

	<p style="text-align: center;">Research Related To Treatment Effects Using AK Methods: Clinical Series and Case Reports</p>
<p>Symptomatic Arnold-Chiari malformation and cranial nerve dysfunction: a case study of applied kinesiology cranial evaluation and treatment, Cuthbert, S., Blum, C.</p>	<p><i>J Manipulative Physiol Ther.</i> 2005 May;28(4):e1-6. www.journals.elsevierhealth.com/periodicals/yymm</p> <p>Objective: To present an overview of possible effects of Arnold-Chiari malformation (ACM) and to offer chiropractic approaches and theories for treatment of a patient with severe visual dysfunction complicated by ACM. Clinical Features: A young woman had complex optic nerve neuritis exacerbated by an ACM (Type I) of the brain. Intervention and Outcome: Applied kinesiology chiropractic treatment of the spine and cranium was used for treatment of loss of vision and nystagmus. After treatment, the patient's ability to see, read, and perform smooth eye tracking showed significant and lasting improvement. Conclusion: Further studies into applied kinesiology and cranial treatments for visual dysfunctions associated with ACM may be helpful to evaluate whether this single case study can be representative of a group of patients who might benefit from this care.</p>
<p>Evaluation of Chapman's neurolymphatic reflexes via applied kinesiology: a case report of low back pain and congenital intestinal abnormality, Caso, M.L.</p>	<p><i>J Manipulative Physiol Ther.</i> 2004 Jan;27(1):66. www.journals.elsevierhealth.com/periodicals/yymm</p> <p>Objective: To describe the applied kinesiological evaluation of Chapman's neurolymphatic (NL) reflexes in the management of a person with an unusual congenital bowel abnormality and its role in the manifestation of low back pain. The theoretical foundations of these reflexes will be elaborated on and practical applications discussed. Clinical Features: A 29-year-old man had chronic low back pain. Radiographs of the patient's lumbar spine and pelvis were normal. Magnetic resonance imaging (MRI) demonstrated a mild protrusion of the fifth lumbar disk. Oral anti-inflammatory agents, cortisone injections, and chiropractic manipulative therapy provided little relief. Though generally in robust health, the patient was aware of a congenital intestinal abnormality diagnosed when he was a child; it was thought to be of no consequence with regard to his current back condition. Intervention and outcome: The patient's history, combined with applied kinesiology examination, indicated a need to direct treatment to the large bowel. The essential diagnostic indicators were the analysis of the Chapman's neurolymphatic reflexes themselves, coupled with an evaluation of the traditional acupuncture meridians. The primary prescribed therapy was the stimulation of these reflexes by the patient at home. This intervention resulted in the resolution of the patient's musculoskeletal symptomatology, as well as improved bowel function. Conclusion: The rather remarkable outcome from the application of this relatively simple, yet valuable, diagnostic and therapeutic procedure represents a thought-provoking impetus for future study and clinical application.</p>
<p>Insult, Interference and Infertility: An Overview of Chiropractic Research, Behrendt, M.</p>	<p><i>Journal of Vertebral Subluxation Research,</i> May 2003:1 www.jvsr.com</p> <p>Objective: Infertility is distinct from sterility, implying potential, and therefore raises questions as to what insult or interference influences this sluggish outcome. Interference in physiological function, as viewed by the application of chiropractic principles, suggests a neurological etiology and is approached through the mechanism of detection of vertebral subluxation and subsequent appropriate and specific adjustments to promote potential and</p>

	<p>function. Parental health and wellness prior to conception influences reproductive success and sustainability, begging efficient, effective consideration and interpretation of overall state and any distortion. A discussion of diverse articles is presented, describing the response to chiropractic care among subluxated infertile women. Clinical Features: Fourteen retrospective articles are referenced, their diversity includes: all 15 subjects are female, ages 22-65; prior pregnancy history revealed 11 none, 2 successful unassisted, 1 assisted, 1 history of miscarriage. 9 had previous treatment for infertility, 4 were undergoing infertility treatment when starting chiropractic care. Presenting concerns included: severe low back pain, neck pain, colitis, diabetes, and female dysfunction such as absent or irregular menstrual cycle, blocked fallopian tubes, endometriosis, infertility, perimenopause and the fertility window within a religious based lifestyle, and a poor responder undergoing multiple cycles of IVF. Chiropractic Care and Outcome: Outcomes of chiropractic care include but are not limited to benefits regarding neuromuscular concerns, as both historical and modern research describe associations with possible increased physiological functions, in this instance reproductive function. Chiropractic care and outcome are discussed, based on protocols of a variety of arts, including Applied Kinesiology (A.K.), Diversified, Directional Non-Force Technique (D.N.F.T.), Gonstead, Network Spinal Analysis (N.S.A.), Torque Release Technique (T.R.T.), Sacro Occipital Technique (S.O.T.) and Stucky-Thompson Terminal Point Technique. Care is described over a time frame of 1 to 20 months. Conclusion: The application of chiropractic care and subsequent successful outcomes on reproductive integrity, regardless of factors including age, history and medical intervention, are described through a diversity of chiropractic arts. Future studies that may evaluate more formally and on a larger scale, the effectiveness, safety and cost benefits of chiropractic care on both well-being and physiological function are suggested, as well as pursuit of appropriate funding.</p>
<p>Applied kinesiology for treatment of women with mastalgia, Gregory, W.M., Mills, S.P., Hamed, H.H., Fentiman, I.S.</p>	<p><i>Breast</i>, 2001 Feb;10(1):15-9.</p> <p>www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14965552&query_hl=1</p> <p>To determine whether an applied kinesiology technique was of benefit to women with breast pain, an open pilot study was conducted in which 88 newly presenting women with self-rated moderate or severe mastalgia were treated by applied kinesiology. This involved a hands-on technique consisting of rubbing a series of 'lymphatic reflex points' while touching painful areas of the breasts. The women were predominantly pre-menopausal, and patients with both cyclical and non-cyclical pain were included in the study. Patients' self-rated pain scores, both before and immediately after applied kinesiology were compared, together with a further score 2 months later. Immediately after treatment there was considerable reduction in breast pain in 60% of patients with complete resolution in 18%. At the visit after 2 months, there was a reduction in severity, duration and frequency of pain of 50% or more in about 60% of cases (P<0.0001). This preliminary study suggests that applied kinesiology may be an effective treatment for mastalgia, without side-effects and merits testing against standard drug therapies.</p>
<p>Spinal reflex attenuation associated with spinal manipulation, Dishman JD, Bulbulian R.</p>	<p><i>Spine</i>, 2000 Oct 1;25(19):2519-24;discussion 2525.</p> <p>STUDY DESIGN: This study evaluated the effect of lumbosacral spinal manipulation with thrust and spinal mobilization without thrust on the excitability of the alpha motoneuronal pool in human subjects without low back pain. OBJECTIVES: To investigate the effect of high velocity, low amplitude thrust, or mobilization without thrust on the excitability of the alpha motoneuron pool, and to elucidate potential mechanisms in which manual procedures may affect back muscle activity. SUMMARY OF BACKGROUND DATA: The physiologic mechanisms of spinal manipulation are largely unknown. It has been proposed</p>

	<p>that spinal manipulation may reduce back muscle electromyographic activity in patients with low back pain. Although positive outcomes of spinal manipulation intervention for low back pain have been reported in clinical trials, the mechanisms involved in the amelioration of symptoms are unknown. METHODS: In this study, 17 nonpatient human subjects were used to investigate the effect of spinal manipulation and mobilization on the amplitude of the tibial nerve Hoffmann reflex recorded from the gastrocnemius muscle. Reflexes were recorded before and after manual spinal procedures. RESULTS: Both spinal manipulation with thrust and mobilization without thrust significantly attenuated alpha motoneuronal activity, as measured by the amplitude of the gastrocnemius Hoffmann reflex. This suppression of motoneuronal activity was significant ($P < 0.05$) but transient, with a return to baseline values exhibited 30 seconds after intervention. CONCLUSIONS: Both spinal manipulation with thrust and mobilization without thrust procedures produce a profound but transient attenuation of alpha motoneuronal excitability. These findings substantiate the theory that manual spinal therapy procedures may lead to short-term inhibitory effects on the human motor system.</p> <p>Comment: This study demonstrates that there is an immediate effect upon the motor system after spinal manipulative therapy. This factor has been consistently demonstrated in AK, and measuring the effect upon the motor system is made after every manipulative treatment. Clinical conditions involving hypotonicity, spasticity or hypertonicity are attributed to pathophysiologic abnormalities in the motor neuron system, and this study measures this state.</p>
<p>Cervical root compression monitoring by flexor carpi radialis H-reflex in healthy subjects, Sabbahi M, Abdulwahab S.</p>	<p><i>Spine</i>, 1999 Jan 15;24(2):137-41.</p> <p>STUDY DESIGN: One-group, pretest-posttest experimental research with repeated measures. OBJECTIVE: To determine the effect of head postural modification on the flexor carpi radialis H-reflex in healthy subjects. SUMMARY OF BACKGROUND DATA: H-reflex testing has been reported to be useful in evaluating and treating patients with lumbosacral and cervical radiculopathy. The idea behind this technique is that postural modification can cause further H-reflex inhibition, indicating more compression of the impinged nerve root, or recovery, indicating decompression of the root. Such assumptions cannot be supported unless the influence of normal head postural modification on the H-reflex in healthy subjects is studied. METHODS: Twenty-two healthy subjects participated in this study (14 men, 8 women; mean age, 39 +/- 9 years). The median nerve of the subjects at the cubital fossa was electrically stimulated (0.5 msec; 0.2 pulses per second [pps] at H-max), whereas the flexor carpi radialis muscle H-reflex was recorded by electromyography. The H-reflexes were recorded after the subject randomly maintained the end range of head-forward flexion, backward extension, rotation to the right and the left, lateral bending to the right and the left, retraction and protraction. These were compared with the H-reflex recorded during comfortable neutral positions. Data were recorded after the subject maintained the position for 30 seconds, to avoid the effect of dynamic postural modification on the H-reflex. Four traces were recorded in each position. During recording, the H-reflex was monitored by the M-response to avoid any changes in the stimulation-recording condition. RESULTS: Repeated multivariate analysis of variance was used to evaluate the significance of the difference among the H-reflex, amplitude, and latency, in various head positions. The H-reflex amplitude showed statistically significant changes ($P < 0.001$) with head postural modification. All head positions, except flexion, facilitated the H-reflex. Extension, lateral bending, and rotation toward the side of the recording produced higher reflex facilitation than the other positions. These results indicate that H-reflex changes may be caused by spinal root compression-decompression mechanisms. It may also indicate that relative spinal root decompression occurs in most head-neck postures except forward flexion. CONCLUSIONS: Head postural modification significantly influences the H-reflex amplitude but not the latency. This indicates that the H-reflex is a more sensitive predictor of normal physiologic changes than are latencies. The H-reflex modulation in various head positions may be-caused by relative spinal root compression-</p>

	<p>decompression mechanisms. Comment: In AK, the cervical compaction test was developed to monitor this kind of phenomenon. With compression upon the top of the skull, MMT will reveal weaknesses when cervical spine subluxations, and especially cervical disc syndromes are present. This study measures this dynamic.</p>
<p>Correlation of Applied Kinesiology Muscle Testing Findings with Serum Immunoglobulin Levels for Food Allergies, Schmitt, W., Leisman, G.</p>	<p><i>International Journal of Neuroscience</i>. 1998; 96:237-244.</p> <p>Abstract: The pilot study attempted to determine whether subjective muscle testing employed by Applied Kinesiology practitioners, prospectively determine those individuals with specific hyperallergenic responses. Seventeen subjects were found positive on Applied Kinesiology (A.K.) muscle testing screening procedures indicating food hypersensitivity (allergy) reactions. Each subject showed muscle weakening (inhibition) reactions to oral provocative testing of one or two foods for a total of 21 positive food reactions. Tests for a hypersensitivity reaction of the serum were performed using both a radio-allergosorbent test (RAST) and immune complex test for IgE and IgG against all 21 of the foods that tested positive with A.K. muscle screening procedures. These serum tests confirmed 19 of the 21 food allergies (90.5%) suspected based on the applied kinesiology screening procedures. This pilot study offers a basis to examine further a means by which to predict the clinical utility of a given substance for a given patient, based on the patterns of neuromuscular response elicited from the patient, representing a conceptual expansion of the standard neurological examination process.</p> <p>Comment: This study showed a high degree of correlation between AK procedures used to identify food allergies and serum levels of immunoglobulins for those foods. AK methods in this study consisted of stimulation of taste bud receptors with various foods, and observation of changes in manual muscle testing that resulted. The patient was judged to be allergic to foods that created a disruption of muscle function. Blood drawn subsequently showed that patients had antibodies to the foods which were found to be allergenic through AK assessment.</p>
<p>The effects of a pelvic blocking procedure upon muscle strength: a pilot study, Unger, J.</p>	<p><i>Chiropractic Technique</i>, Nov 1998;10(4)</p> <p>Using a hand-held force transducer, the unit was interposed between the examiner's hand and the subject's appendage being tested. The unit used in this study was interfaced with a computer program that gives statistical analysis for repeated testing reliability. This study found a significant increase in strength in the pectoralis (sternal and clavicular divisions tested separately), anterior deltoid, latissimus dorsi, psoas, tensor fascia lata, adductor, and gluteus medius muscles following the correction of a category II pelvic fault.</p>
<p>Diagnosis of thyroid dysfunction: applied kinesiology compared to clinical observations and laboratory tests, Jacobs, G, Franks, T, Gilman, G.</p>	<p><i>J Manipulative Physiol Ther</i>, 1984;7(2):99-104</p> <p>Abstract: Sixty-five patients presenting to three clinics were independently evaluated for thyroid dysfunction by applied kinesiology (AK), a clinical protocol, and laboratory testing. Each was rated on a scale of 1 (unquestionably hypothyroid) to 7 (unquestionably hyperthyroid). AK ratings correlated with laboratory ratings ($r_s = .32, p < .002$) and with laboratory ratings ($r_s = .32, p < .005$). Correlation between clinical and laboratory diagnosis was $.47, p < .000$. Three AK therapy localizations had a significant correlation with the laboratory diagnosis ($p < .05$). Two of these (right neurovascular-left brain and left neurolymphatic-right brain) were points associated with thyroid function. The third, ventral hand on the glabella with the other on the external occipital protuberance, is associated with pituitary function. AK enhanced but did not replace clinical/laboratory diagnosis of thyroid dysfunction. Preliminary evidence indicates that there may be a significant correlation between certain AK tests and an elevated LDH in the serum.</p>
<p>New diagnostic and therapeutic approach to thyroid-associated</p>	<p><i>J Altern Complement Med</i>, 2004 Aug;10(4):643-50.</p>

<p>orbitopathy based on applied kinesiology and homeopathic therapy, Moncayo, R., Moncayo, H., Ulmer, H., Kainz, H.</p>	<p>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.</p>
<p>George Goodheart, Jr., D.C., and a history of applied kinesiology, Green, B.N. and Gin, R.H.</p>	<p><i>J Manipulative Physiol Ther</i>, 1997;20(5):331-337</p> <p>Abstract: Applied Kinesiology (AK), founded by Michigan chiropractor George J. Goodheart, is a popular diagnostic and therapeutic system used by many health care practitioners. Many of the components in this method were discovered by serendipity and observation. In 1964, Goodheart claimed to have corrected a patient’s chronic winged scapula by pressing on nodules found near the origin and insertion of the involved serratus anterior muscle. This finding led to the origin and insertion treatment, the first method developed in AK. Successive diagnostic and therapeutic procedures were developed for neurolymphatic reflexes, neurovascular reflexes and cerebrospinal fluid flow from ideas originally described by Frank Chapman, D.O., Terrence J. Bennett, D.C., and William G. Sutherland, D.O., respectively. Later, influenced by the writings of Felix Mann, M.D., Goodheart incorporated acupuncture meridian therapy into the AK system. Additionally, the vertebral challenge method and therapy localization technique, both based on phenomena proposed by L.L. Truscott, D.C., were added to the AK system. Scholarship has also evolved regarding AK and research on the topic is in its infancy. This paper documents some of the history of AK.</p>
<p>Applied Kinesiology (AK), Perle, S.</p>	<p><i>Chiro Technique</i>, 7(3);Aug 1995:103-107</p> <p>Abstract: Applied Kinesiology (AK) intends to be a comprehensive interdisciplinary approach to health care. It postulates that human disease can be seen as an alteration in the function in structural, chemical, and/or mental aspects of the body. Unique to AK is the use of manual muscle testing procedures to aid in the diagnosis of the structural, chemical and/or mental aspects of a disease process. After treatment, AK again uses manual muscle testing procedures to determine the effectiveness of the treatment. Therefore, manual muscle testing is used both to diagnose specific dysfunction and to assess outcomes.</p>
<p>Neuromuscular relaxation and CCMDP. Rolfing and applied kinesiology (article in Italian),</p>	<p><i>Dent Cadmos</i>. 1989 Nov 15;57(17):76-80.</p>

Santoro, F., Maiorana, C., Geirola, R.	
Applied Kinesiology: Muscle Response In Diagnosis, Therapy And Preventive Medicine, Meal G.	<i>Eur J Chiro</i> , Jun 1986;34(2):107
Quantification of the Inhibition of Muscular Strength Following the Application of a Chiropractic Maneuver, Perot, D., Goubel, F., Meldener, R.	<i>Journale de Biophysique et de Biomecanique</i> . 1986; 32(10):471-474.
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 I, Omura, Y.	<p><i>Int J Acupuncture & Electro-Therapeut Res</i>, 4:165-183</p> <p>Abstract: By critically evaluating exceptions that 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," <i>using the Applied Kinesiology Dysfunction Localization Principle</i>. 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.</p>
Predictive value of manual muscle testing and gait analysis in normal ankles by dynamic electromyography, Perry, J.P. et al	<p><i>Foot Ankle</i>. 1986 Apr;6(5):254-9.</p> <p>Eight muscles about the ankle of seven normal subjects were assessed by electromyography (EMG) during manual muscle testing (MMT) and walking. Three strength levels (normal, fair, trace) and three gait velocities (free, fast, slow) were tested. The muscles studied included the gastrocnemius, soleus, posterior tibialis, flexor digitorum longus, flexor hallucis longus, anterior tibialis, extensor digitorum longus, and extensor hallucis longus. Relative intensity of muscle action was quantitated visually (using an eight-point scale based on amplitude and density of the signal). The data showed that EMG activity increased directly as more muscle force was required during the different manual muscle test levels and increased walking speeds. No MMT isolated activity to the specific muscle though being tested. Instead, there always was a synergistic response. Both the gastrocnemius and soleus contributed significantly to plantarflexion regardless of knee position. The intensity of muscle action during walking related to the manual muscle test grades. Walking at the normal free velocity (meters/min) required fair (grade 3) muscle action. During slow gait the muscle functioned at a poor (grade 2) level. Fast walking</p>

	necessitated muscle action midway between fair and normal, which was interpreted as good (grade 4).
Neurophysiologic Inhibition of Strength Following Tactile Stimulation of the Skin, Nicholas, J.A., Melvin, M., Saraniti, A.J.	<p><i>American Journal of Sports Medicine</i>. 1980; 8:181-186.</p> <p>Abstract: A modified shoulder abduction manual muscle test was incorporated in this study to demonstrate strength changes following tactile stimulation of the skin. Resistance was applied to the distal radioulnar joint and the stimulus (scratching) was applied inferior to the clavicle on the clavicular head of the pectoralis major muscle after maximum contraction. An electromechanical device quantified the isotonic (eccentric) measurements. A standard dynamometer system (Cybex II) was used to measure isometric strength. The nondominant side was used as the "control." Two populations, a normal (random) and a strong (athletic) group, were studied. Twenty-three persons (52% women, 48% men; mean age, 27 years; mean height, 67 inches (170 cm); and mean weight, 147 lb (66.7 kg)) were in the "normal" group and 17 persons (100% men; mean age, 25 years; mean height, 74 inches (188 cm); and mean weight, 215 lb (97.5kg)) were in the "strong" group. The random population showed a 19% decrease in strength following tactile stimulation as measured by the manual muscle testing unit; the athletic population showed a 17% decrease in strength. With the isometric measurements, the random population had an 8% decrease in mean strength following the scratch but the athletic population showed no significant decrease. The capability to quantify objectively manual muscle tests is discussed in relation to the importance of the proximal musculature.</p> <p>Comment: This study demonstrates a small part of the potentiality of the AK technique called Therapy Localization or TL. In AK, TL is a simple, non-invasive technique to find out where a problem in the body exists. TL doesn't show the physician what the problem is but shows that something under the hand that is contacting the patient's body is disturbing the nervous system. "Neurophysiologic Inhibition of Strength Following Tactile Stimulation of the Skin" states this dynamic precisely. In AK, positive TL always calls for further investigation to the area concerned. The 17% and 8% decrease in strength following TL demonstrated in this study would create a MMT finding of 4 (or inhibited) as graded in the <i>Guides to the Evaluation of Permanent Impairment</i>, 4th Edition by the American Medical Association.</p>
Factors Influencing Manual Muscle Tests in Physical Therapy, Nicholas, J. A., Sapega, A., Kraus, H., Webb, J.N.	<p><i>Journal of Bone and Joint Surgery</i>. 1978; 60-A:186-190.</p> <p>Abstract: To determine whether it is the amount or the duration of the force applied manually by the tester, or both, that determines the tester's perception of the strength of the hip flexor or abductor muscles, an electromechanical device was designed which was placed between the tester's hand and the subject's limb. With the device we measured the force applied to the limb, the time interval during which it was applied, and the angular position of the limb during the entire test. In 240 such tests, the testers' ratings of the differences in strength between the right and left sides were correlated with seven variables involving force and time. It was found statistically that the impulse--that is, the duration of the tester's effort multiplied by the average applied force during each test--was the factor that most influenced the tester in the ratings.</p>
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 I, Omura, Y.	<p><i>Int J Acupuncture & Electro-Therapeut Res</i>, 4:165-183</p> <p>Abstract: By critically evaluating exceptions that 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</p>

	<p>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.</p>
<p>Relations between occlusal interference and jaw muscle activities in response to changes in head position, Funakoshi, M., Fujita, N., Takenana, S.</p>	<p><i>J Dent Res</i>, 1976;35:684-690</p> <p>Abstract: The jaw muscles responded to changes in the head position. Electromyographic responses to head positions were classified as either of two types--balanced and unbalanced. The balanced type of electromyographic responses of participants with normal occlusion changed to the unbalanced type after being set with an overlay to make a premature contact artificially, and returned to the balanced type after removal of the overlay. The unbalanced type of electromyographic response of participants with occlusal interference turned to the balanced type after occlusal adjustment.</p> <p>Comment: In AK examination and treatment, the complexity of the TMJ apparatus is appreciated. The TMJ is part of a complex system including the bones of the skull and cervical spine, the mandible and hyoid bone, the related muscle attachments and other soft tissues, and neurologic and vascular components. This complex is often referred to as the stomatognathic system. The use of AK methods, especially challenge and therapy localization, greatly assists the practitioner in finding concealed or hidden TMJ problems.</p>