



Muscle Activation Techniques (MAT) Explanation for Health Care Providers

MAT is a very specific non-medical process with a narrow application to the assessment, improvement and maintenance of a targeted aspect of human motor control – a muscles' contractile efficiency as a function of; a strict time interval, at various positions along a muscles' length: tension relationship, at a precise limb/body position, in response to a specific point of application and direction of external force.

Muscle Activation Techniques incorporates individual strategies each of which may be used by any number of licensed medical or non-medical providers; medical doctors, doctors of osteopathy, doctors of chiropractic, doctors of physical therapy, massage therapists, nurses, trainers, strength and conditioning coaches, etc.

These techniques/strategies are:

1. Comparative Mobility Assessment – The CAM (the Comparative Assessment of Mobility)
2. Active Muscle Contract and Sustain Assessment – The AMC&S
3. Positional Isoangular Contraction (Muscle Activation Techniques) – The PIC
4. Digital Force Application to Muscle Attachment Tissues (Muscle Activation Techniques) – The DFAMAT

The MAT Certified Specialist is trained and certified to perform several force application techniques to the body. When licensed providers, unfamiliar with the MAT paradigm, observe a MAT Specialist perform these techniques, the MAT Specialist may appear to replicate procedures used within a medical diagnostic and treatment scope of practice. For this reason our definition of each technique is provided followed by an observers' possible interpretation for each;

1. ***The Comparative Mobility Assessments*** is a specific force application leading to the measurement of active or passive limb motion from a designated start position/posture, through a designated plane and direction, to the end of the limb motion. This measurement is then compared to the mirror image limb motion for the limb on the opposite side of the body. **It is not** a joint range of motion examination performed to evaluate passive tissue stability, joint surface pathology, ligamentous integrity, etc.

2. ***The Active Muscle Contract and Sustain Assessment*** is a specific force application of a specific magnitude and rate of force application, set-up and delivered by the MAT Specialist, that assess the muscles' ability to react to and meet that force. **It is not** a manual muscle "break" test or a manual muscle test used as an indication of the body's response to a chemical substance, nor a change in its energetic field, nor a positional post relaxation technique.

3. ***The Positional Isoangular Contraction*** is a specific limb position/orientation and direction of motion generated by the client, into a barrier to that motion, set-up and maintained by the MAT Specialist. The MAT Specialist may use their hands and body to hold/guide limb orientation/positions and provide the barriers to the motion during the isoangular contraction. **It is not** Muscle Energy Techniques, strain/counter strain or post isometric relation technique.

4. ***The DFAMAT*** is a specific force application to the body tissue using the practitioners' fingers – direct pressure applied perpendicular to muscle attachment tissues (tendons, aponeuroses) using the tips of the finger instituting motion creating subtle tension on the attachment tissues, followed with motion lines that are perpendicular (cross hatching) to each other, maintaining the tension for a duration of 1 – 4 seconds per site, releasing and then reinitiating the process, moving along the width/length of the target muscle attachment. **It is neither** a soft tissue evaluation nor a manipulation to release trigger points, adhesions, Active Release Technique, move body fluids to and from tissue sites, etc.

The specific application and unique manner in which the DFAMAT is executed is not any of the following manual techniques which are taught in massage or other soft tissue manipulation schools:

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| • Effleurage | • Petrissage |
| • Tapotement | • Cross Friction |
| • Longitudinal Stroking | • Jostling |
| • Acupressure | • Craniosacral |
| • Neuro-lymphatic | • Positional Release |
| • Trager | • Rolfing |
| • Myofascial Release | • Reiki |
| • Trigger Point Therapy | • Sports Massage |
| • Chair Massage | • Deep Tissue |
| • Goading | • Stripping |

The intention of the MAT DFAMAT technique is never to evaluate and interpret the state of soft tissues, nor to create a relaxation response for the muscle targeted. **The MAT DFAMAT intends to stimulate sensory receptors that in turn may increase motor neuronal pool activation to the muscle associated with the attachment.** *This represents the opposite effect that most, if not all, massage techniques are attempting to achieve as an outcome of their techniques – which is relaxation.*

MAT is clarifying and defending its use of these strategies as useful and appropriate for non-licensed health and fitness professionals for the assessment and improvement of muscle contractile capabilities related to exercise and physical performance. Furthermore, the individual MAT strategies (previously noted) when used together in a systematic format, under its definite methodology, based in the interpretation of the information gained from each strategy, and the relationships established between that information, are unique to MAT. MATs' intention is not to diagnose or treat pathology but to improve a specific aspect of a muscles contractile capabilities and that aspects' impact on limb motion and position maintenance as it relates to exercise and physical performance.

MAT assures that these strategies are not taught in a way that MAT Specialists interpret nor perform them as medical procedures, or otherwise, and acknowledges the legal liability position, as well as the authority of, established state licensed scopes of practice.

MAT is in no way attempting to usurp, undermine or assume the scope of practice of licensed professionals with its techniques which in no way intend to be medical in nature.

A MAT practitioner specializes in improving the contractile characteristics of skeletal muscle. With this in mind, MAT acknowledges, understands and appreciates...

1. ...that the muscle system is often implicated in pathology and that MAT's process affects human physiology. Therefore MAT educates its specialists to seek to work adjunctively and synergistically with licensed medical providers from all disciplines.
2. ...that its certified specialists need to work with medical and wellness provides as individuals seeking MAT often carry with them undiagnosed disease and conditions that may be influenced by the MAT process..
3. ...that the muscle systems' improvements may not be advanced in the face of some pathologies and therefore medical care must be sought to address those issues limiting this advancement.
4. ...that an individual with pain may experience a reduction, or even elimination of that pain as a by-product of the MAT process. This only suggests that the pain had its source within the loss of muscle system contractile efficiency. *The MAT process does not directly treat pain.*
5. ...a consumers' reaction to the reduction or elimination of their pain, especially if medical intervention has been utilized to relieve "pain" prior to the MAT process. The reaction may be one where the consumer interprets that MAT "fixes" pain problems. MAT education its primary intention is to restore muscle contraction efficiency and limb mobility and not to treat pain. MAT is no way attempts to diminish the efficacy or efforts of medical providers to resolve their patients' individual pain issue(s).

6. ...that the MAT process may be learned and utilized by licensed providers in the medical treatment of their patients, thus making the MAT process "Medical" only in that context. Since MAT is taught primarily to non-licensed medical providers (trainers, strength and conditioning coaches), the intention of the MAT process is not to "diagnose" but to assess an individuals' muscular readiness for, and tolerance of, participation in exercise and relatively strenuous physical activity.
7. ...that many states, and the licensed professional regulated by a state, may have language in their regulations defining the use of manual techniques where the practitioner uses their hands in the application of treatments. MAT specifically instructs its certified specialists to become familiar with their states' regulations. MAT also instructs its practitioners to stay within their skill set boundaries.
8. ...the need to foster a deeper understanding and positive attitude toward the group of diverse and highly qualified providers in their community, while being fully cognizant of the legal and political significance of each groups' scope of practice in the competitive inter-disciplinary health and fitness environment.
9. ...that only licensed and authorized medical providers can utilize the ICD-10 designations for disease and CPT Codes for treatment of disease. MAT instructs its specialists that they are never to use this system of coding to bill third party payers. If a licensed provider working with third party payers chooses to hire a MAT Specialist and bill that specialists' skills under the authority of their license as a treatment modality, then that is clearly the prerogative of that provider.

In closing, MAT encourages dynamic and collaborative working relationships in order to facilitate the health and wellness of an individual. MAT seeks to demonstrate its efficacy and contribution to individual health and for all health care and fitness providers, education providers to recognized the importance of muscle contractile capability as viewed by the MAT paradigm.

MAT also wants to communicate that despite its narrow scope of practice - focusing on muscle system contractile capabilities - this process and its outcomes should not be minimized nor their potency overlooked or underestimated. MAT is an important process for anyone who recognizes the significance of the muscular system for the maintenance and improvement of overall human health and fitness. MAT believes its strategies are a unique and important contribution to the general field of assessing and improving an individuals' physical capabilities to engage and sustain physical activity and improve human performance.