAND
BY
PAUL A. WHITE, D.C.

Abstract:

The adreanls (suparenals) are two glands that each consist of two parts; and outer part (the cortex) and an inner part (the medulla). Each part function as a separate gland in the endocrine system. The adrenals lie posteriorly on top of each kidney.

Adrenal Cortex

Functions as part of adreno-hypothalamus-pituitary axis. The cortex is controlled by secretion of the hormone ACTH for the pituitary. Hormones secreted by the cortex are classified as steroids. These are further broken down into the categories of glucocorticoids, those hormones control metabolism and mineralocorticoids, those controlling mineral balance.

1. Normal function.

- a. Suppresses inflammatory reaction and enhances body's resistance to infection.
- b. Controls metabolism of proteins, carbohydrates and fats
- c. Acts as check on the metabolism of sugar by insulin.
- d. Regulates electrolyte balance.

2. Abnormal function.

- a. Addison's disease, as a result of extreme under production of cortical hormones.
- b. Cushing's syndrome, as a result of extreme overproduction of cortical hormones.
- c. Seven known inborn errors of metabolism involving specific enzyme deficiencies leads to disordered hormone production.
- d. Improper function could be a factor that contributes to water retention in the body.

Adrenal Medulla

The medullary cells have packets of stored hormones which are classified as catecholamines. A neural message is converted into a hormonal one; hormones are released upon demand for systemic distribution by the bloodstream. These hormones are specifically called epinephrine (adrenalin) and norepinephrine (noradrenalin). These catecholamines are derived from the amino acid, phenylalanine.

1. Normal function.

Epinephrine increases cardiac output and thus raises blood pressure. It causes vasodilation of skeletal and cardiac muscle by vasoconstriction of skin and splanchnic vessels. Epinephrine causes an increase in pulse rate; norepinephrine acts in an opposite manner.

Norepinephrine has little effect on the heart; it is a peripheral vasoconstrictor and thus raises blood pressure. It increases the size of the splanchnic bed and apparently is the physiologic neurotransmitter in the adrenergic nervous system.

2. Abnormal function

Disease of the medulla are rare but subnormal function may be quite common and characterized by: headaches, sudden fatigue, depression, crying spells, dizziness and the inability to concentrate. Other possibilities which can

slow down medullary function are: chronic smoking habit, excessive coffee, tea or cola drinking. Stress conditions at home or at work can contribute.

Many believe the adrenals are the first glands in the body to break down in any disease or stress condition. **IMPORTANT** - It is estimated that up to 95% of the adrenal gland must be destroyed to indicate direct symptoms in some cases.

Nutritional Support:

Adrenal glandular support intended to supply the specific tissue determinants of the adrenal glands with additional organic synergists found useful in promoting adrenal function, namely Pituitary, Vitamin C, Bioflavonoids, and Pantothenic Acid.

Clinical Considerations:

Prominent Clinical Signs and Symptoms:

1. Nervous Complaints, chronic fatigue, nervousness, tachycardia and other symptoms. Possible cause by insufficiency of adrenosympathetic system
2. Respiratory disorders, allergies, asthma, sinusitis, colds, pneumonia, cough, etc. Cause by lowering the resistance factor, disturbance in histamine-adrenalin metabolism due to adrenal insufficiency
3. Vasomotor disturbances (hypo-hypertension; circulatory symptoms). Cause from adreno-sympathetic reaction
4. Blood Sugar Disturbances (hypoglycemia), caused by inadequacy of the pancreas and liver.
5. Allergic reactions (hives, dermatitis, sneezing attacks, frequent colds) caused by a histamine-adrenal imbalance.
6. Reaction to potassium foods (molasses, veal, vegetable juices, olives, etc.) caused by elevated serum potassium, found in advanced hypoadrenia.
7. Abnormal craving for salt caused by a reaction indicating need of sodium to compensate for excessive potassium.
8. Lowered resistance (coughs, weakness, and other residual effects of illness), probably concerned with a reduction in the defense mechanisms.
9. Lower back pain as a result of weakness of the adrenal related muscle (sartorius & gracilis) which are major lower back stabilizers.

Symptom Characteristics:

Usually involve the vasomotor mechanism, respiratory tract, or allergic reactions, fatigue being a common finding. Illnesses which may be traced to pneumonia or severe shock (mental or physical) often are due to the adrenal failure syndrome.

Clinical Tests:

1. Postural Blood Pressure Test as shown by failure to show rise of systolic pressure on rising (standing position)
2. Potassium Tolerance Test as in the inability to tolerate potassium-rich foods (advanced states only)
3. Observation of weight loss & bronzing of skin
4. Abnormal heart sounds such as fibrillation (with hypotension) and also tachycardia (with hypertension).

High second sounds over mitral area.

Laboratory Tests:

1. 17-Ketosteroid Test shown by below or above 12-15 mg. 24 hours
2. Sodium-Potassium Serum Ratio

Applied Kinesiology Testing

In Kinesiology there are certain muscles that are linked with certain organs. In the case of Adrenal insufficiency there is a marked weakness of the sartorius, gracilis, and/or gastrocnemius.

Administration:

Dosage:

Adrenal gland supplementation, together with the above mentioned synergists should be supplied 2-3 times per day for 3 days, 1-3 times thereafter, each patient manages dosage according to degree of fatigue.

Effect:

Changes in Postural Blood Pressure are often noted within 20 minutes. Chronic conditions require long term schedule.

Side-Effects:

None known specifically, however, note that fatigue may not be immediately relieved in some cases. In fact there may be a temporary "let-down" feeling which is a specific indication of adrenal response and indicative of the need for use of synergists as listed below:

Synergists:

1. Potassium plus multiple trace to contribute organic potassium.
2. Sodascorb-1000 to contribute source of Sodium

* NOTE: Management of the adrenal patient depends upon an understanding of the physiological mechanisms involved. The adrenals regulate potassium use and disposal. If the adrenals are damaged the patient cannot get rid of potassium taken in; to him it is a poison, he gets weak, has flabby tissues, a viscous blood and poor circulation. He cannot retain sodium and has to eat salt in great amounts.

General Consideration:

The adrenal glands enter into a variety of physiological effects and are known to be concerned with the following mechanisms:

- a. Resistance
- b. Detoxification
- c. Mineralization (Sodium-Potassium-Chlorides)
- d. Histamine-adrenalin regulation
- e. Glucose-glycogen metabolism
- f. Vasomotor regulation

The adrenal glands are particularly associated with the following types of conditions:

- a. Respiratory diseases
- b. Allergic reactions

- c. Inflammatory diseases (Particularly Rheumatoid Arthritis)
- d. Neurasthenic diseases (Neurocirculatory asthenia)
- e. Blood pressure aberrations
- f. Low Back Pain

The adrenals-"the stress glands"-have been shown to be the first of the endocrine axis to fail under various conditions of stress, such as burns, poisons, and other toxic manifestations-as well as being susceptible to failure from protracted stress and strain of "ordinary" everyday activities. Conclusive evidence was offered by Selye to show that the adrenals were also among the first to fail under the stress of surgery, infections, physical trauma, immunological and allergic insults, severe exertions, strong emotions, severe exposures to hot and cold, and malnutrition.

Clinically Associated conditions:

GASTROINTESTINAL-URINARY

Kidney and Bladder
Uremia

NERVOUS AND PSYCHOGENIC

Functional
Asthenia
Dysphagia
Migraine Headaches
Sweat Gland Activity

Metabolic

Legs, Weakness of

Vasomotor

Dizziness
Heat Prostration
Hypotension

METABOLIC DISORDERS

Intermediate Processes
Carbohydrate Metabolism
Cholesterol Metabolism
Salt Metabolism

Acid-Base Balance

Acidosis
Alkalosis

Water Balance

Edema

Blood

Leukopenia

Respiratory

Bronchitis
Emphysema

Allergies

Asthma

EXOGENIC DISORDERS

Infections

Pneumonia

Virus Infections

Colds, Flu, Grippe
Herpes Zoster

Toxic

Burns, Systemic
Eclampsia
Halitosis
X-ray Burns

Inflammation

Sinusitis

SKIN CONDITIONS

Pruritus

FEMALE DISORDERS

Menopausal Symptoms

GLANDULAR

Adrenal Insufficiency

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LIMBIC FIXATION AS A CONFUSION

Stanley A. Wieczorek, D.C.

Abstract

The limbic fixation complex must be regarded as a confusion when found during the examination.

We have noted and documented the fact that there are switching patterns present in the meridian system (AP and K27). We have also identified factors which cause the short leg to be less than diagnostic regarding pelvic distortion because of such subluxations as lateral occiput, lateral atlas, inferior sacrum and occiput and upper cervical fixations. There has been found that in the presence of a limbic fixation complex (C7-T1-first rib) the therapy localization of a Category I, II or III is often erroneous and misleading. For example, patient therapy localizes as Category I sacrospinalis or crest sign on the left. The rib head tenderness as an indicator of Category I is present on this patient's right side. The previously mentioned confusions have already been checked and corrected and this indicator is a contradiction to the rule that says rib head tenderness in a Category I will be on the sign side. Therapy localization or challenge for a limbic fixation may well be found on the side of erroneous rib head tenderness and after correction of the limbic fixation, re-therapy localization the pelvis may result in either total negative therapy localization or a completely different pelvic weakness. For example, right piriformis or right sacrospinalis. In a Category II patient it may change the therapy localization from right to left or perhaps in the case of a Category II that will not therapy localize in any posture even though obvious signs are present. It will often times

allow for positive therapy localization after a limbic correction has been made. This author supposes that limbic fixation is a major compensatory complex which tends to cover up or hide the true basic category problem being presented by the patient. Therefore, in a Category III patient with a negative therapy localization, the limbic correction can open or make available for correction a hidden Category III.

Respectfully Submitted,

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CATEGORY I IS-IO

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Abstract

A new approach to the Category I correction wherein there is a piriformis-gluteus weakness (DeJarnette-Dollar Sign) maybe accomplished in certain cases via adjustment of inferior sacrum and occiput on the involved side.

Category I is a dis-relationship of the pelvis which interferes with the cranio-sacral respiratory mechanism. It has been broken down into piriformis-gluteus or sacro-spinalis weakness (Dollar Sign-Crest Sign, DeJarnette). Very often there will be swelling and tenderness of the ligamentum nuchae. This has been described as a indicator of either occipital or sacral base inferiority.¹ When this indicator is present it behooves the doctor to challenge the sacral apex toward the side of piriformis weakness. This will usually result in strengthening the piriformis or weakening any intact testing muscle. If this test is negative but the indicator is still present, a challenge of the occiput as an inferiority on the weak piriformis side should be done. If either of these challenges are positive, correcting it will make the other available for correction.

An ocular assist has been associated with this type of distortion pattern. If the patient's sacrum challenges as right inferior and the patient was to move his eyes into a superior and right direction, it would abolish the challenge weakness. This in addition to an inhalation assist

is used to amplify the correction. When this approach is used there is total correction of the Category I and all indicators will now therapy localize as negative. In 96% of cases there will no longer be an (SB+ or SB- DeJarnette) or an respiratory assist to the Category I.

To summarize, Category I is therapy localized primarily with one hand on each sacroiliac joint. If the therapy localization is positive, both hands are placed over one PSS and if this is positive, we have a Category I piriformis-gluteus or dollar sign patient. At this point it would be efficacious to have the patient turn their eyes superior and lateral toward the side of distortion. If this ocular involvement abolishes the therapy localization, we have what might be called an inferior sacrum, inferior occiput, Category I. The correction is accomplished very nicely with an activator, with manual manipulation or with a respiratory pump type adjustment. The activator is probably the fastest. You will recall that there is rib head tenderness on the side of category involvement. This tenderness is no longer present after the correction is made with ocular and respiratory assist. There will no longer be pelvic weakness and therapy localization will be negative. In the 4% of cases where the respiratory assist is not corrected via the adjustment, there is usually a cranial-spheno-basilar subluxation which will require attention.

Respectfully Submitted

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EFFECTS OF THE EMOTIONAL NEUROVASCULAR TECHNIQUE ON A PATIENT WITH
TRAUMATIC AMNESIA

Emil S. Emenak

September 23, 1960

Goodheart has demonstrated the special characteristics of the neurovascular point of the Pectoralis Major Clavicular. The significance of the emotional neurovascular technique is further discussed by Walker. Briefly the technique is applied as follows.

The Pectoralis Major Clavicular are bilaterally tested to make sure they are strong. The patient is asked to recall a reoccurring traumatic, painful event or experience in vivid detail and the Pectoralis Major Clavicular is retested. Bilateral weakening of the Pectoralis Major Clavicular under these circumstances is indicative that the patient is still reliving the experience in the present rather than in the past, where it belongs.

The corrective procedure is as follows:

1. Open the Conception Vessel by running the meridian from the symphysis pubis to the lower lip three times
2. While the patient is mentally recalling the painful events in great detail maintain contact on the neurovascular points of the Pectoralis Major Clavicular until a pulsation is felt
3. Close the Conception Vessel from lower lip to symphysis pubis

Under normal circumstances this seems to allow the nervous system to file the painful experience in the past and the emotional charge of the experience is eliminated or greatly diminished. I had found this technique of great value in persons who were unable to forget or let go of death of loved ones, divorce or other painful experiences. A new use for this method has evolved in my dental classes and the dentists are now often having their chairside assistants use this technique as a preparatory relaxation technique. They have found this method to be an excellent way of reducing the fear and anxiety of dental procedures.

A possible third use for this technique occurred when a patient who

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September 28, 1982

had been struck by a car presented herself at my office. The patient had been walking along a road with her daughter when both the mother and daughter were struck from behind and thrown some distance into a ditch. After the accident the mother developed an amnesia relative to the whole incident as well as developing severe hysterical symptoms of anxiety, phobias and depression. She subsequently attended a psychiatrist with little in the way of results. She attended a local kinesiologist whose adjustive procedures seemed to exacerbate both her emotional and physical symptoms. She was referred to our office by the kinesiologist.

During the treatment the patient was extremely apprehensive and as a consequence I decided to use the neurovascular emotional technique on the patient. I proceeded to maintain the contact and had the patient describe the events that she could recall leading up to the accident. As the patient talked about the accident she not only began to remember all the details of the accident but began to relive the whole episode in slow motion with considerable hysteria, screaming and crying. The accident seemed to unfold in slow motion and at the apparent moment of impact she sat bolt upright and relived the pain of the impact and her fear that her daughter had been killed during the accident.

She then proceeded to travel through her trip to the hospital and the examination procedures she experienced there, and, her fear of seeing her daughter unconscious. The patient eventually started to come out of the procedure after about one to one and one-half hours. I then closed the conception vessel and had the patient return in a week. When the patient came back she was obviously more relaxed and was able to recall some details of the accident. The neurovascular technique was used on two more occasions with increased recollection of the accident and relaxation to the patient. By the fourth visit we were able to institute conventional kinesiological procedures and the patient has subsequently made significant improvement.

EFFECTS OF THE EMOTIONAL NEUROVASCULAR TECHNIQUE ON A PATIENT WITH
TRAUMATIC AMNESIA cont'd.

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September 28, 1982

This case suggests that the neurovascular technique may be used to not only file painful or traumatic events in the past, but as a possible use in patients who have post traumatic amnesia as a method of reducing the anxiety associated with the accident.

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