

Meditative movement as a category of exercise: implications for research.

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INTRODUCTION: Meditative Movement (MM) is proposed as a new category of exercise defined by (a) some form of movement or body positioning, (b) a focus on breathing, and (c) a cleared or calm state of mind with a goal of (d) deep states of relaxation. REVIEW: Two forms of exercise meeting this definition, Qigong and Tai Chi, are reviewed to examine health benefits found in the research literature, recap elements that should be assessed in MM research, and suggest where aspects of MM intersect with, and are distinguished from, conventional forms of exercise. RESULTS: Relevant dimensions of the key elements of MM, such as frequency, duration, type of movement, degree of exertion, description of breathing, and achievement of relaxed state are recommended to be clearly described and measured to consistently define the category across studies and clarify how MM may affect health outcomes in similar, and perhaps different, ways than conventional exercise. CONCLUSIONS: If these suggested standards are used, we will gain a better understanding of which elements are necessary for achieving targeted outcomes. Over time, as MM is studied as a category of exercise, research may progress more efficiently to define the domains of physiological and psychological benefit.

A Comprehensive Review of Health Benefits of Qigong and Tai Chi Jahnke R, Larkey L, Rogers C and Etnier J

Table of Qigong and Tai Chi Literature Reviews Roger Jahnke OMD, Institute of Integral Qigong and Tai Chi & Linda Larkey PhD, Arizona State University "This study provides the first compelling evidence that the RR elicits specific beneficial gene expression changes in shortterm and long-term practitioners". There *is* a pill for anti-aging, and it is called Qigong. Two earlier papers reinforce these results.

Genomic Counter-Stress changes Induced by the Relaxation Response

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BACKGROUND: Mind-body practices that elicit the relaxation response (RR) have been used worldwide for millennia to prevent and treat disease. The RR is characterized by decreased oxygen consumption, increased exhaled nitric oxide, and reduced psychological distress. It is believed to be the counterpart of the stress response that exhibits a distinct pattern of physiology and transcriptional profile. We hypothesized that RR elicitation results in characteristic gene expression changes that can be used to measure physiological responses elicited by the RR in an unbiased fashion. METHODS/PRINCIPAL FINDINGS: We assessed whole blood transcriptional profiles in 19 healthy, long-term practitioners of daily RR practice (group M), 19 healthy controls (group N(1)), and 20 N(1) individuals who completed 8 weeks of RR training (group N(2)). 2209 genes were differentially expressed in group M relative to group N(1) (p < 0.05) and 1561 genes in group N(2) compared to group N(1) (p < 0.05). Importantly, 433 (p < 10(-10)) of 2209 and 1561 differentially expressed genes were shared among long-term (M) and short-term practitioners (N(2)). Gene ontology and gene set enrichment analyses revealed significant alterations in cellular metabolism, oxidative phosphorylation, generation of reactive oxygen species and response to oxidative stress in long-term and short-term practitioners of daily RR practice that may counteract cellular damage related to chronic psychological stress. A significant number of genes and pathways were confirmed in an independent validation set containing 5 N(1) controls, 5 N(2) shortterm and 6 M long-term practitioners. CONCLUSIONS/SIGNIFICANCE: This study provides the first compelling evidence that the RR elicits specific gene expression changes in short-term and long-term practitioners. Our results suggest consistent and constitutive changes in gene expression resulting from RR may relate to long term physiological effects. Our study may stimulate new investigations into applying transcriptional profiling for accurately measuring RR and stress related responses in multiple disease settings.

More info on the Qigong Institute Scientific Basis of Qigong and Energy Medicine page: http://qigonginstitute.org/html/scientificbasis.php#QigongGeneExpression

One of the most exciting things about the upcoming Mind Body week is that it is sponsored by two of the most prominent mainstream Institutes in NIH, not NCCAM.

National Institutes of Health 1st Annual Mind Body Week Bethesda, MD September 8-11, 2009

Dr. Roger Jahnke, OMD selected by the National Institutes of Health (NIH) will present a keynote lecture and a practical applications workshop September 8-11, 2009.

The Institute of Integral Qigong and Tai Chi (IIQTC) is proud to cooperate with the NIH, the National Cancer Institute and National Institute for the Heart, Lung and Blood to make Mind-Body week a great success.

This gentle form of exercise can prevent or ease many ills of aging and could be the perfect activity for the rest of your life.

Tai chi is often described as "meditation in motion," but it might well be called "*medication* in motion." There is growing evidence that this mind-body practice, which originated in China as a martial art, has value in treating or preventing many health problems. And you can get started even if you aren't in top shape or the best of health.

The National Institutes of Health's National Center for Complementary and Alternative Medicine (NCCAM) has added four new Centers of Excellence for Research on Complementary and Alternative Medicine (CERCs) to its research centers program. The new centers will add to knowledge about complementary and alternative medicine (CAM) approaches and their potential in treating and preventing diseases and conditions that are common among Americans. Two of the new Centers are: Wisconsin Center for the Neuroscience and Psychophysiology of Meditation and Metabolic and Immunologic Effects of Meditation.

More information can be found at <u>http://nccam.nih.gov/news/2008/102008.htm</u> .

President Obama called a non-partisan forum to discuss how to lower the costs and improve the quality and accessibility of health care. Participants strongly recommended changing the current paradigm so that prevention of illness and keeping people healthy becomes an integral part of the American health system. They noted that it is much cheaper to prevent disease than to treat it, and that public health and prevention should be interwoven into our society, including schools.

See http://qigonginstitute.org/html/papers/WHHealthReformRPT.pdf