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applied kinesiology

Applied kinesiology (AK) is a diagnostic method created by [George Goodheart, D.C.](#) According to the [International College of Applied Kinesiology](#), AK "is a system that evaluates structural, chemical and mental aspects of health using manual muscle testing with other standard methods of diagnosis." However, Goodheart and his followers unite [chiropractic](#) with traditional Chinese medicine (among other things); not only do they accept the notion of [chi](#) and the meridians of [acupuncture](#), they posit a universal intelligence of a spiritual nature running through the nervous system. They believe that muscles reflect the flow of chi and that by measuring muscle resistance one can determine the health of bodily organs and nutritional deficiencies. These are empirical claims and have been tested and shown to be false ([see references below](#)). Other claims made by practitioners are supported mainly by anecdotes supplied by advocates.

One of Goodheart's followers, John Thie, believed that AK "could be taught to and practiced as a method of self-care for all people."* In 1972, he and Mary Marks published a workbook entitled *Touch for Health: A Practical Guide to Natural Health Using Acupuncture, Touch, and Massage*. The workbook has been translated into more than a dozen languages and has sold in excess of 500,000 copies.

AK has some formidable proponents, such as psychiatrist-cum-guru [David Hawkins](#). He claims, among many other things, that he has proof that AK is a reliable "lie detector" and can be used to determine the truth or falsity of any statement. Hawkins also has developed a "scale of consciousness" and uses AK to determine how "enlightened" a book or person who wrote the book might be.* Hawkins claims he's calibrated *The Skeptic's Dictionary* at level 160, "which is that of sophomoric egotism."* Only 15% of humanity calibrate at above 200, according to Hawkins, so I'm in good company. By 'consciousness' Hawkins means some sort of developing spirituality. When you score between 700-1,000 you have reached "enlightenment." George W. Bush calibrates at 460, according to Hawkins, which is in the range of intellectual genius. (Need I add that Hawkins holds spirituality in high regard and has very conservative political values?) Hawkins goes so far as to claim that the [Wikipedia article on him](#) would calibrate at 400, instead of 200, if it removed the links to my criticisms.*

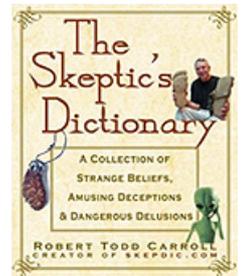
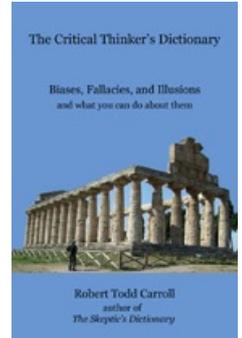
He claims AK is also a reliable way to determine a person's motives. Like many other New Age gurus, Dr. Hawkins believes he has not only found a way to tap into the [unconscious mind](#) but that therein dwells an unlimited database full of amazing truths.

Here is Hawkins's description of how AK works (taken from the work of [Dr. John Diamond](#), another fallen-away psychiatrist in love with Eastern mysticism):

It takes two people, the "tester" and the "subject."

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OTHER LANGUAGES

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- [Dutch voor kinderen](#)
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Print versions available in Dutch, Russian, Japanese, and Korean.

1. Have the subject stand erect, right arm relaxed at his side, left arm held out parallel to the floor, elbow straight.

2. Face your subject and place your left hand on his right shoulder to steady him. Then place your right hand on the subject's extended left arm just above the wrist.

3. Tell the subject to resist when you try to push his arm down.

4. Now push down on his arm fairly quickly, firmly, and evenly. The idea is to push hard enough to test the spring and bounce in the arm, not so hard that the muscle becomes fatigued. It is not a question of who is stronger, but of whether the muscle can 'lock' the shoulder joint against the push.

Yes, that's it. That's the magical technique of AK that can unlock the door to many truths. The only thing missing is the direction to face east and wear tin foil under your cap. (For more on Hawkins, check out [New Zealand cults](#), etc.)

There is little doubt that the muscle movements detected by AK are unconsciously triggered (Hyman 1999), but there is scant evidence that they are triggered by amazing databases of truths. In short, AK practitioners are deluding themselves and mistaking [ideomotor action](#) for access to hidden truths.

Some readers might be convinced that AK is the ideomotor effect in action by seeing a demonstration. The first video below demonstrates how one can consciously create the illusion that AK really works. It should be emphasized that this demonstration does not consider that the action of the one pressing down on the other's arm may be doing so unconsciously.

Not everybody, however, will be convinced by this demonstration. Another demonstration illustrates the point of the ideomotor effect, the unconscious alteration in pressing or resistance of AK.

Psychologist Ray Hyman provides a very telling example of how gurus and true believers can deceive themselves into believing what has been demonstrated to be false:

Some years ago I participated in a test of applied kinesiology at Dr. Wallace Sampson's medical office in Mountain View, California. A team of chiropractors came to demonstrate the procedure. Several physician observers and the chiropractors had agreed that chiropractors would first be free to illustrate applied kinesiology in whatever manner they chose. Afterward, we would try some [double-blind tests](#) of their claims.

The chiropractors presented as their major example a demonstration they believed showed that the human body could respond to the difference between glucose (a "bad" sugar) and fructose (a "good" sugar). The differential sensitivity was a truism among "alternative healers," though there was no scientific warrant for it. The chiropractors had volunteers lie on their backs and raise one arm vertically. They then would put a drop of glucose (in a solution of water) on the volunteer's tongue. The chiropractor then tried to push the volunteer's upraised arm down to a horizontal position while the volunteer tried to resist. In almost every case, the volunteer could not resist. The chiropractors stated the volunteer's body recognized glucose as a "bad" sugar. After the volunteer's mouth was rinsed out and a drop of fructose was placed on the tongue, the volunteer, in just about every test, resisted movement to the horizontal position. The body had recognized fructose as a "good" sugar.

After lunch a nurse brought us a large number of test tubes, each one coded with a secret number so that we could not tell from the tubes which contained fructose and which contained glucose. The nurse then left the room so that no one in the room during the subsequent testing would consciously know which tubes contained glucose and which fructose. The arm tests were repeated, but this time they were double-blind -- neither the volunteer, the chiropractors, nor the onlookers was aware of whether the solution being applied to the volunteer's tongue was glucose or fructose. As in the morning session, sometimes the volunteers were able to resist and other times they were not. We recorded the code number of the solution on each trial. Then the nurse returned with the key to the code. When we determined which trials involved glucose and which involved fructose, there was no connection between ability to resist and whether the volunteer was given the "good" or the "bad" sugar.

When these results were announced, the head chiropractor turned to me and said, "You see, that is why we never do double-blind testing anymore. It never works!" At first I thought he was joking. It turned out he was quite serious. Since he "knew" that applied kinesiology works, and the best scientific method shows that it does not work, then—in his mind—there must be something wrong with the scientific method. (Hyman 1999)

One would think that a trained psychiatrist such as Hawkins would give more credit to the power of the unconscious mind to cause muscles to tense or relax ([ideomotor action](#)) and would not be buffaloes by the applied kinesiology [quackery](#). One would also think that a trained M.D. (Medical College of Wisconsin) and Ph.D. (Columbia Pacific University) would know that you can't do a proper controlled experiment with an audience of paying customers who are given envelopes containing either Nutrasweet® (bad, bad, bad!) or vitamin C (good! good! good!), a popular technique used by Dr. Hawkins to demonstrate the accuracy of AK. He and [Dr. David Gerston](#), another psychiatrist, refer to these public exhibitions as [double-blind controlled studies](#). I would hope that Dr. Hawkins was taught better when he worked on his Ph.D. under the guidance of [Dr. Sheldon Deal](#), one of the world's foremost promoters of AK.

Applied kinesiology should not be confused with kinesiology proper, which is the scientific study of the principles of mechanics and anatomy in relation to human movement. However, many practitioners of applied kinesiology, refer to their quackery as *kinesiology* and themselves as *kinesiologists*.

See also ["alternative" health practice, magical thinking, placebo jewelry](#) (which has another YouTube video featuring Richard Saunders debunking the use of AK to validate the Power Balance bracelet), and ["Evaluating Personal Experience" by Robert Todd Carroll](#).

[reader comments](#)

[further reading](#)

[books and articles](#)

[Barrett, Stephen. 2009. Applied Kinesiology: Phony Muscle-Testing for "Allergies" and "Nutrient Deficiencies"](#)

[Brewer, Richard. Applied Kinesiology.](#)

[Friedman, M. H, and J. Weisberg \(March 1981\). "Applied kinesiology—double-blind pilot study". *Journal of Prosthetic Dentistry* 45 \(3\): 321–3.](#)

[Garrow, J. S. \(June 1988\). "Kinesiology and food allergy". *British Medical Journal*. 296 \(6636\): 1573–4.](#)

[Haas M. et al. 1994. Muscle testing response to provocative vertebral challenge and spinal manipulation: a randomized controlled trial of construct validity. *Journal of Manipulative and Physiological Therapeutics* 17:141-148. CONCLUSIONS: For the population under investigation, muscle response appeared to be a random phenomenon unrelated to manipulable subluxation. In and of itself, muscle testing appears to be of questionable use for spinal screening and post-adjustive evaluation.](#)

[Hyman, Ray. "The Mischief-Making of Ideomotor Action," in the *Scientific Review of Alternative Medicine* 3\(2\):34-43, 1999. Originally published as "How People Are Fooled by Ideomotor](#)

Action."

Kenny et al. "Applied Kinesiology Unreliable for Assessing Nutrient Status," *Journal of the American Dietetic Association*, 88:698-704, 1988.

Klinkoski B. and C. Leboeuf. 1990. A review of research papers published by the International College of Applied Kinesiology from 1981 to 1987. *Journal of Manipulative and Physiological Therapeutics* 13:190-194. A review was undertaken of the type and scientific quality of 50 papers which had been published between 1981 and 1987 by the International College of Applied Kinesiology, 20 of which were classified as research papers. These were subjected to further scrutiny relating to criteria considered crucial in research methodology, namely, a clear identification of sample size, inclusion criteria, blind and naive subjects and statistical analysis. Although some papers satisfied several of these criteria, none satisfied all seven of them. As none of the papers included adequate statistical analyses, no valid conclusions could be drawn concerning their report of findings.

Lüdtke R. et al. (September 2001). "Test-retest-reliability and validity of the Kinesiology muscle test". *Complementary Therapies in Medicine* 9 (3): 141–5. RESULTS: An overall kappa of 0.03 (95%-CI: -0.02-0.07) indicates the test is not reliable.

Staehele, H.J. et al. (November 2005). "Double-blind study on materials testing with applied kinesiology". *J. Dent. Res.* **84** (11): 1066–9. The working hypothesis was the assumption that the reliability of AK would not exceed random chance....outcome confirmed our working hypothesis.

Wurlich, B. (2005). "Unproven techniques in allergy diagnosis". *Journal of investigational allergology and clinical immunology* 15 (2): 86–90. Results are not reproducible when subject to rigorous testing and do not correlate with clinical evidence of allergy.

websites

[Applied Kinesiology](#) by William T. Jarvis, Ph.D.

[Why Bogus Therapies Often Seem to Work](#) by Barry L. Beyerstein, Ph.D.

[Social and judgmental biases that make inert treatments seem to work.](#) by Barry L. Beyerstein

[Applied foolishness](#) by John Blanton

[Double-blind study on materials testing with applied kinesiology](#)
Nov. 2005

[Test-retest-reliability and validity of the Kinesiology muscle test](#)
Sept. 2001

[A review of the research papers published by the International College of Applied Kinesiology from 1981 to 1987](#)

[AK in allergy diagnosis](#)

[Unproved diagnostic and therapeutic approaches to food allergy and intolerance](#)

[Evaluation of applied kinesiology in nutritional intolerance of childhood](#)

[Dowsing for \[a god\] —Critique of Power vs Force](#) by David Hawkins Andrew P—02/2005

blogs

from Science Based Medicine: 1. [Applied Kinesiology by Any Other Name...](#) by Harriet Hall "Whether you call this applied kinesiology or nutrition response testing or wallet biopsy, it still stinks."

2. [AK: Nonsense on Full Automatic](#) by Mark Crislip "I have found over the years writing for SBM that I have developed an increasing bias around the concept of [prior probability](#). As best I can tell there is a well described reality, and that reality constrains what is not only probable, but what is possible. Within the limitations of our current understanding of reality, some processes are impossible, i.e. have zero prior probability. AK's prior probability is exactly zero. "

video

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Applied kinesiology (AK), is a technique that is said to be able to diagnose a patient's illness and help to select treatments by performing muscle testing for weaknesses and strengths. It is used in alternative medicine, and it may be practiced by massage therapists, nutritionists, dentists, physicians, nurses and nurse practitioners, veterinarians, physical therapists, and naturopaths. There are also applied kinesiology chiropractic uses. [Assessment](#) | [Biopsychology](#) | [Comparative](#) | [Cognitive](#) | [Developmental](#) | [Language](#) | [Individual differences](#) | [Personality](#) | [Philosophy](#) | [Social](#) | [Methods](#) | [Statistics](#) | [Clinical](#) | [Educational](#) | [Industrial](#) | [Professional items](#) | [World psychology](#) | [Clinical: Approaches](#) · [Group therapy](#) · [Techniques](#) · [Types of problem](#) · [Areas of specialism](#) · [Taxonomies](#) · [Therapeutic issues](#) · [Modes of delivery](#) · [Model translation project](#) · [Personal experiences](#) · [See also: academic kinesiology](#).

Applied kinesiology should be distinguished from kinesiology (biomechanics), which is the scientific study of movement." Unfortunately, some professionals and educators refer to science-based kinesiology as "applied kinesiology," which increases the risk that people searching for information will confuse the two. Bizarre Claims. AK proponents claim that nutritional deficiencies, allergies, and other adverse reactions to foods or nutrients can be detected by having the patient chew or Applied kinesiology (AK) is a technique in alternative medicine claimed to be able to diagnose illness or choose treatment by testing muscles for strength and weakness. According to their guidelines on allergy diagnostic testing, the American College of Allergy, Asthma and Immunology stated there is "no evidence of diagnostic validity" of applied kinesiology. "Another study indicated that the use of applied kinesiology to evaluate nutrient status is no more useful than random guessing," and the Assessment | Biopsychology | Comparative | Cognitive | Developmental | Language | Individual differences | Personality | Philosophy | Social | Methods | Statistics | Clinical | Educational | Industrial | Professional items | World psychology |. Clinical: Approaches Â· Group therapy Â· Techniques Â· Types of problem Â· Areas of specialism Â· Taxonomies Â· Therapeutic issues Â· Modes of delivery Â· Model translation project Â· Personal experiences Â·. See also: academic kinesiology.

