	Applied Kinesiology and the Acupuncture-Meridian System
Evaluation of Applied Kinesiology meridian techniques by means of surface electromyography (sEMG): demonstration of the regulatory influence of antique acupuncture points. Moncayo R, Moncayo H.	*Chin Med.* 2009 May 29;4(1):9. **ABSTRACT: BACKGROUND:** The use of Applied Kinesiology techniques based on manual muscle tests relies on the relationship between muscles and acupuncture meridians. Applied Kinesiology detects body dysfunctions based on changes in muscle tone. Muscle tonification or inhibition within the test setting can be achieved with selected acupoints. These acupoints belong to either the same meridian or related meridians. The aim of this study is to analyze muscle sedation and tonification by means of surface electromyography. **METHODS:** Manual muscle tests were carried out using standard Applied Kinesiology (AK) techniques. The investigation included basic AK procedures such as sedation and tonification with specific acupoints. The sedation and tonification acupoints were selected from related meridians according to the Five Elements. The tonification effect of these acupoints was also tested while interfering effects were induced by manual stimulation of scars. The effects of selective neural therapy, i.e. individually tested and selected anesthetic agent, for the treatment of scars were also studied. The characteristics of muscle action were documented by surface electromyographys (sEMG). **RESULTS:** The sEMG data showed a diminution of signal intensity when sedation was used. Graded sedation resulted in a graded diminution of signal amplitude. Graded increase in signal amplitude was observed when antique acupuncture points were used for tonification. The tactile stretch stimulus of scars localized in meridian-independent places produced diminution of signal intensity on a reference muscle, similar to sedation. These changes, however, were not corrected by tonification acupoints. Correction of these interferences was achieved by lesion specific neural therapy with local anesthetics. **CONCLUSION:** We demonstrated the central working principles, i.e. sedation and tonification, of Applied Kinesiology through the use of specific acupoints that have an influence on manual muscle tests. Sedation decreases RMS signal in sEMG, whereas tonification increases it. Interfering stimuli from scars were corrected by selective neural therapy. **Comment:** AK MMT was conducted throughout in this study. The investigation included stimulating sedation and tonification points of the same meridian being investigated. From the conclusion: “We have been able to demonstrate one of the working principles of Applied Kinesiology in relation to tonification or sedation through the use of specific acupuncture points.”
The Use of Traditional Chinese Medicine Principles In Chiropractic Technique, Brown BT, Bonello R, Pollard H.	*Chiropr J Aust* 2009;38:18-26. **Abstract:** **Objectives:** The authors of this manuscript seek to define the role, and scientific backing for the inclusion of Traditional Chinese Medicine (TCM) principles in the chiropractic techniques known as Applied Kinesiology (AK) and Neuro-Emotional Technique (NET). A discussion of the suitability of TCM principles within the chiropractic profession is also presented. **Data Sources:** A search through the electronic databases Medline, Meditext, Pubmed, OVID< CINAHL, and the Cochrane Library was performed for the period of 1900-2007 using the key words Traditional Chinese Medicine, meridian, five-element, five-phase, acupuncture, chiropractic, Applied Kinesiology, and Neuro-Emotional Technique. The results were limited to works published in English appearing in peer-reviewed journals. A hand search was then performed within the reference lists of the articles retrieved. **Study Selection:** Based on their relevance to the subject, 196 references were obtained. Data Extraction and Synthesis: Only those historical principles and current research findings that pertain specifically to the TCM concepts used in AK and NET have been included. **Conclusions:** Principles and philosophies from TCM are incorporated into the diagnostic and treatment protocols of the chiropractic techniques AK and NET. The scientific backing for this inclusion is still evolving and it is clear that further research is required to support the

	placement of TCM principles and practices within these chiropractic techniques. The welcoming of TCM principles into chiropractic practice may broaden the scope of the chiropractic profession and allow chiropractors to more faithfully adhere to the biopsychosocial model of health care. **Comment:** Meridian therapy was introduced into AK (and into the chiropractic profession at large) by Dr. Goodheart in 1966. Goodheart and the ICAK have provided some of the first advancements in the area of acupuncture diagnosis in the Western world. By using AK techniques, the movement of acupuncture energy in the meridians can be evaluated and corrected if out of balance. AK methodologies have also helped in the understanding of why there may be imbalance of energy in the meridian system. Other researchers in this compendium have described the value of the AK method in determining problems related to the meridian system, and this is an area where further research will necessarily continue.

The immediate effects of local and adjacent acupuncture on the tibialis anterior muscle: a human study, Costa LA, de Araujo JE.	*Chin Med.* 2008 Dec 18;3(1):17. **ABSTRACT:** **BACKGROUND:** This study compares the immediate effects of local and adjacent acupuncture on the tibialis anterior muscle and the amount of force generated or strength in Kilogram Force (KGF) evaluated by a surface electromyography. **METHODS:** The study consisted of a single blinded trial of 30 subjects assigned to two groups: local acupoint (ST36) and adjacent acupoint (SP9). Bipolar surface electrodes were placed on the tibialis anterior muscle, while a force transducer was attached to the foot of the subject and to the floor. An electromyograph (EMG) connected to a computer registered the KGF and root mean square (RMS) before and after acupuncture at maximum isometric contraction. The RMS values and surface electrodes were analyzed with Student's t-test. **RESULTS:** Thirty subjects were selected from a total of 56 volunteers according to specific inclusion and exclusion criteria and were assigned to one of the two groups for acupuncture. A significant decrease in the RMS values was observed in both ST36 ($t = -3.80$, $P = 0{,}001$) and SP9 ($t = 6.24$, $P = 0.001$) groups after acupuncture. There was a decrease in force in the ST36 group after acupuncture ($t = -2.98$, $P = 0.006$). The RMS values did not have a significant difference ($t = 0.36$, $P = 0.71$); however, there was a significant decrease in strength after acupuncture in the ST36 group compared to the SP9 group ($t = 2.51$, $P = 0.01$). No adverse events were found. **CONCLUSION:** Acupuncture at the local acupoint ST36 or adjacent acupoints SP9 reduced the tibialis anterior electromyography muscle activity. However, acupuncture at SP9 did not decrease muscle strength while acupuncture at ST36 did. **Comment:** This is a fascinating study that demonstrates many of the contentions held in AK for many years about the meridian system's influence on muscle and neurological function. By needling ST36, Costa and de Araujo were able to induce functional changes (decreased strength) in the tibialis anterior muscle as evidenced by EMG. According to AK, the tibialis anterior muscle corresponds to the Bladder meridian. This sedation point stimulation of the Bladder meridian, and its weakening effect upon the tibialis anterior muscle, confirms one of the approaches AK has used for decades in evaluating the meridian system. From the many recent refinements in the evaluation of the principles and methods of acupuncture (electroacupuncture, laser acupuncture, computer diagnosis, etc.), the MMT is unique in that it requires no electricity or instruments. This offers simplicity in the clinical setting, and ease when away from it. From the research presented here and elsewhere, examples of the body's response to stress and disease include a distorted radial pulse, acupuncture point and meridian abnormalities, as well as the neuromusculoskeletal inhibition found with MMT. Muscle testing may potentially offer us a tool to read the energetic from the physical, and this possibility may prove to increase the use and the reliability of meridian system diagnosis. Though traditional methods of Traditional Chinese Medicine (TCM) diagnosis have extensive research to support them, the MMT involves the patient in the findings of TCM disturbances in a whole new way. This more active participation allows the patient to feel the response as clearly as the practitioner via the MMT.
Short- and long-term modulation of upper limb motor-evoked potentials induced by acupuncture. Maioli C, Falciati L, Marangon M, Perini S, Losio A.	*Eur J Neurosci.* 2006 Apr;23(7):1931-8. **Abstract:** The aim of this study was to investigate in humans the effects of acupuncture upon upper-limb motor-evoked potentials (MEPs), elicited by transcranial magnetic stimulation of the primary motor cortex. It is known that peripheral sensory stimulation can be used to induce short- and long-term changes in motor cortex excitability. Data show that the simple insertion of the needle is an adequate somatosensory stimulus to induce a significant modulation of MEP amplitude, the sign of which (facilitation or inhibition) is specific to the investigated muscle and to the point of needle insertion. Moreover, MEP changes in upper-limb muscles are also observed following needling of lower-limb sites, revealing the presence of long-distance effects of acupuncture. Finally, the modulation in muscle excitability considerably outlasts the time period of needle application, demonstrating the induction of long-term plastic changes in the central nervous system. In addition, results

	have shown that the effects on muscle excitability are not restricted to the stimulation of well-coded acupoints, as described in traditional Chinese medicine, but they can also be induced by needling of nonacupoints, normally not used for therapeutic purposes. The possible neuronal mechanisms underlying the observed effects of acupuncture are discussed in relation to the available neurophysiological data regarding the interlimb reflexes and the changes in the representational cortical maps induced in humans by a prolonged somatosensory stimulation. **Comment:** This is a fascinating study that demonstrates many of the contentions held in AK for many years about the meridian system's influence on muscle and neurological function. This study shows that specific stimulation of the meridian system and acupuncture points can change the strength of the muscular system which is assessable by the manual muscle test. This study confirms one of the contentions held in AK for decades regarding the meridian system.
New diagnostic and therapeutic approach to thyroid-associated orbitopathy based on applied kinesiology and homeopathic therapy, Moncayo, R., Moncayo, H., Ulmer, H., Kainz, H.	*J Altern Complement Med,* 2004 Aug;10(4):643-50. **Objectives:** To investigate pathogenetic mechanisms related to the lacrimal and lymphatic glands in patients with thyroid-associated orbitopathy (TAO), and the potential of applied kinesiology diagnosis and homeopathic therapeutic measures. **Design:** Prospective. **Settings/location:** Thyroid outpatient unit and a specialized center for complementary medicine (WOMED, Innsbruck; R.M. and H.M.). **Subjects:** Thirty-two (32) patients with TAO, 23 with a long-standing disease, and 9 showing discrete initial changes. All patients were euthyroid at the time of the investigation. **Interventions:** Clinical investigation was done, using applied kinesiology methods. Departing from normal reacting muscles, both target organs as well as therapeutic measures were tested. Affected organs will produce a therapy localization (TL) that turns a normal muscle tone weak. Using the same approach, specific counteracting therapies (i.e., tonsillitis nosode and lymph mobilizing agents) were tested. **Outcome measures:** Change of lid swelling, of ocular movement discomfort, ocular lock, tonsil reactivity and Traditional Chinese Medicine criteria including tenderness of San Yin Jiao (SP6) and tongue diagnosis were recorded in a graded fashion. **Results:** Positive TL reactions were found in the submandibular tonsillar structures, the tonsilla pharyngea, the San Yin Jiao point, the lacrimal gland, and with the functional ocular lock test. Both Lymphdiaral® (Pascoe, Giessen, Germany) and the homeopathic preparation chronic tonsillitis nosode at a C3 potency (Spagyra,® Grödig, Austria) counteracted these changes. Both agents were used therapeutically over 3–6 months, after which all relevant parameters showed improvement. **Conclusions:** Our study demonstrates the involvement of lymphatic structures and flow in the pathogenesis of TAO. The tenderness of the San Yin Jiao point correlates to the abovementioned changes and should be included in the clinical evaluation of these patients.
Case history: Shoulder pain and the 24-hour clock, Shin B.	*Collected Papers International College of Applied Kinesiology*, 2002-2003;1:43-44. **Abstract:** **Objective:** To discuss the benefits of examining the meridian system of traditional Chinese medicine for a case of shoulder pain. **Clinical Features:** A 40-year-old female presents with right shoulder pain of a few weeks duration. No trauma to the shoulder was revealed in the patient's history. Movement of the shoulder produced a mild "boring" pain. The drop arm test, shoulder apprehension, and Wright's test were all negative. The only muscle weakness was in the subscapularis on the right. Pulse point TL diagnosis was positive at the left distal pulse point. Correlating muscles of the small intestine and heart were tested, showing only a weak right subscapularis. The alarm point for the heart did not strengthen the muscle. **Intervention and Outcome:** The examiner went backwards on the 24-hour clock, classically described in traditional Chinese medicine, to the lung alarm point, which strengthened the weak subscapularis muscle. T3 was challenged and corrected. LI-6, the Luo point, was stimulated to balance the flow of energy. The patient's shoulder pain was resolved by the end

	of treatment.**Conclusion:** The author points out that symptoms anywhere in the body may be connected to the meridian system. Meridians carry energy from one meridian to the next every 2 hours. If there is a blockage in the energy to prevent proper flow, symptoms can occur. Pulse point diagnosis is recommended as a part of the regular AK diagnostic workup of every patient.
"Basic AK" applied to an existing patient: pulse points uncover "the weakest link" case history, Tooley J.	*Collected Papers International College of Applied Kinesiology*, 2002-2003;1:55-58 **Abstract:** **Objective:** To present the case of a female with back pain and left thumb pain that was successfully treated in one visit using AK meridian therapy procedures. **Clinical Features:** A 52-year-old female with left dorsolumbar and thumb pain presented with no history of trauma (back pain rated at 7-8, and thumb pain 4-5 on a 1-10 scale). The patient has a severe S-type scoliosis that developed in early childhood and has been under chiropractic care for most of her life. Pulse point diagnosis was employed to locate her primary deficient meridian. In AK, there are 6 traditional pulse points that TL on each wrist, 3 superficial and three deep. The scanning of pulse points utilizing MMT and TL ascertains which meridian is currently the patient's weakest link and directs treatment toward improving this factor. The active pulse point in this case was the kidney and bladder meridians. Muscles related to these meridians – tibialis anterior for the bladder and psoas for the kidney – were tested. The psoas was found inhibited on the left, and TL to the left kidney alarm point caused the left psoas to become strong. **Intervention and Outcome:** The tonification point for the kidney meridian (KI7) was stimulated for 15-20 seconds using a low frequency infrared laser. The associated point for the kidney on the spine at the L2/L3 level was found subluxated and corrected with a chiropractic adjustment. The extraspinal articulation closest to the tonification point for the kidney on the left ankle showed a subluxation of the talus, which was adjusted. The left psoas muscle tested strong after this treatment. The patient experienced an immediate increase in dorsolumbar ROM and a marked decrease in pain that was now a 0 or 1 on the 1-10 scale. **Conclusion:** This case demonstrated that using AK methods of MMT, TL, and pulse point diagnosis could help diagnose the cause of a patient's discomfort and impaired function.
Acupuncture in applied kinesiology: a review, Garten H.	*Int J AK and Kinesio Med,* 2002;14. **Abstract:** Acupuncture is a healing art, which is embedded in eastern culture and Traditional Chinese Medicine (TCM).Applied kinesiology (AK) as a Western development has an analytical, logical basis, which is backed up by neurological and other models, and apparently supplies a logical "easy" tool for the use of acupuncture. Difficult and "mystic" tasks like pulse diagnosis and the selection of points seem to be facilitated by the "objective" tool of muscle testing. Yet for the purpose of a "constitutional diagnosis" the diagnosis of pulse points, alarm points, and muscle strength as per AK is not equivalent to a traditional Chinese diagnosis. The AK-specific therapy based on AK-specific pulse diagnosis can furnish only part of the possible acupuncture effects. For constitutional acupuncture treatments a TCM diagnosis has to be established and the treatment has to be done accordingly. The selection of points can be improved by therapy localization and challenge as per AK. Therapy of dysfunctional muscles is a major issue in AK. The AK-specific use of acupuncture of tapping points according to the AK-specific acupuncture diagnosis is by no means a sufficient way of imitating the effects of a needle therapy with the correct manipulation of the needle at the site of the disturbed structure of the muscle (trigger points, tendon avulsions, etc). Musculoskeletal therapy is most effective using concepts derived from manual therapy and myofascial therapy. The practitioner must follow anatomical and palpatory information and use the adequate stimulus as defined by the reflexotherapeutic aspects of acupuncture. Somatotopic reflexotherapy can be used (ear, scalp, hand, and others). Muscle function and the selection of points can be monitored by manual muscle

	testing.
Plantar fascitis, Hambrick T.	*Journal of Bodywork and Movement Therapies,* 2001 Jan:49-55 **Abstract:** A case presentation involving plantar fascitis is presented. The structural causes of plantar fascitis are reviewed. The specific muscular factors found on AK examination that produce the dropped longitudinal arch of the foot, the separation of the distal tibia and fibula, and the posterior calcaneus are presented. The inflammatory component of this problem is reviewed, and treatment for disturbances in fatty acid metabolism and adrenal function suggested. The importance of evaluating patient's with plantar fascitis in the weight bearing position and during gait is stressed, and evaluation of muscular function during gait is offered. **In AK, the effect of specific acupuncture point stimulation upon the function of the ambulatory muscles is presented.** Treatment of each of these factors in this patient proved successful in resolving her problem with plantar fascitis.
The treatment of urinary tract disorders and interstitial cystitis, Sprieser PT.	*Collected Papers International College of Applied Kinesiology*, 2001-2002;1:49-50. **Abstract** **Objective:** To present an overview of urinary tract disorders, particularly interstitial cystitis, and a successful method of treatment using meridian therapy. **Clinical Features:** Interstitial cystitis is a painful inflammation of the bladder that might be related to collagen disease, autoimmune disorders, allergic conditions, or an infectious agent not yet identified. A case series of 49 female and 1 male patient is presented. **Intervention and Outcome:** A protocol of treatment is presented for patients with urinary tract or pelvic diaphragm problems. TL to the alarm point for the bladder was negative, but with simultaneous TL to the lung alarm point, it became positive. The author was able to neutralize this TL pattern in these patients by tapping bladder meridian's second point, BL2 for 60 seconds on both sides. The author also treated the bladder's associated point BL28. This method of treatment improved the bladder problem in all the patients in this study. The extent of improvement and the method of measuring this were not documented in this report. **Conclusion:** This method had a high success rate for patients with urinary tract problems, including interstitial cystitis. Because interstitial cystitis afflicts millions of patients with bladder urgency, frequency, and pelvic pain, this method should be investigated for its value to these patients.
Switching, Stress, muscular hypertonicity, fire element, central and governing vessels – new aspects for an integrating overview, Gerz W.	*Collected Papers International College of Applied Kinesiology,* 2000-2001;1:65-74. **ABSTRACT** **Objective:** To present a literature review that suggest a direct connection exists between the meridian system, the skeletal system, the cranio-sacral system, Selye's system of adaptation, the hormone system and the phenomenon called "switching" in AK. **Clinical Features:** AK therapists have found one of the most common problems in patients is the "switching" or "neurological disorganization" phenomenon. This condition in the patient may cause erroneous information to be derived from various AK testing procedures. A review from both the European and American AK literature on the topic of switching and its diagnosis is given. A literature review of biomedical, AK, and acupuncture is also given that suggests how the meridian system in its interaction with the neuromuscular system and the adaptation system (Hans Selye) may play an important role in the switching phenomenon. The rationale for use of the conception vessel and governing vessel in therapy localization is described. **Intervention and Outcome:** The meridian correlations with the endocrine glands are reviewed, and its relevance to clinical presentations and treatment strategies for patients are described. The author states that in many cases of switching, SI3 and LU7 will demonstrate a positive TL. Positive TL to SI3 is frequently found on the side of handedness and LU7 is contralateral. **Conclusion:** AK allows the physical demonstration of a connection between

	the muscle and the meridian systems. AK hypothesizes that the muscles and organs share physiological systems connected via the nervous system. It is suggested in this paper that AK and acupuncture interact and validate one another and that both can be used in the diagnosis and treatment of patient problems.
The Systems, Holograms and Theory of Micro-Acupuncture, Dale RA.	*Am J Acupunct,* 1999;27(3-4):207-242. **Abstract:** Although acupuncture has been practiced for more than 5,000 years, micro-acupuncture is a recent concept. In the mid-1950s, Nogier discovered that the ear may be utilized as a diagnostic and therapeutic system for the entire body. He explored the toplogy of acupoints on the ear, observing that it is reiterative of the anatomy. Micro-acupuncture extends these principles to other parts of the body, for example the foot, hand, nose, and even the orbit of the eye. The development, systems, theory, clinical uses and holograms of micro-acupuncture are reviewed. It is suggested that the holographic paradigm may even have implications for the evolution of a new scientific, social and personal consciousness. **Comment:** Dale reviews several "hologram systems" used in AK, including the Teeth System of M.L. Rees and the Temporal Sphenoidal (TS) Line, each of which have been correlated by Goodheart with muscle and meridian correspondents. The AK applications of meridian system principles are cited frequently and very positively by Dale in his frequent articles in the *American Journal of Acupuncture*.
Point-Counterpoint: Is O-Ring testing a reliable method? Van Benschoten MM.	*Am J Acupunct.* 1999;27(3-4):243-247. **Abstract:** This article presents an impressive literature review regarding the O-Ring method. 59 citations are offered from the peer-review literature investigating the O-Ring test. The potential of utilizing manual muscle testing to receive relevant feedback directly from physiological processes in the subject's body rather than relying primarily on the patient's and doctor's information was first developed by Goodheart and elaborated by Walther.
Lifestyle factors to consider in overactive circulation-sex meridian and the need for thiamine pyrophosphate, Kane JN.	*Collected Papers International College of Applied Kinesiology*, 1993-1994;1:198-200. **Abstract** **Objective:** To present 17 cases where MMT was used to evaluate the need for thiamine pyrophosphate (the active form of vitamin B1) in cases showing over-activity of the circulation sex meridian. **Clinical Features:** In AK it has been found that patients who require rebalancing of the circulation sex meridian may require thiamine pyrophosphate. Twenty patients were examined (14 female, 6 male), ages 21 to 64 years. Possible causes of thiamine pyrophosphate deficiency are reviewed, including dietary anti-thiamine items like coffee, tea, and alcohol, as well as conditions like hyperthyroidism, pregnancy, lactation, exogenous thyroid hormones, stress and exercise. **Intervention and Outcome:** Twenty patients were tested for overactivity of the circulation sex meridian by tapping the sedation point and then testing an intact associated muscle with that meridian (in this case series the piriformis muscle). If the muscle remained strong (it should momentarily weaken after tapping the sedation point), thiamine pyrophosphate or magnesium citrate was orally administered to the patient. Of the 20 patients tested, 17 showed an inappropriate response to tapping of the circulation sex sedation point. All 17 showed proper weakening of the piriformis muscle after tapping of the sedation point for the circulation sex meridian when a source of thiamine pyrophosphate was orally administered to the patient, and 3 also responded to magnesium citrate. **Conclusion:** This case series report showed that AK testing of the circulation sex meridian could be improved with the use of thiamine pyrophosphate or magnesium citrate. Larger clinical trials would be helpful to determine the effect of this therapy on patient populations with diverse symptomatology.
The demystification of Chinese pulse diagnosis: An overview of	*Am J Acupunct* 1993;21(1):63-80.

the validations, holograms, and systematics for learning the principles and techniques, Dale RA.	**Abstract:** Chinese pulse diagnosis is demystified in this review of the scientific validations, and of the holographic relationships between the pulse, the anatomy and the principal energetic exchanges of the body. A systematics is presented for learning to "read" the quantitative and qualitative differentiations at the six classical positions of the radial artery. Novices at pulse diagnosis are provided a methodology that permits basic readings of various patterns of energetic imbalances to be acquired at the outset. Treatment suggestions for each pathological pattern are provided for correcting these imbalances, and for immediately reevaluating the pulse. **Comment:** The AK applications of meridian system principles are cited frequently and very positively by Dale in his frequent articles in the *American Journal of Acupuncture*. In this paper, Dale says of Goodheart: "George Goodheart is a chiropractic physician in Detroit who has developed a holistic systematics of diagnosis and treatment, which incorporates acupuncture. Goodheart defines switching as a neurological disorganization that can interfere with the immunological system. Paul Nogier, who discovered auriculo-acupuncture refers to the same dysfunction as the oscillation of the corpus callosum, the structure which makes left and right brain assignments in response to different stimuli."
An attempt to quantify muscle testing using meridian therapy/acupuncture techniques, Corneal JM, Dick R.	*Collected Papers International College of Applied Kinesiology*, Winter, 1987:59-78. **Abstract** **Objective:** To present an observational study on the relationship between acupuncture meridian sedation and muscle force using electromyographic measurements. **Clinical Features:** In AK, a clinical relationship has been suggested between the muscles of the body and the meridian system in traditional Chinese medicine. The stomach meridian is associated in AK with the biceps brachaii and brachioradialis muscles. Four subjects with no history of arm problems, with a mean age of 31 years, and who were right-handed were tested for maximal isometric elbow flexion on the right with an isometric test apparatus secured to a table. The tests were made before and after sedation therapy for the stomach meridian. Force produced, biceps EMG, and triceps EMG were recorded for each subject. The elbow flexion was tested in the standardized MMT position for the biceps muscle. **Intervention and Outcome:** An acu-Aid was taped to stomach meridian's sedation point (S-45) on the second toe, and then isometric testing was performed. After a five-minute rest period, a placebo (tape) was applied to the same location (subjects were unable to distinguish between these two conditions), and isometric testing was again performed. Subjects averaged 5.3% less force produced with the acu-Aid applied than with the placebo. The acu-Aid appeared to have no effect on EMG measurement. **Conclusion:** Sedation of the stomach meridian produced a significant reduction in bicep force production as measured in an isometric elbow flexion test. Bicep EMG demonstrated no relationship to the stomach meridian sedation.
Physical balancing: Acupuncture and Applied Kinesiology, Larson D.	*Am J Acupunct.* 1985;13(2):159-162. **Abstract:** This paper is an introduction to applied kinesiology (muscle testing) and its relation to acupuncture. Comparisons are made with pulse diagnosis and muscle testing. The Five-Element treatment plan is described. **Comment:** This paper is part of a continuing series of papers regarding the interrelationships found between the muscular system – readily accessible through the manual muscle test – and the meridian system of Traditional Chinese Medicine (TCM). Acupuncture is a healing art which is embedded in eastern culture and TCM. Applied kinesiology (AK) as a Western development is supported by neurological models, and potentially supplies a logical "easy-to-use" tool for the use of acupuncture. The MMT has been a key tool for the entry of many clinicians into the ideas and methods of TCM. The more recent discoveries in the West like Applied Kinesiology may add to the tools for diagnosis and treatment using TCM principles.
Effect of cranial laser	*Am J Acupunct.* 1984;12(2):117-124.

acupuncture on muscle strength in healthy individuals, Sopler D.	**Abstract:** Cranial acupuncture zones for the lower extremities, trunk area and upper extremities were stimulated with a helium-neon laser on a group of bodybuilders. The purpose of this study was to test the hypothesis that stimulation of these zones could increase muscle strength. The twelve subjectds were randomly divided into treatment and control groups. Four treatments were given, with subjects in both groups reporting any increases in their ability to lift weights after each treatment. Results of the study showed that the treatment group increased 12.77 percent more in muscle strength over the control group.
German electro-acupuncture, Applied Kinesiology and gastric digestion, Hanicke B.	*Dig Chiro Econ,* 1982;24(5):10-12.
New simple early diagnostic methods using Omura's "Bi-Digital O-Ring Dysfunction Localization Method" and acupuncture organ representation points, and their applications to the "drug & food compatibility test" for individual organs and to auricular diagnosis of internal organs--part I, Omura Y	*Acupunct Electrother Res.* 1981;6(4):239-54. **Abstract:** By critically evaluating exceptions which may lead to false diagnoses, as well as by improving the currently-used **applied kinesiology diagnostic method** (="Dysfunction Localization Method"), the author was able to develop the "Thumb-Index Finger Bi-Digital O-Ring Diagnostic Method," **using the Applied Kinesiology Dysfunction Localization Principle.** By combining the author's "Bi-Digital O-Ring Dysfunction Localization Method" with clinically useful organ representation points in acupuncture medicine (where the presence of tenderness at the organ representation point is used for diagnosis as well as for the location of treatment), it has become possible to make early diagnoses of most of the internal organs, with an average diagnostic accuracy of over 85%, without knowing the patient's history or using any instruments. The method can detect dysfunctioning or diseased organs even before tenderness appears at the organ representation point, with an applied force of less than 1 gm/mm2 on the skin surface, while the detection of tenderness at the organ representation point often requires a minimum applied force of 80-100 gm/mm2. The method was applied to the "Drug and Food Compatibility Test" to determine the probable effects of a given food or drug on individual internal organs without going through time-consuming, expensive laboratory tests. It was also applied to auricular organ representation points and their evaluation, and has succeeded in increasing their diagnostic sensitivity. The method was also used for the evaluation of magnetic fields. Usually the North pole increased muscle strength and the South pole weakened it at most parts of the body. This simple, improved, economical diagnostic method may have invaluable implications in clinical diagnosis, treatment and drug research.
Applied Kinesiology using the acupuncture meridian concept: Critical evaluation of its potential as the simplest non-invasive means of diagnosis, and compatibility test of food and drugs—Part 1, Omura Y.	*Acupun Elec.* 1979;4(3/4):165-184. **Comment:** In the late 1970s, medical doctor and electrical engineer Yoshiaki Omura developed the O-ring test which he derived from applied kinesiology methods. Using the AK method of therapy localization to areas of organic dysfunction, Omura showed that measurable decreases in grip strength occurred. In addition to journal articles regarding the O-ring method in English, Omura published two books in Spanish and one in Japanese. [Electro Acupunctura y Acupunctura Manual: Bases Biofisicas y Bioquimicas. (Electro Acupuncture & Manual Acupuncture: Biophysical and Biochemical Bases). EDAD S.A., Maracaibo, Venezuela, 1984.] [Practice of Bi-Digital O-Ring Test. Ido-No-Nihon-Sha, Tokyo Japan, 1986. (In Japanese).] The “Bi-Digital O-Ring Test” refers to an opponens pollicus and flexor digiti minimi general manual muscle test, while the patient or assistant TLs a particular organ, acupuncture point or substance to be tested. Omura’s difference with AK in the area of acupuncture is primarily in Omura’s exclusive use of finger muscles without testing any other muscles in the body potential effect from meridian imbalances. This may prove to be a significant limitation from the research presented in this compendium.