You'll Be Better, Why You'll Be Better — The Story of Applied Kinesiology

by George Goodheart

Chapter 1 : THE BEGINNING

I graduated from the National College of Chiropractic in Chicago, Illinois in 1939, and previously attended pre-chiropractic at the University of Detroit. I began practice in association with my father late in 1939. However, the advent of World War II didn't give me much time to practice. I went through the Air Corps Cadet Program in 1941, during the early war years, but through a happy series of fortunate events became involved in innovative air operations research, so my active practice really began in 1946 following my release as a Major from the United States Air Force. Having left the Air Force in 1946, I resumed active practice in association with my father until his death in the early '60s.

Because of my father's background in general practice, ours was a general practice, and we saw many patients with many problems. As is usually the case, the further along I got in practice the more intelligent my father seemed to become—the obvious fact being that I became more aware of my inadequacies and his excellent qualities; and I grew in stature and development because of my association with his very, very practical and superb diagnostic and clinical work.

My time in the Air Force had given me a taste for innovative opportunities, and also had taught me a practical method of dealing with problems, and this was to stand me in good stead later on.

Not long after my father's passing, a young man presented himself at the office complaining of a relatively common problem, although at a very early age. He was losing his hair. He had a rapidly receding widow's peak, and at the age of 24 seemed quite concerned. He was a stocky young man who was quite well built, and had recently been discharged from the paratroopers, but despite apparent good health he was suffering from a rapid hair loss.

Examination revealed a hyperthyroid problem, and at that time we were measuring the thyroid function as we still do, by measuring the speed of the achilles tendon reflex. The achilles tendon is put on a stretch and tapped with a testing hammer; then the speed of the achilles as it moves, just as your knee would jerk under the knee jerk test, is measured by its path through a photo-electric beam. This impulse is transferred electrically to an EKG, which then gives a printout to the degree of functional capacity of the achilles tendon to respond to the tap.

The normal time is 330 milliseconds, and his was abnormally fast, approximately 220 ms. 220 milliseconds was quite fast, and nutritionally I had learned that natural amounts of Vitamin A and a source of Thymus, a small gland around the windpipe which is associated with auto immunity, were practically specific for hyperthyroid problems, along with regular chiropractic care. Upon administering this nutritional support and the proper treatment mechanically, he showed a tremendous response in about two weeks. His hairline stopped receding, for which he was very grateful and pleased, and he asked me advice about another problem.

He mentioned that he couldn't get a job in any of the factories in our town because he was unable to pass the physical—and the reason he was unable to pass the physical was his inability to press in a forward direction with one of his arms. One of his shoulder blades stuck out in a rather unusual fashion, protruding from the chest wall. He asked me if I could do anything about it. I said, "Well, probably it's some type of anomaly, a variation in a probably normal function." We did some x-rays to prove this potential which revealed no abnormality, and I could offer him no further advice as to why this particular condition was present.

Either fortunately or unfortunately, depending upon your point of view, I was able to procure a job for him with one of the companies in the building where we had our offices, a nutritional company with whom we did a lot of business. He would come into our office, and quite often in a crowded waiting room would ask me in a loud voice, "When are you going to fix my shoulder?" This embarrassed me somewhat, and I motioned him to come into the inner office quickly, away from the sight and scene of my embarrassment, and I would tell him that there wasn't much I could do about it.

Having been embarrassed for the last time by his frequent inquiry, I resurrected a book that had been given me by a colleague of mine, Dr. Raymond Koshay, a very fine chiropractor in Port Huron, Michigan whom I had been able to help with a knee problem; and for Christmas he had given me a copy of the book. I remembered that there was a muscle that pulled the shoulder blade forward so that it would lie flat on the chest wall, but something like the old adage—what you don't use you lose—I knew the muscle existed but I wasn't sure of its actual origin and insertion. When I applied myself to the book he had given me, "*MUSCLE TESTING*" by Kendall & Kendall, I soon found the muscle that pulled the shoulder blade forward on the chest wall was the anterior serratus. There was a method for testing it which involved placing the patient's hand on the wall, and then pressing on the spine in a forward direction, and the shoulder blade immediately stuck out.

In an effort to identify the cause of the problem I palpated the muscle. He said he had the condition as long as he could remember—15 or 20 years—yet when I palpated the muscle left and right, on the side of involvement, I found no atrophy of disuse—the usual pattern of inactivity that occurs, for example, if you keep your arm in a cast and the muscles wither from lack of activity.

Upon palpating the muscle I felt an unusual nodulation at the attachment of the muscle to the anterior and lateral aspects of the rib cage, which I didn't feel on the other side. The small nodulations were quite apparent to the palpating finger, and in an effort to identify their nature I pressed on them. They were not painful other than minimally so, and they seemed to disappear as I pressed on them with my palpating pressing finger.

Encouraged by the apparent disappearance of the first one or two, I continued to press on all of the small areas which we later learned to be avulsive in character, a tearing away of the muscle from the periosteum. The attachment of the muscle to the covering of the bone, the periosteum, was producing a nodula-

tion which is characteristic in these cases of micro avulsion. They are small tearings away of muscles from their attachment.

Having palpated and pressed on all the small nodulations which coincided with the attachments of the muscle to the rib cage, I then surveyed the muscle. It felt the same, but this time I noticed his scapula (shoulder blade) was lying in a normal position on the posterior chest wall.

Surprised but pleased, I repeated the test, having him place his hands in front of him against a plywood panel that separated one section of the office from another, and I pressed hard on his spine. The shoulder blade did not pop out, and he looked at me with an inquiring glance and said, "Why did you not do that before?" I looked back at him, serious of face and direct of eye, and said, "Well, you have to build up to a thing like this. You didn't get sick over night." It was an automatic response, but all I could think of at the time.

He was pleased, I was delighted. It was an unusual thing to see this quick a response. In an effort to identify this unusual reaction, yet not reveal my surprise, I requested him to return to the office the next day so I could check his hair loss. He advised, surprised, that he hadn't lost any hair in six months. I mentioned that he could never be too sure, so he showed up the next day. I looked at his hair and said it looked fine. Then I said "By the way, let's test that muscle." I tested the muscle, and it remained strong—and it has remained strong ever since! I have seen this patient from time to time since that first incident, which occurred in 1964.

Emboldened by this unusual success, I began to test muscles by the method of Kendall & Kendall, a method which is used by military, civil and government agencies to rate disability and is a standard method of diagnosis. I found many patients showed muscle weakness. Many patients also denied a history of trauma, but many patients responded to the hard heavy pressure at the origin insertion, although many did not.

Fundamentally, my rate of success with patients was rising and I had communicated this method of testing along with the rather primitive method of treatment to my colleagues. One of those colleagues, Dr. Pat Finucan, sent me a patient who had an unusual type of sciatic neuritis, a painful problem involving the lower limb that would cause severe pain if he were to stand, sit or lie down, but would disappear when he would walk. Dr. Finucan had found a weakness of the fascia lata, the muscle covering the lateral portion of the thigh associated with movement outward of the leg.

Despite efforts to correct it mechanically at the spine and locally, using the origin insertion technic, he had been unsuccessful in relieving the patient's pain or changing the disability which was diagnosed by the pattern of muscle testing. The muscle would test consistently weak on the side of involvement: tested by requesting the patient to abduct, moving the leg sideways, and then requesting the patient to resist the pressure to take it medially. This was accomplished while the patient was in the supine, back lying position.

Because of the unusual history, I felt that this was an involvement of the lymphatic system, which is the sewer or drainage system of the body. It is drained by a variety of modes, but fundamentally it is drained by the squeezing action of the muscles on the lymph system. Because walking relieved it, indicating this possibility, I palpated the lymph glands on the lateral aspect of the thigh and felt nothing unusual in comparison to the uninvolved left side.

I palpated also for the potential of any sacroiliac disturbance, because occasionally we get lymph nodulation in the region of the sacroiliac joint if there is a sacroiliac disturbance. I found none of these, and the patient was in a great deal of distress while lying on his back. After palpating for diagnostic information, which I did not find, the patient looked up at me and said, "That's the first relief I've ever gotten." I looked at him and said, very bravely, "That's what you came here for," indicating that it was not the surprise to me that it was.

Astonished by this rather quick success and yet not understanding the basis, I continued to initiate the palpation which I had accidentally used to relieve his pain. He remarked that the pain which he had experienced for many, many months was now completely absent, and subsequent investigation and diagnosis revealed a complete disappearance of the long-standing and chronic irritation of the sciatic nerve.

My secretary, who had been with me for many years and who was a very fine German woman, had quite a bit of sinus trouble and would consistently show a head tilt when she would have a sinus disturbance; and despite the fact that I could find a weakened muscle which I associated with the head tilt, the original technic that had been used on the young man with the hair loss did not produce any muscle strengthening, nor did it affect the sinus involvement.

Thinking that one had to simple palpate and treat the muscle, such as had been done to the sciatic patient earlier that afternoon, I tested her neck flexors by having her raise her head and turn it slightly to one side, and they showed immediate weakening on testing, I attempted to repeat the procedure that had helped the sciatic patient, running my hand along the lateral aspect of the muscle, the sternocleidomastoid muscle that runs from the back of the head bone to the collarbone. I felt nothing different on palpating and testing the muscle, using the technic that I had palpated and tested earlier on the gentleman with the sciatic neuritis.

I tried triumphantly to test her neck muscles again, and to my chagrin her neck muscles were possibly even weaker than before, and I almost injured her head by the sudden collapse of her neck to the testing direction of my hand. I said rather despairingly, "It sure seemed to work on that fellow this morning. I can't understand why it doesn't work on you now."

Then I thought, perhaps what I pressed on was something unassociated with the muscle itself, but associated with, possibly, some lymphatic circuit breakers which had been postulated by an osteopath named Chapman. This had later on been discussed in a text, "*AN ENDOCRINE INTERPRETATION OF CHAPMAN'S REFLEXES*," the second edition, which had been reprinted by the Academy of Applied Osteopathy, copyrighted May 6, 1946. It had originally been copyrighted in 1937 by Charles Owens, D.O., and was a book on the diagnostic and therapeutic application of neurological reflexes that had been the work of Frank Chapman. Both Dr. Chapman and Dr. Owens had postulated the existence of a reflex called the neurolymphatic reflex—a cutaneous visceral reflex that had been under investigation at the Kirksville College of Osteopathy and Surgery.

"The surface changes that are present in a Chapman's reflex are palpable." Dr. Owens spoke of the changes found in the deep fascia as well as the superficial tissues located at specific points (loci) and consistently associated with the same viscera. These little tissue changes, which began in the form of contractions, are located anteriorly in the intercostal spaces between the ribs near the sternum. They may vary in size from a half of a BB shot to that of a

small shot gun pellet, and are generally multiple. This type of tissue change is apparent in some of the reflexes found in the pelvis; but the ones found in the lower extremity, associated with the colon, broad ligament and prostate, vary in character.

By trial and error, testing muscles and then comparing areas that Chapman had originally talked about, we found which circuits affected which muscles. Then, by trial and error and also by examination of a particular patient who had Hodgkin's Disease, and who exhibited nodulations and lymphatic gland characteristics inherent as characteristic of Hodgkin's Disease, we found that many of the nodulations corresponded precisely to the areas that Chapman had originally postulated; and by trial and error, and also by the discovery of nodulations in areas that Chapman had not discussed, we were able to find the neurolymphatic reflexes for most muscles.

By now I was becoming convinced that there was a relationship between muscles and particular viscera or organs. A moderately weak muscle on testing appeared to be associated with a weak viscera or organ, but every time I could see evidence of a weak pancreas, or a weak stomach, or a weak liver or a weak kidney dysfunction—of those organs which would be measured by x-ray or by biochemistry or by some other accepted biological test—I would find a corresponding weakened muscle. This relationship, although rather tenuous at first, became more and more evident as time went on.

This began to explain, at least somehow, the visceral response that occurred from muscular skeletal corrections and made a little more sense out of the observations that patients used to make following treatment for a muscular skeletal problem, and with the spontaneous resolution of the visceral or organ problem. I found a strong relationship to exist between the spinal level of neurolymphatic activity and structural aberrations of the spine, but this was not always the case.

It was just as if there might have been an original subluxation or lesion of the spine, a functional disturbance of the spine that somehow was either self corrected spontaneously or corrected by manipulation; but the long term effects of that disturbance continued to remain. For example: if you have a home washer-dryer and perhaps place a heavy object such as a rug in it, as it starts to spin it dry, the rug's eccentric position in the spinning washer causes a vibration, then the vibration sensor in the washer turns the washer off to prevent damage from the eccentric rotation. This usually sets an alarm going as well as turning the washer off, and the housewife then attends to the problem by opening the panel on the washer, and seeing the rug in an eccentric position rearranges the rug. Then she closes the panel on the washer and many times must then reset a circuit breaker if closing the panel did not already do so. In other words, she would have to do two things: rearrange the rug structure, so to speak, and then also set a circuit breaker.

We postulated that the lymphatic centers were circuit breakers in this sort of analogous context. This proved to be a valuable system of analysis and the response rate continued to rise in patients, and we started to see more and more patients upon whom we did more and more muscle testing.

An Italian woman came to see me and complained of a headache for 30 of her 49 years, and on testing the muscles I observed some muscles to be weakened on both the right and left sides of her body. I noticed that in an effort to maintain a response to testing of certain muscles, if she took a deep breath some muscles, for example on her right side, strengthened; but the same deep breath seemed to weaken the muscles on her left side. But instead of taking a deep breath and producing strengthening on her left side, letting the air OUT seemed to strengthen the muscles on her left side.

She also exhibited a rather unusual configuration in terms of analysis of the level of her head. Looking at the position of her ears in relationship to her head, her ear was lower on the right than it was on the left, as was her occiput, the bones of her skull. Looking at her from the rear confirmed this position, lower on the right, but looking at her on a face view, head on, an anterior look showed her eyebrow and eye to be higher on the right and lower on the left, just the opposite of what I had observed looking at her from the posterior view. Thinking perhaps that her ears were in an altered position, I compared her ear position by measuring down from the vertex and I found that the ears were equally spaced on her head measuring from the top down, yet there was an obvious discrepancy between the level of her ears and the level of her eyes, instead of making a parallel pattern they made a wedge pattern, which was very confusing.

I had been aware of the work of William Garner Sutherland, an osteopath who had postulated the concept that the bones of the skull move as you breathe like the gills of a fish. He developed the concept that there was a vestigial gill mechanism in the skull, and by long experimentation with himself, using many ingenious devices, had attempted to limit the motion. He observed his own response, and published an original text based on his observations entitled, "*THE CRANIAL BOWL*," by William Garner Sutherland. His work had later been documented and revised by Harold Magoun, D.O., entitled "*OSTEOPATHY IN THE CRANIAL FIELD*." Both the first and second editions of Dr. Magoun's books are available.

The concept that the bones of the skull had motion seemed contrary to my anatomical and osteological training, yet in an effort to understand the problems produced by the patient I was examining, I attempted to move the mastoid process on one side of her head in a forward direction while she took deep inspirations, and at the same time moved the mastoid process in a backward direction while she took a deep expiration—in other words, using a counter-torque motion with the fleshy part of my thumbs, the thenar portion of the palm of the hand—and the forward motion and the backward motion were accomplished simultaneously on this 49-year-old Italian woman.

After 4 or 5 deep inspirations and expirations, despite the fact that she had attempted these before, but not with the concomitant skull pressure, she looked at me and her eyes widened, and she said, "That's the first relief I've ever gotten." I looked at her, again serious of face, and with true sincerity said, "Well, that's what you come here for," to again disguise my surprise at her rapid response.

We then began to test muscles against phases of respiration, and we found many muscles responded to inspiration, some responded to expiration, and interestingly enough some responded to half a breath taken out, some responded only to a breath taken only at the nostrils and some responded to a breath taken only at the mouth. Some responded to breathing through one nostril as opposed to the other, and some responded in an opposite fashion. We soon found fourteen basic cranial faults which will be discussed later, but the primary investigation method was to find a weakened muscle.

We had the patient take a deep breath in or out. If the muscle was found to be weak and responded to inspiration, the mastoid process on the side of the skull that the muscle weakened was located and pressed forward at the temporal bone mastoid pro-

cess with the thenar eminence of the hand, with about 4 or 5 pounds of pressure coincident with 4 or 5 deep inspirations.

If the muscles found weak responded to expiration, the thenar eminence of the hand was placed anterior to the mastoid process of the temporal bone and the mastoid process of the temporal bone was pressed backward towards the occipital coincident with 4 or 5 deep expirations using 4 or 5 pounds of pressure.

This resulted in many, many cases improving from many, many conditions, and they postulated a concept of a cerebral spinal fluid flow rate something like a dual irrigation ditch—with someone turning the rheostat down on the pump, and the tomato vines withering somewhat, and then when someone turned the rheostat up on one side or the other, the tomato vines thriving due to an increased flow of the irrigation fluid.

Investigation revealed that not only did the bones of the skull move in a predetermined fashion, but so also did the vertebral segments in which vertebrae went through a rocking type of motion—the tip of the spinous process of a vertebra involved moving in an inferior direction towards the feet with inspiration and a superior direction with expiration. The spinous process moves inferior, footward, with inspiration and headward with expiration.

We soon found there was also a sacral motion, the tip of the sacrum at the coccyx moving forward with inspiration, toward the front of the body, and moving backward, toward the back of the body, with expiration. We found a reverse movement to exist in the coccyx, a counter movement between the sacrum and the coccyx. We also found a counter movement between the total pelvis, the pelvis moving backward as the sacrum moved forward and the pelvis moving forward as the sacrum moved backward, coincident each time with phases of respiration.

This new cranial finding coincident with a method of diagnosis aided greatly in the application of the cranial concept. The original Sutherland concept, as well as those that followed, used topographical, anatomical changes for cranial corrections; but the addition of respiration added a measure of diagnostic certainty and also safety to this relatively new science.

Time has shown that a respiratory relationship exists in the spinal fluid flow rates, and a critical factor in the production of routine cranial correction was to correlate muscle weakness to strengthen with respiration. More of this will be discussed later on in chapters on cranial technic.

By now we had the original methods of muscle testing with the concept of micro avulsion origin insertion technic; we now had the possibility of lymphatic blockage—in other words, the muscle couldn't flush its own lymphatic toilet; we now had the concept of cranial technic, respiratory systems; and we also had, prior to the development of cranial technic, the system which we call neurovascular response.

I was lecturing in Rochester, New York discussing the original method of hard, heavy pressure at the origin insertion of the muscle in case of weakness caused by micro avulsion, and also demonstrating the lymphatic technic for finding the source of blockage in the lymphatic range of muscles. I was asked to treat a young boy with asthma who was having an acute attack and who did not respond to the usual medications. He was having some response to chiropractic technic by a young chiropractor attending the lecture, but he was suffering an acute asthmatic episode at the time of the lecture, during the lunch period.

By now we had found that the adrenal glands were responsible to a great extent for failure to produce adequate adrenalin, agreeing with the medical approach—the crisis care type of approach to asthma seemed time honored, at least pharmaceutically. We would find a weak sartorius gracilis muscle which time had shown to be related to potential failure of the lymphatics of the adrenal gland to flush its own toilet, so to speak—its lymphatic toilet. But investigation of the neurolymphatic reflexes and treatment for them did not change the weakness that we found on testing of the sartorius muscles.

The young boy was lying on his back, one foot pointing straight up and the other foot lying loosely to one side. In an effort to correct the problem I had already used the neurolymphatic reflex and had attempted an origin insertion technic without any success. I knew that occasionally the lymph system was sluggish because of failure of the lymph system itself to drain, and I was using what was called a lymphatic pump. The operator's fist first was placed on the sternum of the individual and moderate pressure was exerted spineward while the patient attempted to lake a deep breath. At the middle of the attempt to take a deep breath the fist was suddenly removed, causing the succussion of the chest, changing the pressures within the chest, and literally shaking the thoracic duct, allowing better lymphatic drainage potential. This too was unsuccessful, but at that time I was aware of a primitive cranial technic of simply spreading the cranial sutures as advocated by Dr. James Alberts, Sr., a very fine chiropractor in the southwest.

In attempting to spread the cranial sutures in a very simplified fashion, I did not see any change, and in an effort to evaluate the problem I sat down and re-attempted to spread the sagittal sutures. From experience I had learned that this was of some value occasionally in lymphatic blocks. My index fingers were resting on the posterior fontanel area with the rest of my fingers spreading the sagittal suture which runs vertically along the top of the skull, separating the two halves of the skull and joining the parietal bones of the skull together. I felt that insistent pulsation, very faint at first, at the posterior fontanel; and despite the fact that his carotid arteries were beating at the rate of about 120 and his respirations were at least 40, I noticed that the pulsations that I experienced with my fingertips were at the rate of 72 beats per minute.

Thinking the beating was perhaps in my own fingers; I removed my fingers and placed them on a wall to identify if the 72 rate beating was in my own fingers. I noticed no change. I reapplied my fingers to the posterior fontanel and felt the continued pulsation, which became more insistent and more persistent and more evident in strength, until finally the young man gradually stopped his labored breathing, took a deep breath, began to breathe easily, and simultaneously his foot rotated up into a parallel position with its opposite member. The doctor attending the youngster, who had asked me to see the patient, looked at me and said, "Good gracious, Doctor, that's marvelous." And I looked at the doctor, very serious of face, and said, "That's what you come here for. "We now had developed another method, called the neurovascular technic, for the correction of muscle weakness.

In the embryo there is no heart, and for the first three or four months the mother's placental circulation is augmented by a network of vascular circuits which, as the tissues grow, ex-

ert slight traction on the blood vessel which then causes the blood vessel's muscles themselves to pulsate in an augmented fashion, aiding the mother's placental circulation.

At about the fourth month the heart is formed, and many times the mother is delighted to hear the heart beat that her obstetrician allows her to listen to. At the advent of the heart beat, the heart takes over part of the burden of supplying circulation to the growing embryo, and the neurovascular circuit of supply and demand circuitry goes on a standby basis—something like a generator behind a hospital in case of power failure, which can be turned on for emergency use.

These neurovascular receptors were first discovered by a chiropractor in California named Terrence Bennett, who developed a foundation for teaching his material and who wrote extensively in the early '30s and '40s of their use. Upon his departure from active practice, and upon his death, Dr. Floyd Slocum, one of the early pioneers in the American Chiropractic Association, took over his activity and the Neurological Research Foundation continues to be active under the auspices of Dr. Martin King from California.

When a light tugging touch was applied to the vascular circuits a pulsation was felt beneath the finger. The light tugging touch is maintained for 20 or 30 seconds minimum time, the muscle is tested before and after, and many times this coincides with the need for cranial fault correction. But in any event, the light tugging touch is maintained for a variable period of time, a minimum of 20 or 30 seconds, and the muscle tested before and after to ascertain the return of strength.

It is just as if the neurovascular receptor acts as a thermostat. If the thermostat is set too low the muscle doesn't get its proper circulation and the muscle's lactic acid and other products of mechanical contraction of the muscle are not flushed or washed out, and the muscle therefore is clogged with its own waste products and shows weakness.

Roger Bannister, who ran the first four minute mile, became a vegetarian - not through embracing of the vegetarian concept, but because the vegetarianism put less of a load on his liver and he was able to oxidize excess lactic acid produced by the increased effort to run the four minute mile. Lactic acid, as it is produced by the muscle in function, causes the capillaries to dilate, and finally there is a status quo reached by the lactic acid level producing the greatest amount of capillary dilation. When the lactic acid reaches higher levels, there is no further capillary dilation until the liver goes into "overdrive" and attempts to oxidize off the excess lactic acid; and here, then, the muscle can resume a normal function.

We find that many muscles lack a "thermostatic" configuration which allows them to function when under stress, and attention to the neurovascular receptors by a light tugging touch allows much better circulation to the muscle. We continue to observe the muscle-organ relationship and we were becoming increasingly convinced of the reasonably frequent relationship between weak organ-weak muscles, although we were not convinced of the contrary relationship of the weak muscle-weak organ.

We now had four options for strengthening weak muscles. We had the hard heavy pressure described earlier, the activation of the lymphatic reflexes, the application of cranial technic, and the use of neurovascular receptors.

The subject of acupuncture has long been a point of interest, but not much was known of this concept until the early work of Bennett Cerf, who published in Random House publications the book, "*ACUPUNCTURE, ANCIENT CHINESE ART OF HEALING*," by Felix Mann, an English physician. Some of the early Jesuits who had been missionaries in China had spoken of the unusual responses that were obtained in many instances from the practice of acupuncture, the insertion of tiny needles of metal or bamboo into prescribed areas on the skin of the sick patient. To quote Felix Mann in his acknowledgements at the beginning of his book, "*ACUPUNCTURE, ANCIENT CHINESE ART OF HEALING*" now published by James Heineman Company, Medical Books Ltd., London, "All European acupuncturists owe Soulie de Morant a debt for his original translations of Chinese treatises. He developed much understanding of the subject and its practical application during the time he associated with Dr. Ferey Rolles. Those who read Chinese are few, but many may be greatly benefited by the French and German books on acupuncture mentioned in the bibliography."

Acupuncture is an ancient Chinese system of medicine in the practice of which a fine needle pierces the skin to a depth of a few millimeters and is then withdrawn. The only thing of real importance in the study of acupuncture is to know at what point to pierce the skin in relationship to which disease.

The notion that a pin prick, often in a part of the body far removed from the seat of the disease, can cure ills is alien to conventional thinking. It is unfortunately the case that many doctors, even when faced with several former patients who have been cured by acupuncture where other efforts have proved fruitless, have refused to believe the evidence.

Acupuncture is not the exclusive possession of the Chinese. The papyrus ebers of 1150 B.C., one of the most important of the ancient Egyptian medical treatises, refers to a book on the subject of muscles which would correspond to the 12 meridians of acupuncture. The Bantu sometimes scratched certain parts of the body to cure disease. In the treatment of sciatica some Arabs cauterize with a hot metal probe a part of the ear. Some Eskimos practice simple acupuncture with sharp stones. An isolated cannibalistic tribe in Brazil shoots tiny arrows with a blow pipe at certain parts of the body.

A patient, and a good friend, had returned from Hawaii and brought me one of the first copies published by Random House of Felix Mann's book. By now we have become pretty well convinced of the relationship between viscera and muscle. In the chapter of Fefix Mann's book entitled "The Five Elements" on page 92, he spoke about an organ relationship which included many of the aspects of acupuncture, giving four points to tonify or stimulate the area and four points to sedate if the organ was overactive.

In an effort to relate these points to kinesiological parameters, we attempted stimulating the points for tonification and found occasional responses in muscles. We attempted to sedate other points and found occasional responses in muscles. Insertion of a needle at the so-called "first point" invariably would produce a strengthening of a muscle if found weak on testing, and insertion of a needle at the first point of sedation would invariably cause weakness of the muscle if the muscle was strong. We soon found that touching the first two points for tonification would result in strengthening of a weak muscle. The converse was also true. Touching the first two points for sedation and simultaneously the second two points for sedation would weaken the muscle.

We wrote the first book on acupuncture in 1966, showing its relationship kinesiologically, and this was the only research manual that did not go through a second reprinting, because the concept was too new at the time. However, since that time it has grown to be a standard portion of Applied Kinesiology and forms a basis of much of the information we have been able to identify about acupuncture.

We now have five arrows, so to speak, in our quiver. We could shoot the arrow along the origin insertion, the neurolyrnphatic, the neurovascular, the cranial, and now the acupuncture path. Each of these develops their own special set of rules and special set of circumstances.

How The Body Heals Itself

Applied Kinesiology is based upon the fact that body language never lies. The opportunity of understanding the body language is enhanced by the ability to use the muscles as indicators for body language. The original method for testing muscles and determining function, by the methods of muscle testing first advocated by Kendall and Kendall, is a prime diagnostic device. Once muscle weakness has been ascertained, a variety of therapeutic actions are available which are too numerous to enumerate here. The opportunity to use the body as an instrument of laboratory analysis is unparalleled in modern therapeutics because the response of the body is unerring. If one approaches the problem correctly, makes the proper and accurate diagnosis and treatment, the response is adequate and satisfactory both to the doctor and the patient. The name of the game, to coin a phrase, is to get people better. The body heals itself in a sure, sensible, practical, reasonable, observable, predictable manner. "The healer within can be approached from without." Man possesses a potential for recovery through innate intelligence or the physiological homeostasis of the human structure. This recovery potential with which he is endowed needs the hand, the heart, and the mind of a trained individual to bring it to potential being, and allow the recovery to take place which is man's natural heritage. This benefits man. It benefits him both individually and collectively, but it also benefits the doctor who has rendered the service and allows the force that created the structure of the body to operate unimpeded. This benefit to man can be compounded by knowledge with physiological facts and with predictable certainty.

Chapter 2 : NUTRITION AND BODY LANGUAGE

Why nutrition is a hit and miss sort of thing

By now my practice was growing at a rate I found difficult to maintain, together with attempting to teach this new material, and I was fortunate to have as my first associate Dr. Terry Franks, who was able to "watch the store" while I was gone. It was also during these initial lecture periods that my next door neighbor's son, now Dr. Walter Schmitt, came to hear me lecture and observe me treating a rather apprehensive female physician, and my making the particular corrections aided in stimulating him to enter chiropractic college

By careful comparison of the facts—what I now could observe in the patients of Dr. Franks and myself, as well as the assistance of the student doctor, Walter Schmitt—we were able to investigate many different features of problems that involved muscle testing and treatment, and we were well into the production of research manuals and research with an ever-increasing amount of knowledge.

I had a patient and a good friend who was attempting to go through Wayne University at the age of 45, having raised a family. She was hypothyroid and hypoadrenic, and her hypoadrenia I was able to help. While taking 3 grains of thyroid a day, she continued to show symptoms of hypothyroidism; i.e., increased weight, easy fatigability, loss of the outer third of the eyebrow, greasy sort of skin, and poor memory—which was not conducive to being a good student at a relatively late period in life. Because of the three grains of thyroid a day and failure to respond, I thought perhaps it would be interesting to observe what happened if she took thyroid in a different fashion.

Many years before I had observed a young boy who had swallowed the contents of an orange crush bottle thinking it contained the beverage, but instead it contained lye and it chemically perforated his esophagus. His esophagus was being reconstructed by a series of maneuvers designed to use a portion of his small intestine, and there was a stoma, an opening in his stomach, where properly vitamized and calorized food was placed. This young man was losing weight despite an adequate caloric intake, developing kidney signs, and also arthritis, at the age of seven. I thought I knew my father's wisdom, but did not understand it totally when my father told me to tell the young boy to chew the food he could not swallow, and then insert it into the artificial stoma. On following this request I observed a decrease in the arthritis, the disappearance of the kidney stones, and an increase in weight. This greatly impressed me—that somehow our salivary digestion and mastication was a factor in the production of proper food assimilation.

With my own children growing I had observed that if they were crying because of being hungry and if I gave them a piece of cheese they stopped crying immediately, when I knew how long it took to digest the cheese. If I were the child involved I wouldn't stop crying until some stage of digestion had developed. I found it difficult to understand how they could stop crying in anticipation of digestion. I also had been doing a test for Vitamin B on the saliva of patients involving the combination of starch and iodine which produces a blue color on the level of ptyalin. Ptyalin in the saliva is an indicator of the amount of Vitamin B; the more ptyalin the more Vitamin B, and the faster the starch-iodine blue color disappeared the greater the amount of Vitamin B. Therefore, judgment could be made as to the need or lack of need for Vitamin B supplementation in a particular patient.

In addition, I was aware of the fact that the parotid glands deiodinated the food we ate. So, with this background material regarding salivary digestion and absorption, I asked this particular patient to chew on the thyroid tablets—she had already taken one that morning—she took three grains of thyroid a day. She chewed one of the grains of thyroid and promptly went into a deep syncope. By this time I was not dismayed by this sudden turn of events and I checked her vital signs, found them all to be normal and sat there with crossed hands waiting for her recovery. After four or five minutes she fluttered her eyes, looked at me. and asked, "What happened?" I said, "You fainted," and she asked, "From chewing the thyroid?" and I said "Yes." She said, "I never did that before," and I said, "Well, you never chewed it before."

The teres minor muscle, the muscle at the back of the shoulder, can be tested easily with the arm flexed 90° and the wrist pushed toward the umbilicus, while the patient attempts to externally rotate the arm, pressing against the doctor's thrust. This muscle I found associated with thyroid, and I had always found it consistently weak in her case, despite efforts to treat it by the previous methods we have discussed. This muscle now tested very strong, and she looked at me and said, "Could I possibly have felt better from that, that you gave me?" I looked at her, serious of face and sincere of purpose and said, "That's what you come here for." This was the first patient we attempted to have chew on the nutrient without swallowing it down.

That afternoon our next door neighbor's father had been to a Mexican party at one of our local hunt clubs and had been tipping a tequila bottle with some frequency and was suffering quite a headache. Emboldened by the experience I had earlier that morning I had him chew some bile salt tablet material. I had tested his pectoralis major sternal division, the muscle associated with liver, and found it to be weak. I then had him chew the bile salt material combined with some Vitamin A. There was an immediate increase in strength of the tested muscle and he looked at me with a question in his eyes and asked, "Could that have helped my headache that quick?" I said, "That's what you come here for," and proceeded to explain what had happened that morning. We then, by trial and error, started testing muscles against nutrients, and have developed the rationale and the pattern of activity which we will discuss later on in this particular text.

We found that certain food could be tested and they would either strengthen or weaken certain muscles. We found certain contaminants in our environment could be tested by inhalation or by contact. We found ration and reason and sense to the rather nebulous concepts of allergy and sensitivity.

Nutrition is a hit or miss sort of a thing because people take nutritional products for symptoms, and depending on which issue of which magazine they have read, people will be taking the currently fad-interest nutritional product, many times with good results.

The body has a unique system of identifying its needs both in terms of food and nutritional supplementation, as well as medication, and the nutrient in question can be tested against any of the patient's muscles upon ingestion of the material on the patient's lingual receptors on the tongue; a muscle is tested, and if the food is good or neutral the muscle will not weaken. If the food, although very appetizing and well liked, is detrimental to the patient the muscle will weaken. The same is true of a nutrient or any medication. This makes sense out of a hit-or-miss sort of nutritional thing, and rather than listening to symptoms alone, we depend on body reaction, a much more effective technic.

It is possible also to test the combinations of foods. For instance, occasionally beef by itself and rye bread by itself may test in a positive fashion, but if you combine them they will test poorly indicating that certain foods should not be combined with others. The point is that one can test any food, any medication and get a body response if the lingual receptors are allowed to be activated by the substance in question. This does not require skill and training. The husband can do it for the wife or vice versa, or any member of the household can be readily trained to do this. It readily improved the management of allergy and food sensitivities, as well as finding foods which are quite compatible with the individual, the biological makeup of the person, as well as increasing their energy balance.

Nutrition as a science is in a sort of chaos because people keep finding out small bits of information about large and major problems. It's like pieces of a jigsaw—when you happen to get the right piece for the right jigsaw puzzle it completes it, but that's not the piece we needed in another person's jigsaw, even though they may have the same desire to accomplish the same problem, and perhaps have similar problems.

Nutrition requires some type of evaluation, both in a positive and minus situation, and the ability to make valid clinical observation of a nutritional requirement requires standardized testing of muscles. Here lies the key to proper nutrition. If a patient needs a certain nutrient, it should at least not weaken any muscle. If the muscle is weak on testing in the "clear," that is no testing without any further action on the part of the patient's body {simply testing the muscle), then the appropriate nutrient should produce quick strength when placed on the lingual receptors of the tongue, and this produces safe, effective and proper use of the science of nutrition on a lingual receptor basis. This same lingual receptor activation may be used to test the food the individual consumes, and many times foods themselves should be tested as well as the nutrients.

I can recall a very famous person in show business who was taking 60 different nutrients and who required only 12 of the 60 she was taking, and 48 were doing her harm. She had a severe allergy and because of her unique voice had no understudy. She did very well following this procedure.

The failure of the science of nutrition to properly evaluate the need or lack of need for a person's nutritional support can only be based on the usual technic of symptom stopping or a "pill for every ill," whether it be a nutrient or pharmacological product. There is a better way, and the better way is to evaluate the patient kinesioiogically and test the nutrient singly against the patient's response. A recent book entitled "*THE FOOD CONNECTION*," by Schecter and Scheinken, speaks of Applied Kinesiology technic in brain sensitivity. There is a new theory of biology as advocated by James Isaacs in his "*COMPLEMENTARY IN BIOLOGY*," published by the John Hopkins Press, and this will also be discussed in further pages.

Chapter 3 : FURTHER DEVELOPMENTS IN BODY LANGUAGE
How the left and right brain function affect the body when trouble has taken place in the body

Our practice had grown to such an extent by this time that I found it necessary to have another associate, and we were fortunate to have Dr. Walter Schmitt join our group following his graduation from the National College of Chiropractic. He had always been of much assistance in developing new concepts. While a champion swimmer at Duke University, North Carolina, from which he had graduated, he would often enter long distance swim meets looking and feeling quite well, and come out of the pool quite distorted and naturally quite exhausted. We found, again by trial and error, that his method of swimming, turning his head to one side while doing the Australian Crawl or its equivalent, was producing a certain pattern activity of unbalance, repeated function which we felt was compromising the natural balance between the right and left sides of his brain.

By taking the work of Doman and DeLacato, who had developed the brain dominance concept, we found that we could exert what we called a cross crawl or homolateral crawl—a pattern of activity using rhythmic muscular activity combined with alternating arm and leg position—to effect consistent and long term structural correction. It was just as if by using repetitive contralateral movements with proper hip position we could put a final coat of varnish on twenty coats of "decoupage" that our efforts in correcting the patient's problem could produce. This could readily be abolished by using a homolateral crawl and this will be discussed in the section on Brain Damage and Cross Crawling.

We then developed the concept that there was a "tape recording" of the patient's problems within the body's nervous system, and proper exercise could produce the facilitation of correction and improper exercise could produce deterioration. This allowed a penetration of the body's nervous system in a manner never before experienced.

The ability to cause a return of 4 or 5 or 10 or 20 different functional problems by simply changing the action of certain muscles and

their rhythmic function was phenomenal. We walk with a contralateral motion, moving one arm and the opposite leg, alternating contralaterally, and by identifying residual areas of our remaining areas of muscle contraction and simply turning the head away from that side of residual contraction or remaining muscle contraction and then performing contralateral motions such as walking, we were able to eliminate many areas of difficulty that had a tendency to recur.

By the same token, we could briefly revive the old concept of a "sick" tape pattern in the body, and by doing a homolateral crawl pattern we could cause a return of highly specialized and definite patterns of activity associated with illness that had previously been documented in that particular patient. The section on Cross Crawl and Brain Damage will further develop these concepts.

About this particular time I was treating a young patient approximately five years of age who had been brain damaged at birth. We also found he had repeated convulsions and many, many problems with his development, especially with his teeth, digestion, elimination—all the patterns of activity of normal function were disturbed. He had been referred to me by another doctor and we were able to help the youngster with the frame of reference that we had open to us.

After the child had progressed quite well, we had a long conference with the mother discussing prognosis limitations, and she asked me if I could help her with a shoulder problem. I said, "Well, if you don't have an appointment I can't do it, but I can check something indicated quite quickly. Accordingly, I tested the teres minor muscle and found it to be quite strong. I went on to treat the child and had several absences from the treatment area with phone calls, and when I returned to finish treating the child, she asked me again about her shoulder, and I said, "Well, I can test a couple of things and if it's something simple I might be able to help you, even though you don't have an appointment."

I tested the teres minor muscle again and because of the numerous interruptions I questioned the mother and asked, "Hadn't I been in here and tested that just a few minutes ago?" because this time in testing I found the muscle weakened. She was holding her child. She said "Yes," and I then had her place the child flat on the table and tested the muscle again and it was quite strong. I then asked her to pick the child up again, and the muscle was weak.

This perplexed me, and I said, "Well, it's probably how you're holding the child. Simply let the child rest on the treatment table and simply touch him." On touching him with one hand the muscle weakened. I thought I was taking leave of my senses and called in my young assistant, Dr. Franks, and had him repeat the same pattern. He found it to be true and looked at me questioningly, and asked, "Why is that?" I said. "Well, Terry, I don't know, but it seems to be sort of transference of muscle weakness." This is what we call surrogate testing, and in most cases where the patient is unconscious or unable to cooperate, contacting one patient with another person who is otherwise normal will reproduce temporarily the muscle weakness that cannot be found easily in the first individual.

The methodism of this mode of investigation is not known at this particular time other than the fact that it is an effective technic under the rather narrow conditions that we set forth above. In other words, if the patient cannot cooperate, or if the patient is unable to cooperate, if she is comatose or unable to respond, this is an effective technic. The use in this regard, and with a very narrow parameter of action, is a useful technic and allows for much therapy in an otherwise difficult situation.

Because of the complexity of man's nervous system, we found a variety of situations, all of which had a time date in that they developed over a period of time. Those studying Applied Kinesiology then sort of grew up with the technic and the technic sort of grew up with them.

We soon found that touching an affected joint or area by the patient would produce an immediate muscle weakening of any tested muscle. We called this Therapy Localization. Therapy Localization did not say "what the trouble was," but simply indicated "where it was. "The *ALL OR NONE* nervous system rule here seemed to be the factor—Therapy Localization would make a strong muscle weak, or conversely a weak muscle strong. This is extraordinarily useful in holistic healing.

We then found that Therapy Localization with palms against the body had a counterpart. If the back of the hands were placed at a critical area, we would also get positive responses. We found Therapy Localization of the thyroid, for example, would be negative, and Therapy Localization of the spleen would be negative, but testing the spleen against the thyroid would be positive. We found a whole host and variety of factors that involved the use of Therapy Localization.

The advent of the Malzack Wall spinal gate theory, which was described in *SCIENCE* for November, 1968, followed a new dimension to Therapy Localization in that, by using a scratch or a pinch we would evoke the touch fiber response and would change Therapy Localization from negative to positive or positive to negative, showing that we were using a spinal gate pattern for Therapy Localization. This also led to the combination of acupuncture circuits with Melzack Wall for the relief from pain, especially post traumatic pain, which has become a very dramatic part of Applied Kinesiology.

As experience developed throughout this entire area of Therapy Localization, one of the prime values in its use has been the identification of structural subluxations, no matter how minimal in character. This had made the muscular skeletal portion of the practice very practical and has stood the test of time.

We have found, as mentioned, that in Therapy Localization we make strong muscles weak and weak muscles strong. Sometimes a muscle which should show a potential weakness on postural observation, such as a high shoulder on one side which is usually a weak latissimus dorsi, would not show this weakness until the patient Therapy Localized the neurolymphatic reflex for the pancreas.

Therapy Localization has allowed us not to tell WHAT something was, but to tell us WHERE it was. Therapy Localization does not tell what something is but where it is, and as a result you can use other methods of examination to identify what the problem is.

The concept of vertebral challenging, 4 or 5 pounds of pressure exerted on a vertebra or some other portion of the skeleton, would cause a rebound phenomenon to occur and muscles would weaken when skeletal areas that were in lesion were pressed upon. This would allow a much better conceptualization of the body's response to structural abnormalities and has proven to be a very practical and very useful technic for changing the osseous relationships that exist in the body. In other words, in finding various segments that are out of position both in static weight bearing positions and in motion, the vertebral challenging has proven to be of great value.