

[Applied Kinesiology](#) ||| [Quackwatch Home Page](#)

International College of Applied Kinesiology- U.S.A.

6405 Metcalf Ave., Suite 503

Shawnee Mission, KS 66202

(913) 384-5336

November 11, 1998

Stephen Barrett, M.D.
Consumer Advocate
P.O. Box 1747
Allentown, PA 18105

Dr. Barrett,

You are herewith informed of the facts about applied kinesiology research. The details are as follows:

1. For the record, we would like to state that while there are numerous methods which employ manual muscle testing procedures, most are not in keeping with the standards of the International College of Applied Kinesiology (ICAK). Specifically, be advised that

1. testing of substances by any method other than the stimulation of gustatory receptors on the tongue or olfactory receptors in the nose is specifically outside the realm of applied kinesiology,
2. using a straight "arm pull down" muscle test for the sole determinant of what therapy to administer is not considered applied kinesiology,
3. other methods, techniques, or approaches not in keeping with the status statement of the ICAK (for example, the failure to combine applied kinesiology assessment methods with standard examination methods) are also outside the realm of applied kinesiology.

2. There is a growing body of research in the medical literature documenting the neurologic basis, inter-examiner reliability, and criterion validity of manual muscle testing. These studies are listed on the ICAK-USA web site: www.icakusa.com.

Among the studies published in the medical literature and cited on our web site, you will find the following three studies, which provide significant evidence of both validity and reliability of manual muscle testing methods utilized in applied kinesiology:

- (a) Leisman, G., Shambaugh, P., Ferentz, A. Somatosensory Evoked Potential Changes During Muscle Testing. *International Journal of Neuroscience*. 1989; 45:143-151.
- (b) Leisman, G., et al. Electromyographic Effects of Fatigue and Task Repetition on the Validity of Estimates of Strong and Weak Muscles in Applied Kinesiology Muscle Testing Procedures. *Perceptual and Motor Skills*. 1995; 80:963-977.
- (c) Lawson, A., Calderon, L. Interexaminer Agreement for Applied Kinesiology Manual Muscle Testing, *Perceptual and Motor Skills*. 1997; 84:539-546.

On the [ICAK-U.S.A. web site](#), you will also find a piece entitled "Quotable Research," which summarizes the above articles as well as others whose outcomes contribute to the validation of applied kinesiology. Any discussion of applied kinesiology research is incomplete without consideration of these studies.

3. For the record, we would also like to state that the studies you quote on your web site are full of inaccuracies and poor design. In addition to the failure to include the studies favorable to applied kinesiology in your portrayal, you fail to mention the significant design flaws in the studies you do include. The details are as follows:

a) Grossi, JA. "Effects of an AK technique on quadriceps femoris muscle isometric strength." *Phys Ther.* Vol 61, No 7 (July 1981). This study attempted to increase a muscle's strength by neuromuscular spindle cell manipulation in a population of 20 normally functioning females. The applied kinesiology technique of manipulating a neuromuscular spindle cell first requires the identification of a muscle whose resting state involves inadequate motor facilitation. Muscle spindle cell manipulation has never been described as a method to improving a normal muscle, which is what this study tried to do. You can't make normal more normal by this technique. In addition, the assessment of muscular strength was done using a force transducer. It has been established in this and other studies that there is no correlation between applied kinesiology manual muscle testing methods and mechanical measures of isometric muscle strength using force transducers alone (Kenney, Clemens & Forsythe, 1988; Rybeck and Swenson, 1980). Force transducer measurements do not correlate with manual muscle test outcomes. One would not expect any study that used a force transducer as the muscular assessment instrument to yield any outcomes relevant to applied kinesiology manual muscle testing procedures.

b) Friedman, MIL & J Weisberg. "Applied kinesiology double blind pilot study." *J Prosthetic Dent.* Vol 45, No 3 (Mar 1991). This study was designed to determine if chewing sugar caused weakness in a normal population. Manual muscle testing was used to assess deltoid muscle strength before and after applying digital pressure over the muscle tested, ingestion of candy, and tasting a vitamin E capsule. Friedman found changes in muscle strength in many subjects, though different subjects were affected by different things. These results support the notion that mechanical stimuli (pressure over the muscle to be tested) and stimulation of taste receptors can change the results of manual muscle tests. The study was negative toward applied kinesiology because the anticipated pattern of change in muscle test outcomes did not occur identically in all subjects. But the standard principles of applied kinesiology have never maintained that sugar causes a muscle weakening in all people. Such a weakening effect would only be expected to occur when there is a problem in sugar metabolism in susceptible people. In fact, there are occasions when a weak associated muscle will strengthen when the subject chews sugar. In addition to the study trying to find something that the ICAK has never claimed, the study used poor muscle testing methods.

c) Kenney, JJ, R Clemens, & K.D. Forsythe. "Applied kinesiology unreliable for assessing nutrient status." *J Am Diet Assoc.* Vol 88, No 6 (Jun 1988). This study purports to investigate applied kinesiology testing of nutritional supplementation but studies nothing that falls within the standards of the ICAK. In addition, the study has poor design. Nutritional "deficiencies" were evaluated with "Ridler" points or by the use of acupuncture meridians. Ridler points are an arbitrarily designated set of body surface points of unknown value, whose use has nothing to do with applied kinesiology. While some aspects of meridian therapy are used in applied kinesiology, they are not used to determine nutritional needs. The diagnostic method used in this

study bears no relation to anything supported by ICAK. This in itself places this study outside of the realm of applied kinesiology. Thorough examination, considering all of the alternatives is necessary to arrive at a final conclusion and diagnosis. This is the main reason that applied kinesiology teaching by diplomates of the organization is limited to those who are licensed to be primary health care professionals. This study was done using two lay persons and a chiropractor whose education in applied kinesiology was not identified. The study describes the "...chiropractor and two lay-persons ... are recognized and experienced in applied kinesiology techniques." They are not recognized by the ICAK because: 1) two are lay-people and, 2) they used techniques not recognized by the ICAK. The lack of qualification of these practitioners and the fact that what they were doing was not applied kinesiology makes their findings irrelevant in relation to applied kinesiology.

d) Triano, JJ. "Muscle strength testing as a diagnostic screen for supplemental nutrition therapy: a blind study." J Manip Physical Ther. Vol 5, No 4 (Dec 1982). Triano found that there was no one-to-one association between certain muscle weakness patterns and specific nutrients which always resolved them. This appears to contradict the idea that weakness of specific muscles indicates the need for certain specific nutrients, a belief held by some AK practitioners. This study did not assess the reproducibility of the test results for an individual patient. Nor did it focus on the possibility that differences in test outcomes from one patient to another might be due to the fact that a specific nutrient might be appropriate for one patient and not for another (a much more reasonable expectation clinically). The idea that all the patients in the study should respond identically to each nutrient is false. Standard applied kinesiology principles have never indicated that a given muscle weakness indicates a specific nutritional need. There are many factors that can cause a muscle to test weak.

We appreciate your offer to post this letter on your site, so that those who are interested in a more balanced view of this subject can avail themselves of a full view of the research related to applied kinesiology.

With Intent,

ICAK-U.S.A. Executive Board:

- Thomas Rogowsky, D.C., DIBAK,
Chairman
- Dale Schusterman, D.C., DIBAK,
Vice-Chairman Sandra Levy, D.C.,
Secretary
- Randall March, D.C., DACNB,
Treasurer
- Robert Porzio, D.C., DIBAK,
Immed. Past Chair.
- George Goodheart, D.C., DIBAK,
Research Director

At-Large Members:

- Michael Allen, D.C., NMD, DIBAK
- Howard Cohn, D.C.

- Timothy Francis, D.C., DIBAK
- Terry Hambrick, D.C., DIBAK
- David Walther, D.C., DIBAK

[Applied Kinesiology](#) ||| [Quackwatch Home Page](#)