

Applied Kinesiology: Health Care "Beyond Category"

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In his expansive creativity, the jazz legend Duke Ellington often crossed traditional boundaries in his music, composing many pieces for big-band outfits that had strong classical overtones and as such, transcended the usual formats associated with just jazz. Indeed, it can be argued that Ellington may have given birth to the "third stream" compositions left to us by John Wilson and others. Ellington himself liked to refer to his music as "beyond category."

I would suggest that a similar analogy holds true when we consider the relationship of chiropractic to the hotly debated topic of applied kinesiology (AK). In introducing the concept of AK, George Goodheart advocated the muscle as the focal point at which bodily function and health could be evaluated.¹ The actual *testing* of the muscle had been previously and firmly established by Kendall and Kendall,² who held that a muscle from a contracted position against increasing applied pressure could either maintain its position (rated as "facilitated" or "strong") or break away and thus be rated as "inhibited" or "weak." The testing of muscle strength itself has been widely practiced in manual medicine for decades by such authorities as Daniels, Worthingham and Janda.³⁻⁴

But what distinguishes AK is its emphasis upon proprioceptive *responses* of the muscle rather than the facilitation of the muscle itself. It essentially sees muscle function as a transcript of the central integrative state of the anterior horn motoneurons, summing all excitatory and inhibitory inputs.⁶ In other words, the locus of dysfunction ultimately rests with the nervous system. A procedure called *therapy localization*, strictly diagnostic, seeks a change of muscle facilitation when the patient's hand is placed over an area of suspected involvement. *Challenge* defines a mechanism to test the body's ability to cope with external stimuli, again assessed by muscle testing and used to guide therapeutic interventions.

This obviously brings AK within shouting distance of the basic tenet of chiropractic, in that both AK and chiropractic share their emphasis upon derangements of neural activity. Chiropractic and AK part company at the point at which the bulk of chiropractic theory appears to have drifted toward emphasizing the spine as the seat of all subluxations affecting nervous system activity,⁷ while AK takes a slightly different and apparently broader tack: It suggests that subluxations might result from no less than three areas of concern, which comprise chemical and mental elements in addition to structural.⁵

It is able to recognize, for instance, how nutritional,⁸⁻⁹ hormonal¹⁰⁻¹¹ and emotional¹⁰⁻¹¹ elements influence neural function as reflected by an established muscle-testing protocol²⁻⁴ whose reliability and validity have been recently established.¹² What needs to be understood is that several muscle-testing protocols that have appeared¹³⁻¹⁷ have *not* adhered to this protocol and as such should never be

confused with the methods employed in AK.

Such is to propose that AK offers an important diagnostic tool to supplement those already in place. In considering how acupuncturists focus upon meridians, physiotherapists upon rehabilitative exercise, naturopaths upon nutrition, and chiropractors themselves (at least in some instances) upon the extremities, AK does not overrule the concept of subluxations as such, but rather implies that subluxations may be attributed to areas in addition to the spine. This allows for a far more inclusive, and in my opinion progressive, view of modern chiropractic:

- It frees the profession from having to limit the concept of subluxations strictly to the spine or to joint aberrations.
- It helps to overcome popular conceptual limitations of chiropractors as merely practitioners who administer only high-velocity thrusts.
- It accommodates the application of physical modalities outside of the spine and, as such, invites closer collaborations of chiropractors with osteopaths, physiotherapists, massage therapists, physiatrists and acupuncturists.
- By returning the focus to neurological imbalance, it immediately allows such major determinants of health as nutrition and stress to become integrated with chiropractic's central tenet and message. No longer do nutrition and emotional elements appear as adjunct (and arguably alien) concepts which are difficult to rationalize with the more traditional chiropractic concepts of subluxation.
- It recognizes that many sources of irritation lie outside of the spine, such that reflexes often described by chiropractors as "somatovisceral" may in fact be quite the opposite; i.e., a subluxated vertebra could be the *result* of a visceral disturbance. In this manner, as pointed out by Carpenter, Hoffman and Mendel, the vertebral subluxation could both initiate *and* reflect neural dysfunction, the latter being the ultimate indicator of compromises to health.¹⁸ For example, peritonitis, gastric ulcer, and renal calculus usually were found in the muscles overlaying the irritated viscera, first described by James McKenzie in 1909.¹⁹ And irritation of the abdominal viscera or stimulation of the visceral nerves elicited skeletal muscle contractions, as reported by Miller and Waud in 1925 and Downman and McSwiney in 1946. These reflexes were ultimately described by Kuntz in 1953 as visceroskeletal or viscerosomatic in nature.¹⁹
- It is entirely plausible to imagine how AK could provide an appropriate vertebral challenge to guide the type and line of drive of manipulation in chiropractic. In a clinical trial, for instance, one would compare the outcomes of conventional chiropractic management (such as determined by motion palpation) with manipulations whose line of drive and type would be guided by the results of manual muscle testing and challenge, which are integral parts of AK. Any number of clinical outcomes would be observed, together with the relative rates of treatment failures and recurrences.

Whether such elements as nutrition or emotion can be definitively demonstrated to affect the results of muscle testing remains the subject of future research and discussions. But the fact remains that chiropractic remains in disarray when attempts are made to reconcile its theory with what is actually practiced or advocated in the public forum. It is trapped in numerous silos that demand an element of prestidigitation when its position in the contemporary health care marketplace is defended. It also remains insulated from meaningful collaborations with other health care providers who are convinced that such ingredients as proper nutrition, emotional well-being, and exercise must be included as integral portions of contemporary care.

It is not that AK has been neglected by chiropractors. Indeed, a survey by the National Board of Chiropractic Examiners indicates that no less than 37.6 percent of practitioners in the United States

have used AK in their routines.²⁰

It is abundantly clear that [further research addressing numerous aspects of AK is clearly warranted](#).²¹ Critics of AK must be mindful that numerous errors in its application and interpretation have hindered its more widespread acceptance.²²⁻²³ But at the time of this writing, AK seems to offer a viable and attractive means to bring chiropractic, and for that matter many approaches to health care, out of their respective silos. It is, in Ellington's terms, truly "beyond category."

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