Muscle Energy 201-207

A) Notice of requirements for successful completion

□ This comprehensive course provides the learner with an in depth knowledge of Muscle Energy theory and application. The learner will be introduced to the basic principles of muscle action and inhibition, hypertonicity and weakness and activation and sedation, the basic assessment and treatment methods of muscle energy therapy, specific assessment techniques and treatment protocols for 20 primary postural control muscles and the muscles of the spine and neck, specific assessment techniques and treatment procedures utilizing muscle energy therapy for dysfunctions of the joints of the spine and extremities and a discussion of the etiology, diagnosis and treatment of myofascial trigger points. The evidence from the scientific literature that supports the concepts and utilization of MET is presented and assessed. The 7 part MET program presents the current, evidence based theories and practice in a dynamic, patient centered approach to musculoskeletal pain and dysfunction. The program is designed for nurses and all health care practitioners interested in incorporating conservative, directed active care in the treatment of musculoskeletal patients.

□ Learning Objectives: Upon completion of this course the participant will be able to:

- o Distinguish the various mechanisms of muscle dysfunction
- o Discuss the history and evolution of muscle energy techniques
- Categorize the different muscle energy techniques and explain their underlying mechanisms
- Describe how Muscle Energy Techniques fits in to the overall care of the patient
- Recognize the relationship between tightness and weakness and agonistic and antagonistic muscles to affect posture and joint function
- Recognize how cells generate, transmit and sense mechanical tension, and to use these forces to control their shape and behavior and genetic expression.
- o Describe the processes that lead to structural decompensation and dysfunction
- o Explain the mechanisms whereby psychological stressors induce chronic musculoskeletal dysfunction
- o Compare the various theories on the origin of reactive muscle tightness
- o Outline how local muscular tightness and altered proprioception can influence static and dynamic posture
- o Integrate a functional knowledge of the body's fascia into an overall concept of muscle energy technique
- o Organize the functional evaluation of common compensatory (fascial) patterns
- o Describe the different ways muscles respond to the stressful demands
- o Outline patterns of dysfunction including the upper crossed and lower crossed syndromes
- o Identify patterns of dysfunction and methods to restore normal function
- List a number of assessment methods for identifying bind / restriction in muscle function
- o Summarize common errors, side effects and contraindications in the use of muscle energy technique
- o Explain the role of eye movement and respiration in applying muscle energy technique
- o Identify a number of muscle energy technique variations
- o Describe muscle energy technique self-treatment
- o Recognize the need for research in the efficacy of muscle energy technique
- Outline the existing evidence supporting the stretch relax techniques
- Summarize the studies in the duration, force and number of contractions appropriate in the different applications of muscle energy technique
- Describe the current investigations in muscle energy techniques as they apply to the spine
- o Correlate principles of biomechanics to the clinical effects of muscle energy technique
- o Discuss the level of evidence supporting the efficacy of muscle energy therapy in treating muscle shortness
- o Integrate muscle energy therapy in the treatment of fibromyalgia
- Explain the clinical purpose of manual therapy
- Outline the generalized methods of evaluating muscle shortness
- List the correct sequence for assessing the postural muscles
- o Describe muscle length assessment and treatment of the postural muscles
- o Compare variations in the assessment and treatment methods for different muscles
- o Describe the procedure for muscle length assessment and treatment of the spinal muscles
- o Describe the mechanism of synkinesis and how it is employed in muscle energy therapy

- o Cite the contraindications and precautions when applying muscle energy therapy techniques
- o Associate end feel with specific types of joint dysfunction
- o Explain the relationship between muscle tightness and joint restriction
- o Describe how muscle energy therapy can prepare a joint for manipulation and mobilization
- o Outline the basic procedure for utilizing muscle energy therapy on a restricted joint
- Explain the integration of muscle energy therapy in the treatment of low back pain and restriction
- Discuss the evaluation for joint restriction of the neck, mid-back, low back and sacroiliac articulations and the corrective muscle energy techniques
- Describe the evaluation for joint restriction of the upper extremity, the rib cage and the tempromandibular joint and the corrective muscle energy techniques
- Extrapolate the procedures for mobilization of joint restriction to all the articulations of the body and in all the possible planes of motion
- o Discuss the characteristics of a myofascial trigger point and methods for locating them
- o List various procedures to treat myofascial trigger points
- o Describe the integration of neuromuscular inhibition technique in clinical settings
- Outline functional screening tests to assess agonist–antagonist–synergist relationships during stereotypical movement patterns
- Explain Brügger's facilitation method for inhibited muscle chains in the extremities
- ☐ Criteria for earned credit:
- To earn the approved contact hours of credit the participant must complete the reading of all materials and correctly answer all quiz questions.
- o The participant must complete the course evaluation questionnaire.
- Courses have a timer that does not allow a participant to proceed through the program in less than the allotted time. Utilizing the Mastery approach to learning, there are quiz questions throughout the course that reinforce the key concepts of the course. Questions must be answered correctly to proceed through the course.

B) Disclosure of Conflicts of interest

 $_{\circ}$ The planners and presenters report no conflict of interest and agree to present the material of this course without bias or promotion

C) Any sponsorship or commercial support

o This program has not received financial support from any commercial interest.

D) Non-endorsement

 "Approval for contact hours through the AHNA is based on an assessment of the educational merit of this program and does not constitute endorsement of the use of any specific product or modality in the care of clients."

F) Expiration Date for awarding Contact Hours

This continuing nursing education activity was approved by the American Holistic Nurses Association (AHNA), an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

AHNA approval code 1068.

Approved to award 19 CNE contact hours through February 20, 2017