Clinical Kinesiology -- The Cornerstone of Biocomputer Communication

To understand the method of Clinical Kinesiology (CK) and the Biocomputer model developed by Alan Beardall, DC it is first necessary to trace the progression of Kinesiology from its beginnings. George Goodheart, DC pioneered the practice of Applied Kinesiology (AK) that was later refined by Alan Beardall, DC as the practice of Clinical Kinesiology.

Kinesiology and Applied Kinesiology (AK) Defined

Kinesiology in common medical usage is "the study of muscles and muscular movement."[1] However, when coupled with the word "applied, " a whole new concept is invoked: the use of muscle testing to evaluate body function.[2] That is, by manually testing various muscles, areas of dysfunction can be diagnosed. These areas can then be tested in relationship to therapeutic reflex points and acupuncture points to identify causal factors.

Disease begins first as an imbalance in the body's energy fields that, if sustained, progresses on to the physical plane.[3] As will be described below, weakness in a muscle is an energetic phenomenon, which can be used to identify health problems before symptoms appear, thereby allowing Western medicine to begin to practice prevention. This is very similar to the Chinese belief that illness is caused by imbalances of energy in the meridian system, as determined by pulse diagnosis. Kaptchuk has dealt with these concepts in great detail.[4] He describes how, in China today, the Western approach is often used in acute and emergency situations where there is a definite and clear concept of the disease etiology. The Eastern approach predominates in situations of a chronic nature and in functional disorders. Kinesiology is a tool that opens a doorway between Eastern and Western approaches to health, allowing a paradigm shift away from disease identification and defeat towards disease prevention and the promotion of wellness.

Historical Development of Applied Kinesiology

Historically, muscle testing was used to evaluate function, range of motion, and strength of muscles in an attempt to rehabilitate conditions resulting from trauma and wasting diseases. Once muscle function was determined, physical therapy was the preferred treatment. Dr. George Goodheart, the founder of AK, changed these concepts in a very innovative way. In the early 1960's, Dr. Goodheart proposed a radically different idea for the cause of posture anomalies. The prevalent view of the times, was that the tight, painful, muscles in spasm were pulling the bones out of proper alignment. Goodheart said that in actuality it is the weak muscles opposing the muscles in spasm that allow the tight ones to

displace the bones. One way to conceptualize this idea is to visualize a swinging door held in place by two springs that allow it to swing in either direction. If one of the springs becomes weak for some reason, then the opposite spring, even though still of normal strength, will knot up in an attempt to eliminate the extra slack. No matter what is done to the knotted spring, the problem will not be permanently fixed until the weak spring is repaired or replaced.[5] The beginnings of AK are linked with the attempt to correct postural abnormalities resulting from weakness of specific muscles or muscle groups.[6] In this way, a person's posture is analyzed, thereby revealing suspected weakness of certain muscles. These muscle weaknesses are then verified by muscle testing, physical therapy is applied and the posture hopefully corrected. The word "hopefully" is indicative of the fact that far too many times the posture does not normalize entirely or the improved posture lasts only temporarily.

Muscle Testing - A Valid Technique

The biggest objection confronted by the rapidly developing AK field was the question of the validity of muscle testing. Does manual muscle testing get consistent and repeatable results? The answer is definitely a big maybe. If the testing is performed by a qualified (i.e. well trained and proficient) practitioner, then the results are indeed reproducible. However, non-skilled testers frequently get inconsistent answers. Muscle testing is both a science and an art. The practitioner of AK must be an expert in both.

<u>The science aspect involves the following criteria:</u>

- Detailed knowledge of the anatomy of the muscle being tested, including how to isolate it from its synergist muscles;
- Knowledge of the function of fixator and antagonist muscles;
- Knowledge of body dynamics and the leverage factors between testers and those being tested;
- Ability to properly stabilize, without pain, the person being tested in order to minimize the recruitment of synergistic muscles;
- Ability to recognize the influence of outside factors, such as painful joints, medications that may alter the function of the nervous system, weakness due to dehydration and malnutrition, neurologic disorganization, and fatigue due to continued testing as opposed to true weakness.[7]

<u>The art of muscle testing involves:</u>

- Applying the same amount of force for each test;
- Getting into the same position and applying the correct vector of force each time a test is performed;
- Applying the test pressure with the correct speed each time to allow the testee time to respond;
- Testing just enough to feel the muscle lock, not through the full range of motion, while at the same time not trying to overpower the muscle;

- Recognizing the attempts of the testee to substitute other muscles for the one being tested;
- Maintaining a clear, unbiased mind, being sure to not anticipate a particular result.[8]

Several scientific studies have been performed to evaluate the validity of manual muscle testing as a reliable diagnostic tool.[9] Schmitt and Leisman found a high degree of correlation between AK procedures used to identify food allergies and serum levels of immunoglobulins for those foods.[10] Perot et al. have found that there was a significant difference in measurable electrical activity for muscles that were tested as “strong” or "weak" by AK practitioners.[11] They further established that these findings were not due to increased or decreased force applied by practitioners during their test. Caruso and Leisman have used a force transducer to demonstrate that examiners with over five years of clinical experience using AK procedures have reliable and reproducible results when their results were compared.[12] It seems then that manual muscle testing, in the hands of an experienced practitioner, is indeed a valuable and accurate diagnostic tool. If this is the case, only obtaining temporary results when correcting muscle weakness is quite unsatisfactory.

Applied Kinesiology Balancing Techniques

Five Factors of the Inter-Vertebral Foramen

In order to affect relatively permanent corrections, Dr. Goodheart continued his research and found many therapeutic techniques that could affect muscle strength. He eventually identified "five factors" into which these techniques could be grouped.[13] These five factors are the nervous system, the cerebrospinal fluid system, the lymphatic system, the vascular system, and the acupuncture meridian system.

The nervous system and the cerebrospinal fluid system are generally directly treated by a chiropractor (or some other professional health practitioner) using spinal manipulation, TMJ manipulation, or cranial sacral techniques. However, the first two factors can be affected indirectly, by working with the last three factors to balance muscular strength. By restoring muscle strength bones can move back into alignment, thereby relieving structural pressure on nerves and establishing normal cranial sacral movement. In this way, proper cerebrospinal fluid function is restored. Consequently, this paper will limit itself to discussing the last three factors.

Neurolymphatic Reflexes

A great deal of research took place in parallel with the developing of AK by George Goodheart. An osteopathic physician named Frank Chapman did extensive research on the lymphatic system during the 1930's. The lymphatics are commonly referred to as the garbage system of the body. They drain waste products of the cells from the interstitial tissues. Other substances that are either

removed or transported to the cells are protein and fat molecules that have diffused through the capillary walls. This garbage removal function is extremely important to keep the cells bathed in nutrient fluids instead of their own metabolic wastes. If drainage is impeded, the cells are separated from their capillaries by a greater than normal distance, thus disrupting the flow of nutrients. The lymph glands along the path of the lymphatic channels serve several roles: firstly, to act as filters of foreign particles, including bacteria; secondly, to manufacture antibodies and white blood cells.

Chapman discovered a series of reflex points on the anterior and posterior aspects of the torso, usually located in the intercostal spaces and along the spine. He then correlated these reflex points with specific glands and organs, as well as specific diseases.[14] Stimulation of these reflexes with a deep rotary massage increases the lymphatic drainage from the associated organs, thereby promoting a healthier interstitial cellular environment. George Goodheart was able to integrate these concepts into AK in 1965 when he correlated Chapman's neurolymphatic reflexes to specific muscles, noting that a weak muscle could be strengthened by massaging its corresponding reflex. Since these reflexes were already associated with specific organs, the relationship of organs to muscles was established. Stimulation of neurolymphatic reflexes promotes lymph drainage at its reflexively related organ reducing congestion of the interstitial fluids and strengthening the related muscle.

Neurovascular Reflexes

Another area of development in the early 1960's was the neurovascular reflexes discovered by Dr. Terence Bennett. These reflexes influence the supply of blood to various organs when they are lightly held.[15] Bennett researched these points by watching the internal changes in circulation on a fluoroscope while stimulating the reflexes. Current theory holds that these reflexes have their effect due to "embryological unfolding."[16] The belief is that the nervous system and the skin both developed from ectodermal tissue and there remains a reflex connection between the surface of the skin and the blood vessels supplying particular organs. Most of these reflexes are located on the head and on the anterior of the trunk.

Goodheart, again capitalizing on techniques in other fields, noted that specific neurovascular reflex activation would strengthen specific weak muscles. He performed extensive research using biofeedback and thermocouple instrumentation to identify exact areas on the skin where temperature changes could be measured as a result of holding the Bennett reflexes. As in the case of neurolymphatic reflexes, Goodheart concluded that specific muscles were related to specific organs. By stimulating neurovascular reflexes, the associated weak muscle would become stronger because the associated organ's stress reduced as its circulation improved.

Meridians

Up to this point, AK had been making large strides integrating various Western developed techniques within the boundaries of the limited concepts of posture analysis, muscle testing, and physical therapy. Again, in a sweeping expansion of the kinesiological horizons, Goodheart took the over 3000 year old acupuncture meridian/organ relationships and combined them with his researched muscle/organ relationship to produce a correspondence of muscles to meridians. The meridians are a system of channels interconnecting all organs, glands, and in fact, all tissues of the body. These channels carry both qi, commonly known as life force (or energy), and blood to nourish all body parts both energetically and chemically. This system of pathways is as complex as the venous/arterial system, familiar to Western medicine.

The meridian system consists of:

- 12 main channels, associated with the primary organs they energize;
- 12 divergent channels branching off the main channels to provide nourishment to other tissues;
- 15 collateral channels providing connections between pathways;
- 8 extra channels providing an energy storage function to back up the primary meridians;
- Innumerable branches to all areas of the body.

Acupuncture points along the main meridians provide a means of testing proper meridian function and of affecting the energy flowing on the channel. The 12 main meridians correspond to the ten major organs (lung, large intestine, stomach, spleen, heart, small intestine, bladder, kidney, gall bladder and liver) and two major functions (circulation/sex and triple warmer). The ability to balance the energy on a meridian, by stimulation or sedation of its appropriate points, provides a means for reestablishing the energetic homeostasis of their associated organs and strengthens the associated weak muscles.

The meridian channels can be affected in many ways:

1. Acupuncture -- the insertion of needles in a way that either stimulates or sedates;
2. Moxibustion -- the burning of herbs to apply heat to acupuncture points;
3. Herbs -- the taking of herbs internally to effect desired changes on the meridian;
4. Manipulation -- the use of pressure on acupuncture points or the massage of body tissues and movement of bones to unblock channels;
5. Diet -- emphasis on the proper balance, preparation and serving of food, thereby providing the essential ingredients to nourish the meridian energy;
6. Exercise -- Chinese kung fu, qi kung (chi gong), and tai chi, which emphasize proper movement in association with correct breathing techniques;

7. Meditation -- mental visualization to improve energy flow and reduce the effects of emotional trauma and negative attitudes;
8. Yoga -- the use of breath control, relaxation techniques, stretching and body postures;
9. Magnets;
10. Sound by internal vocalization, tuning forks or other means, etc.;
11. Light using lasers and color;
12. Far-infrared therapy.

Triad of Health

The next major step in the development of AK came as a result of clinical observations that the five factors of the inter-vertebral foramen affecting muscle strength are influenced for many different reasons. The causes of muscle strength change were divided into three major categories. The first category, structural imbalances, can result from such things as skeletal misalignments and uneven muscular development from one's exercise or employment. The second category, chemical imbalances, can be split into nutritional deficiencies of vitamins, minerals, hormones, enzymes etc; toxic conditions in the body; and allergies to food and environmental conditions. The third category, mental imbalance, can develop from emotional trauma and negative thought patterns. From these three categories the concept of the "Triad of Health" was developed.[17]

The Triad of Health is depicted as an equilateral triangle with one of the major categories effecting muscle strength (structure, chemical or mental) on each of its sides. It quickly became obvious that any one side of the Triad could affect either or both of the other two. For example, a chemical imbalance could affect the proper function of an organ, which in turn could cause a blockage in the associated meridian, which might then weaken a muscle, or create a hypertonic muscle, thereby precipitating a structural or postural alteration resulting in the actual condition of complaint. The structural problem could be treated using the five factors described above, but this approach would only attack the symptoms, and, unless the originating chemical cause was detected and corrected, the structural problem would keep recurring.

<u>Structure</u>

The structural aspect of the Triad is foundational in nature. Structural shifts from accidents or injuries result in neurological disturbance resulting in insufficient circulation and delivery of nutrients as well as congestion from decreased lymphatic drainage. Structure should be addressed whenever the presenting problem is injury related. It can also be addressed after balancing the chemical and psychological causes of problems to ensure the structural and neurological systems rebalance appropriately.

Chemical

AK is uniquely suited for correcting the chemical, or nutritional, side of the Triad of Health. There are several methods available for testing nutrition. One way is to use Dr. Goodheart's muscle-organ relationships. If a muscle is weak due to a chemical dysfunction, often the nutrition that is beneficial for the associated organ will correct the problem. Another approach is to test a strong muscle while touching Dr. Ridler's nutritional reflex points on the anterior surface of the body.[18] If the muscle weakens, there is an imbalance with the associated nutrient. To determine if a particular nutrient is beneficial to the body, it can be placed in the mouth and a strong muscle tested. If the muscle weakens, the substance is definitely detrimental. However, if the muscle remains strong, no conclusion can be drawn without using more advanced techniques, such as simultaneously touching the nutrition reflex points for an organ while keeping the nutrient in the mouth and testing the muscle.

Note that it is important to test nutrients in the mouth. Chemical effects are more accurately displayed by interacting with neurological receptors in the mouth. These receptors directly notify the body of incoming nutrition. In contrast, testing the body's energy field shows energetic effects as opposed to chemical interactions. This is true unless a practitioner is using CK hand modes to program the brain to display chemical information on the surface of the body, as described below.

However, the question of proof is imminent. Walther describes a study where radioactively tagged glucose is placed in the mouth of a rat with its esophagus and trachea ligated.[19] After four minutes, an examination was made and the glucose was found in the brain but not in the digestive tract, the blood stream, or any other organ. These types of studies tend to indicate that the brain is very quickly affected by anything placed in the mouth and sends messages to the appropriate glands and organs preparing them to receive the material. If the substance is beneficial then the body's energy is elevated and the associated muscle is strengthened.

Mental

The mental, or emotional, side of the Triad is equally well treated by AK. To understand the principles involved, it is necessary to review the function of the nervous and vascular systems during periods of high stress. During normal functioning, the arteries, veins, and capillaries supply blood to all tissues as their needs dictate. However, when the body must function under stress, the blood is shunted to the areas of highest priority and away from such organs as the cerebral cortex, the skin, and the digestive system. These survival reactions are executed totally automatically by the autonomic nervous system controlled by the hypothalamus, which sits on top of the brain stem.

The nervous system operates on a first-come, first-served reflex pattern. The first neuro center that can handle a particular stimulus does so. These neuro centers, whether local, spinal, or hypothalamus, handle most daily activities in a

strictly automatic way, without any conscious effort or awareness on the part of the cerebral cortex. For example, the spinal cord is capable of handling such operations as walking, movement, expression, etc. The hypothalamus controls all instinctive responses - hunger, thirst, sex, self preservation -- by directing the sympathetic and parasympathetic nervous systems which in turn manage the viscera and blood vessels of the entire body.

When a stressful situation occurs, the hypothalamus withdraws blood from the cerebral cortex, skin and digestive tract, and sends it to more primitive brain centers where fear, rage, violence are released and where memory patterns of similar situations in the past are drawn upon. This is why -- in situations charged with extreme emotion or trauma -- people react the same way they have in similar situations in the past, even though they wonder, after it is all over, why they responded that way when they really didn't want to. It also explains why in these types of situations a person may become speechless or stammer, forget everything, not hear well, have blurred vision, not feel bumps or cuts, faint, vomit, blackout, or strike out blindly.

AK can work with these stress reactions by having the person visualize an emotionally charged situation. This activates the reflex response associated with it, which is verified by a strong muscle testing weak. Holding the neurovascular reflex on the frontal eminences of the forehead triggers a new nerve message into the system. Blood is rerouted from the reactive areas of brain function to the directive areas of the cerebral cortex, which can now supersede the automatic relay centers and supply a new, consciously directed response pattern.

It is common knowledge that negative emotional states of mind that last for long periods of time can deplete the body's vitality, lower its resistance, and pave the way for illness to strike. In a similar manner, a person who has contracted a disease will many times develop detrimental emotional states, which impede the healing process. The Chinese have known this type of effect for thousands of years. In the five-element system, each element has a specific emotional relationship -- fire to joy, earth to over concentration, metal to grief and melancholy, water to fear, and wood to anger and depression. When an organ becomes irritated, causing the associated meridian to become imbalanced, the related emotion may be activated. It is therefore extremely important to be able to treat the emotions, either to prevent the lowering of vitality and the consequent development of disease or to remove an emotional block impeding the healing process in an on-going illness.

Fortunately, there are very effective remedies for emotional states of mind. Dr. Chancellor describes the development and use of homeopathic remedies made from flowers that work at a vibrational level on the emotional centers of the brain.[20] These preparations were developed by Dr. Edward Bach in the 1930's to help restore a patient's vitality and remove the emotional blocks hindering the progression of his healing. By alleviating the patient's fear, worry, and depression, health was much more quickly restored. AK has incorporated the Bach Flower Remedies into its repertoire, but has added its own unique twist. Using the same test techniques as for nutritional testing, the most appropriate

remedy for the exact condition and time can easily be determined. That is, the correct flower will restore strength to a weak muscle if the mental side of the Triad is involved.

Therapy Localization

Even though AK had apparently unified structure/neurological, chemical/nutrition, and mental/emotional aspects of health, along with several western and eastern therapeutic methodologies, there still remained several problems to resolve. First, how can someone using this methodology determine what to treat as the priority cause? Without a priority, one would need to treat all three sides of the Triad with all five therapeutic factors each time. Second, how can one treat problems with no known muscle association? At this point, Goodheart discovered a procedure called "therapy localization." This is probably the major contribution of AK to accurate diagnostic procedures.
The procedure for therapy localization is to simply touch the body and test a strong muscle. If it weakens, then the area of contact is a problem area or a reflex connected to a problem area. Nearly all pathologies or traumas will exhibit this phenomenon. However, therapy localization will only tell the location of a problem, not what the problem is. This same technique can be used to determine which of the five therapeutic factors to use for treatment of a given problem. While having the patient therapy-localize the problem and using the resulting weak muscle, touch each of the five factors in turn. The factors that strengthen the weak muscle are the ones that can be utilized for treatment.

Clinical Kinesiology (CK)

Alan Beardall, DC developed Clinical Kinesiology from Applied Kinesiology in order to resolve his frustration over identifying which technique was the optimum approach for the specific person and their symptom picture at that time. Over the years, hundreds of AK techniques were developed most of which provided extraordinary benefit when used for the correct condition at the appropriate time. The problem was knowing when to use which technique. It was often hit or miss. This situation was complicated by the fact that the presenting complaint or symptom most probably would not be the causal factor but rather just the conscious complaint resulting from a long cascading sequence of events and circumstances from a cause that might have happened quite some time previously and been subsequently adapted to and forgotten by the body. Dr. Beardall discovered a method to develop a dialogue with the patient's subconscious. It allowed the body to unwind the adaptive patterns to disclose the causal factors needing treatment. This method also reveals which techniques and protocols to use in which order, what supportive therapies from other parts of the Triad of Health were needed, when the various treatments were completed correctly, and when the session was complete.

This discovery was quite serendipitous. During a treatment session, Beardall had found a weak muscle and turned around to document his finding. When he retested for confirmation the muscle was strong without any intervention. While attempting to resolve how this could have happened, Beardall noticed that the

patient had several fingers touching. Retesting with the hand opened resulted in the original weak muscle. Fingers touching equaled strong muscle; hand open equaled weak muscle. This simple serendipitous discovery led to the development of hundreds of mudras or hand modes and protocols to clarify and evaluate the body's problems and optimum solutions. In order to understand this "body language," Dr. Beardall developed the Biocomputer Model described below.

Electronic Computers and the Biocomputer Model

Clinical observations led Dr. Alan Beardall to conclude that the human being functions as a very extensive biocomputer. The Biocomputer Model of the human body has as its underlying premise that at the most fundamental level the body operates on a day-to-day basis on the same basic principles as the electronic computer -- it is binary in nature and operates according to the instructions of a program whose function is survival. The basic operation of an electronic computer is to accept data from the operator, perform operations on that data per the instructions of its controlling program, and to report the results to the operator. Similarly, the basic function of the Biocomputer is to accept input data from all the systems and senses of the body and to perform operations on that data per the instructions of its controlling program. The controlling program evaluates all data for its impact on the survival of the organism and develops the necessary strategy to optimize its ability to survive. Finally, the results are reported to the various systems of the body so the necessary actions can be implemented.

At first glance, it is obvious that a human being is not exactly like an electronic computer. A person is alive, guided by his innate intelligence - his spark of spirit. The body is definitely more complicated and more sophisticated than a computer could ever be. It does not just confine itself to the directions of a program but continuously changes, adapting to the ever-shifting stimuli from its environment. However, since many of the body's functions do have similarities to an electronic computer, we can use our understanding of an electronic computer to derive insights into how the body responds in certain situations. As the analogy becomes more complete based on clinical findings, the ability to predict someone's reaction to environmental changes or applied therapies becomes more accurate.

The Biocomputer Model essentially provides a method to learn the body's language and to develop a dialogue that allows accurate diagnosis of casual factors and accurate prediction of body response to applied therapies. Since comprehending this concept is vital for the proper understanding and performance of the CK system, a review of the operating principles of the electronic computer is essential.

Basic Components, Functions, & Operation Of An Electronic Computer

Computer Chips and The Binary System

An electronic computer primarily consists of electrical components called chips that operate according to the mathematical system of logic. Chips have only two states, either on or off, and therefore only deal with pure information, mathematical calculations, and questions that can be answered by a yes or no. This is called a binary system - two states, either on or off. All operations within a chip are done in terms of "bits" of information. A bit is like a light switch -- it can be on in which case there are five volts present -- or it can be off in which case there are zero volts present. In common terminology, a bit represents one letter or a number that is one integer long. Any given chip may have thousands of these bits and there are many chips in a computer.

Central Processing Unit (CPU) - The Control Unit

The heart of the electronic computer is the Central Processing Unit, more commonly known as the CPU. It controls every operation of the computer from the gathering of information from outside sources to reading or writing its information to memory, to having the logic unit perform calculations on the information, to storing the results in memory, or sending it out to be used by humans. However, the CPU only knows what to do per the instructions given to it by a person through a program written and loaded into the computer. The program is a step-by-step list of instructions for the CPU to execute.

This is very fine indeed, as long as everything functions properly. The CPU performs millions of calculations and functions per second. To keep things in proper order and avoid chaos, every component must operate at a compatible speed and also at the correct time. Therefore, there is a timing chip that sends out timing pulses that control each component's function. If the timing chip, the CPU, or any of the other chips malfunction, then everything goes haywire: either the computer "crashes" and functions inappropriately giving incorrect answers, or it freezes up and stops functioning entirely.

Memory & Storage Devices

In order for a computer to operate properly, it must have some place to put all the information it needs to tell it what to do (the program), as well as all the data it is doing it to, and the results of the doing. This place consists of the memory chips, which correspond to your desktop in your office. During the day, the work you are doing is hopefully placed in an orderly fashion on your desk. When you are done it is placed in its folder and stored in your desk drawer or file cabinet.

A computer loads programs and the data it needs into memory chips (RAM or Random Access Memory chips) for temporary storage while it works. It is temporary because when the computer is turned off everything in these chips is erased. Therefore, once your work is done, the results must be stored onto

permanent memory media like floppy disks, hard disks, CD-R, or other data storage devices.

There is also a type of memory called ROM or Read Only Memory. This memory is not erased when power is turned off. It also cannot be changed. Therefore, ROM holds the system software that runs every time the computer is turned on, verifying all aspects of the computer are functional and can communicate with input and output units.

Input Units

Many times the computer needs information from the person operating it. This is accomplished by several different mechanisms. The most common is the keyboard, which allows the operator to type in words or numbers as required. In addition, there are mice, joysticks, digitizing tablets, scanners, faxes, modems for transferring data via telephone lines and even voice input devices.

Output Units

In order for the work the computer performs to be useful, it must be able to present the results to the operator in some fashion. This is most commonly done by way of a TV-like piece of equipment called a monitor or screen. Printers offer a more permanent "hard copy" output or printout. There are also plotters, modems, faxes, slides, etc. Output units also display error messages when something goes wrong and the computer cannot function properly.

Software Programs

In order for the computer to do anything useful, it must be told exactly what to do, what to do to it, and what to do with the results. This is accomplished by step-by-step instructions called a program. The computer always does exactly what it is told to do unless something malfunctions.

Basic Operation

So, how does a computer work? First, when the power is first turned on, a "built-in test" (or "BIT" test) is automatically executed. The BIT test checks the basic operation of the computer, including its interfaces and its memory. This BIT test is a permanent program that is kept in the Read Only Memory chips. These chips do not lose their memory when power is turned off and cannot be changed. Next, the system software (or operating system) is loaded. This program is the interface between the CPU and the input and output devices as well as the application programs that are being run. The system software basically translates all inputs and commands into the language that the computer understands and can execute. Finally, the application program that the operator wants to run is loaded and the CPU executes each step in sequence and outputs the results as directed by the program.

Networking

When many computers need to work together, they do so by networking. This requires special networking software and hardware and one of the computers must function as a file server, which means that it stores all the data and programs that are to be used in common among all the connected computers. The file server controls which computers have access to what programs and when each one can access the files so that one computer cannot interfere with another one if they are both working on the same problem.

Basic Components, Functions, & Operation Of The Biocomputer

The biological computer, commonly known as the Biocomputer, functions as a binary computer, either on or off, either positive or negative polarity, either strong or weak, etc. The Biocomputer consists of an integrated network of seven mini computers, which are organized on a hierarchical basis depending on the computer's functions. These mini computers are respectively known as the Subtle Computer, Etheric Computer, Master Computer, Primary Computer, Endocrine Computer, Spinal Computer, and the Local Computer. Each computer has a control unit or CPU, memory/storage units, input units, output units, software programs, display terminals, processing points, and access points.

Central Processing Unit (CPU) Control Unit

Each minicomputer has its own control unit. For example, the cerebrum is the CPU of the Primary Computer or brain. The cerebellum is the CPU of the Endocrine Computer. The spine is the CPU of the Spinal Computer, and the nerve synapse is the CPU of the Local Computer.

The control unit regulates the flow of data between the logic unit, storage units, the input units, the output units, and between the minicomputers themselves. It contains the program that continually operates for the survival of the body.

Just as with the electronic computer, timing is of the utmost importance. When the timing is off (i.e., the nerve synapse is too slow or fast, or a nerve is pinched and does not respond properly) then the CPU gets incorrect information and that part of the body gets out of sync with everyone else and does not function properly. If this continues long enough, breakdown or disease occurs.

Similarly, just as the electronic computer can fail so too can the Biological Computer. Biocomputer failure, resulting in erratic function or no function, can result from a myriad of possibilities. Most commonly, this occurs when:

1. Appropriate nutrients are not present.
2. Acupuncture meridian energies are out of balance.
3. Nerve transmission is reduced or impeded.
4. Vertebrae or other structures are out of place.
5. Emotional blockages exist.
6. Etc., the list is endless.

Memory & Storage Devices

Storage devices in the primary computer consist of short-term memory for the ongoing data processing and long-term memory for more permanent storage requirements. Long-term memory is physically contained in the genetic code. In the other physical minicomputers memory is primarily held in the tissues and cells. Holographic energy patterns hold the memory for the Subtle and Etheric Computers.

Input Units

The input units for the Biocomputer consist of all sensory receptors for data coming from the environment, including the chakras and psychic receptors. Internally, input comes from sensory receptors as well as the nervous system, circulation system, etc., in the form of electrical as well as chemical data. The various sensory receptors include eyes, ears, nose, taste sensors on the tongue, feeling sensors in the skin, pain sensors, etc.

The input units are very widespread, acting both as homeostatic loops for the Biocomputer's operation, as well as detecting operator error (i.e., lifestyle problems). This input data (or sensory data) is translated into binary nerve impulses, which are relayed to synapses in the spinal cord -- the Spinal Minicomputer. These impulses can then be ignored, can initiate a correction strategy at this level only, or can be sent to another minicomputer level for processing. This sensory data can be placed in storage or memory along with the reactive strategy taken so it is more easily available in the future.

Output Units

The output units of the Biocomputer consist of muscles and the skin by way of the peripheral nervous system. These output units are basically binary in nature: the muscles are either strong or weak and the skin either displays positive therapy/stress localization or it does not. Like the electronic counterpart, when there are problems in the Biocomputer, the output units display error messages -- pain, hot or cold areas on the skin, or aberrant functions, such as weak muscles or switching phenomenon.

Software Programs

Like the electronic computer, the Biocomputer has a master program that it is continually executing - the program to survive. This program consists of all the subprograms that tell each cell of the body what its function is. This program is written into the genetic code. It represents the overall controlling software, or operating system, of the Biocomputer. Sub-modules of this master program are the controlling programs for the various systems of the body: circulatory, musculoskeletal, immune, nervous, lymphatic, endocrine, respiratory, gastrointestinal (GI), excretory, and reproductive. The application programs are

learned behavior programs that are continuously developing throughout life and manifesting in psychology, philosophy, and behavior of the person.

Basic Operation

The Biocomputer is infinitely more complex than an electronic computer. However, the essential principles of operation are similar. Unlike the electronic computer, the Biocomputer is always working, always monitoring body status and making decisions on strategies for dealing with the day-to-day stresses to which the body is exposed. Its primary directive is to survive. It will do whatever is necessary to keep the body alive -- from using nutrients that are available to creating alternative metabolic strategies, to changing polarities, muscle tone, shifting bones, even sacrificing lower priority organs or functions in order to keep more important systems functioning. It has the unique capability to learn from its experience and change its programming to better enable it to accomplish its fundamental goal -- survival.

The minicomputers work together in a hierarchical network system with the Master Computer regulating each minicomputer's access to programs and data thus optimizing the whole body's efficiency. The sensory data entering the Master Computer is compared with previous data, evaluated and then acted upon. This information is sent to the appropriate minicomputers and the display units.

Networking

Networking is obviously required in the Biocomputer. There are seven major minicomputers in the body:

- The Subtle Computer is composed of the subtle energetic bodies surrounding the physical body, including the Astral and the Mental Bodies.
- The Etheric Computer is closest of the subtle energy bodies to the physical body and energizes the meridian system and the chakras.
- The Master Computer is the file server for the other six computers.
- The Primary Computer is the brain.
- The Endocrine Computer is the Autonomic Nervous System.
- The Spinal Computer is the Spinal Cord.
- The Local Computer is the kinetic system and reflex arc.

In reality, every cell is a minicomputer with a program in memory, the DNA; with input units, nutrients, nerves, chi etc.; with output units, lymphatic system, circulation system, and nervous system. Each cell computer is networked into

the computer that it functions with. Each computer up the line in complexity has more and more capability to make decisions and plan strategies for survival.

Monitoring Status of the Minicomputers -- General Principles

The hierarchical arrangement of the minicomputers from the least to the most complex is from Local to Spinal to Endocrine to Primary to Master to Etheric to Subtle. Each computer has a terminal, or area of display, where its function can be monitored. It also has a processing point which, when tapped, commands the computer to reexamine its available data and access points where diagnostic information can be obtained.

The Subtle Computer

The Subtle Computer consists of the subtle bodies, one of which is the Astral Body, which contains all the emotional energetic patterns brought into this life as well as those accumulated during this life. It is involved in the experience, expression and repression of emotions.

The second subtle body is the Mental Body, which contains all past experiences brought into this life as well as those accumulated during this life. It is involved in concrete concepts and ideas and their transmission to the brain.

The Etheric Computer

The Etheric Computer is the Vital Body, which extends beyond the physical body about two to three inches. This body energizes the meridian system and the associated chakras. It is the holographic energy field or template carrying information for the growth, development and repair of the physical body.

The Master Computer

The Master Computer networks and controls the other six computers.

The Primary Computer

The Primary Computer is the midbrain, which receives, compares, evaluates, integrates, and stores data. It performs the higher functions of the brain.

The Endocrine Computer

The Endocrine Computer is the autonomic nervous system, which monitors the endocrine system and integrates most automatic functions.

The Spinal Computer

The Spinal Computer is the spinal cord, which controls communication and integration of information between the various systems of the body.

The Local Computer

The Local Computer is the kinetic system, nerve synapses, and reflex arc.

Minicomputer Malfunction

Any of these minicomputers can have an "overload" situation which "blows a fuse" at its terminal. This causes their particular muscles to store information about the adaptation that the biocomputer makes to the stress at that particular time. This can eventually cause inhibition of information in a more complex module of the Biocomputer. Alternately, the information is put on hold at that computer level until the over-stressing information can be processed properly.

One of the most efficient methods for correcting minicomputer malfunction is to open up the channels between the minicomputers and restore communication. This removes the adaptation information from their terminals and unblocks the system, which allows information to be processed in structure, chemistry, or electromagnetic balancing files. Then the body can correct its causal imbalances rather than focusing on the symptoms of disease or injury.

Biocomputer Communication

Muscle Testing – Specific Muscles

Muscle weakness is not just an indication of a problem with the strength of a specific muscle, but in general indicates possible imbalances in a whole system of organs and tissues that are associated with the specific muscle by the meridian that energizes all of them. Therefore, just balancing the muscle itself to strength may not affect the causal level if that cause is located in an organ or other tissue. If the problem is a local injury to the muscle, then specific muscle testing and balancing of the associated components for stress reduction is appropriate: neurolymphatic reflexes, neurovascular reflexes, vertebral level, muscle acupuncture point, visceral organ reflex, myomere spinal level, nutrition, cranial bones, and foot bones.

Muscle Testing - Group Muscles

If the imbalance is not in a specific muscle, then group muscle testing is more informative since it gives a broader view of the body's stresses and can more easily be used to evaluate all the different minicomputers rather than just the local minicomputer. It is like taking a poll of a large number of related databases instead of just one small database.

Stress/Therapy Localization

Areas of stress emit a frequency of 69.5 gigahertz that creates a shift in polarity of the skin over associated reflex areas from yang to yin. The surface of the body is mostly yang relative to the interior of the body, which is yin. The yang

polarities and energies on the outside of the body help to protect the body from external, pernicious influences. When there is stress inside the body, the associated skin reflexes switch polarity to yin. This can be detected by placing the palmar surface of the fingers (yang) on the stressed area (yin). The two opposite polarities energize a circuit, which produces a kinetic change in an indicator muscle. This is called "Stress" or "Therapy Localization," and it indicates the presence of acute stress, attempted adaptation, or in-process adaptation.

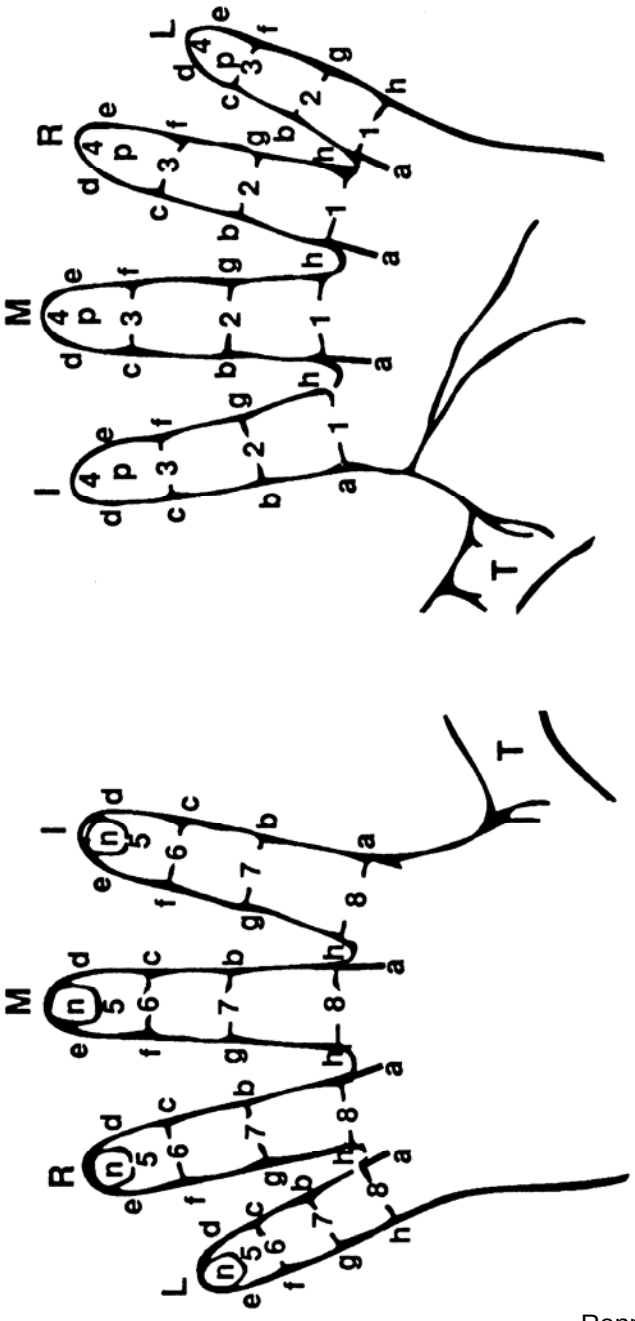
Hand Modes

Hand modes originated as mudras in the Orient and were expanded into the health field by Dr. Alan G. Beardall. The modes are finger positions that create a three-dimensional symbol, or shape, that generates a frequency. This frequency interacts with the body's energy field producing a kinetic change in muscle tone if it resonates or has a relationship with anything going on in the body.

Modes can be used to ask questions of the body about energetic imbalances that may be present. A mode producing a kinetic change in an indicator muscle when placed in the hands would be positive and indicate an involvement of that represented frequency with the body's situation at that time.

If a therapy/stress localization point being touched by a person's hand produces a kinetic change (1-point), and a mode placed simultaneously in the other hand produces another kinetic change (2-point), then the mode is positive and is involved with that particular stress. Modes can also be used to format the Biocomputer to display a specific type of information.

Hand Mode Identification Key



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Minus sign followed by finger letter = finger touch palm
Letter “O” followed by finger letter = finger open – not touching

Clarity of Biocomputer Communication - Biocomputer Integration Test - BIT Test

The integrity of all the body's computers can be evaluated by looking for clarity of communication within each minicomputer and between all of the minicomputers. This is accomplished by doing the BIT test -- the Biocomputer Integration Test. This test consists of checking the output units of each minicomputer for appropriate display.

When the minicomputers are all processing information properly and have no blocks inhibiting the processing of the therapy/stress localization, then there is no adaptation stored in the minicomputer terminals that interferes with the efficient clearing of the stressed areas. For example, if there is a problem with a specific organ, the muscles (Local Computers) associated with that organ should display weakness. If the strategy of the biocomputer to handle this problem is not successful because all the necessary elements for healing are not available, it is forced to adapt and to spread the load to other organs (and their muscles) and eventually to other computers and their terminals. If the adaptation is successful, the muscles for the original problem organ will no longer display, but the newly involved organ muscle will. If the adaptation is not successful, then the display of muscle/organ malfunction spreads.

Conclusions

Clinical Kinesiology introduces several extremely significant tools into the health arena that provide greatly expanded capabilities to the Western health professional. Firstly, this method can help to efficiently diagnose a problem and its remedies, prior to the appearance of symptoms, in a manner that is directly observable by both the health practitioner and the client. Secondly, CK can be used to trace a problem to its cause. Thirdly, this method offers the capacity to pinpoint the most appropriate treatment and the priority of treatment. Finally, Clinical Kinesiology provides the capability to determine the effectiveness of treatment by retesting immediately following its application so that any adjustment to a treatment regimen can be made without delay.

ENDNOTES:

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