# A Decade and Half of Movement

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#### History & Background

Since 1975, I have been fascinated with the amount of information about motion and emotion which is stored in the muscles. My earliest introduction to the basic concepts and understandings of this phenomenon came from the writings of Wilhelm Reich, Alexander Lowen and Stanley Keleman.

When I started my training in Aikido, I learned that calmness and harmony in action were not only possible, but necessary to the development of graceful and effective movement. By the time I found Touch For Health, I had been doing Aikido for 3 years and had direct experience of how body movement is affected by and affects attitude and emotional tension.

In 1979, at the Touch For Health Annual Meeting in Asilomar, I saw Billy Riley demonstrate the use of muscle testing to determine when myo-fascial release was appropriate. Consequently, I became interested in how the reactive muscle and the myo-fascial releases could be used in injury rehabilitation and performance enhancement. I began to use these in combination with great effect.

When Paul Dennison, Ph.D., introduced the concept of homolateral muscles, several pieces of information began to come together for me. I had always known the brain affected muscle movement and that the muscles affected the functioning of the brain, but when Paul demonstrated the homolateral muscle release, I was impressed with the ease of movement this release was able to create.

#### **Principles Of Movement**

During the past decade, I have been looking at the various relationships involved in movement. Below are some general principles I feel are important to understanding movement.

Movement is all or nothing. We either move or we do not. While we may contemplate and visualize moving gracefully and effectively, until we actually commit to the movement, we have no idea as to how well we can actually move.

For example, we know from Positron Emission Tomography (P.E.T.) that roughly 60% - 75% of the neurons required for any given movement fire when simply thinking of the movement. While this exciting, it is the other 25% - 40% of the neurons which actually perform the movement. Hence, while we can visualize to our hearts content, until we perform the movement we have no kinesthetic knowledge to inform us.

Muscles are most effective when working in congruence. When I first learned about our skeleto-muscular system in college, the language used to describe the muscles was based upon a model of conflict. Thus, muscles were described as being Antagonists, Agonists, or Synergists. Even in Applied Kinesiology, these terms were used. Yet, looking at how we move, I have come to the conclusion that there is only one type of muscle movement -- congruent.

Congruent movement is graceful and powerful because your muscles and brain are working in an integrated and harmonious manner. This understanding comes from Aikido wherein the cardinal principle is to harmonize.

For example, the Quadriceps and Hamstrings are often listed as being "opposing" muscles. Yet, in all standing, walking and running, these two muscles must continuously work together. If they did not work together, then knees would give way far more often than they do. At some points both of these muscles are "switched on", in other movements one must release so the other can complete an action. In this sense, these are not "antagonistic" muscles as much as they are complementary.

It is these two understandings, movement is all or nothing, and, muscles are most effective when working in congruence, provide an understanding for reactive muscles, homolateral muscle correction and myo-fascial release.

#### Neuro-Muscular Relationships

The basic neuro-muscular structure is found in the nerves coming out of the cranium, neck and spinal column and innervating the various muscles and organs along their path. The chart shows this relationship for the 42 muscles we test in Touch For Health. These nerves perform two basic functions -moving information from the brain and spinal column to the muscles and organs, and, moving information from the muscles and organs back to the spinal column and brain.

"A motor skill is a group of simple, natural movements combined in a new or unusual manner to achieve a predetermined objective...The proprioceptive reflexes mediated at the spinal and lower brain levels...must be integrated into larger, coordinated patterns at centers in the brainstem, cerebelum, and cerebral cortex ...the proprioceptive reflexes, important as they are, require interregulation from superior sources. The very nature of skilled movement makes this self evident." (Gowitzke & Milner, p.317)

#### **Performance Enhancement**

 question, "How can I reduce tension, improve movement and increase neuromuscular integration?" (Actually, the question is more like, "How can I move more powerfully, smoothly and gracefully?")

To this end, I have combined information about the cranial and spinal nerves with what we know about reactive muscles, fascial release and homolateral muscle correction, to bring about quantitative and qualitative changes in movement integration. The procedure which follows brings about dramatic postural and movement changes.

### Benefits

The major benefit of this procedure is the increase in fluidity and ease of movement. It also allows any prior training in the movement to become more fully accessible by your whole neurology. The changes brought about are felt internally and externally. As the muscle circuits open up and become more clear, major shifts in the posture and proprioception occur.

### Conclusion

In combining these three procedures, the overall goal and purpose is to increase freedom and ease of movement. As you use this procedure more, you will also find that many "emotional" tensions also release and become more "easy". Use it and enjoy!

### **MOVEMENT RELEASE**

- 1. Evaluate posture and movement.
  - a. Notice the amount of inhibition if apparent.
  - b. Rate on a scale of 0 10 for any pain or discomfort.
  - c. Do the movement and test related indicator muscles.
- 2. Balance and correct all muscles.
- 3. Re-evaluate the movement and discomfort levels.
- 4. Determine the priority area to work first.
  - a. This can be done by using the following statement,
    "The priority area for correction is (above the waist, below the waist, at the waist, etc...)" and test an indicator.
  - b. Circuit Locate by touching the various areas and testing an indicator.
  - c. Confirm priority by touching specific area and challenge with breath holding, eyes right, eyes left.
- 5. Once the priority area is determined, look at the spinal nerve chart to locate related muscles. Test these muscles.
- 6. Locate an age and an emotion associated with this specific area, use either the list below, or the Three-In-One Concepts Behavioral Barometer, or your favorite list.

## Joy/Anxiety

### Sympathy/Compassion

#### Grief/Regret

#### Fear

#### Anger

7. Using an indicator muscle, state,

"The priority correction for this muscle is (reactive muscles, myo-fascial release, homolateral muscle)."

- 8. Do the priority correction. See the steps for reactive muscles, fascial release, and homolateral muscles at the end of this article.
- 9. Determine next priority, if any and correct.
- 10. Recheck the age and emotion. Do Emotional Stress Release if necessary.
- 11. Re-evaluate the movement and discomfort.
- 12. Re-check the muscles along the spinal nerve, is there any noticeable difference?
- 13. Determine if there is a second area which needs to be corrected. If so, repeat the above steps until all challenges show clear.

### REINFORCEMENT

Once the above procedure is completed, you may want to visualize the movement and check to see if there is any stress involved. This can be very valuable in working with demanding physical performance. The benefit is that not only are the muscle patterns more efficient, but then the emotional patterns can also support the changes.

- 1. Visualize doing the movement perfectly. Test an indicator.
- 2. If the indicator "switches off" on the visualization, check for an age and emotion.
- 3. Once you have located an age and emotion, hold the Emotional Stress Reduction points while reviewing the movement.
- 4. When you feel complete, recheck the visualization, age and emotion.
- 5. If the muscle still "switches off", check for another age.
- 6. Repeat until all ages are clear.
- 7. Visualize doing the movement perfectly again and retest the indicator.

<b>MUSCLE &amp; SPINAL NERVE LIST</b>	
C = Cervical, T = Thoracic, L = Lumbar, S = Sacral	
Muscle	Spinal Nerve
Sacrospinalis Neck Extensors Neck Flexors Lower Trapezius Middle Trapezius Upper Trapezius Diaphragm Levator Scapulae Anterior Deltoid Brachioradialis Middle Deltoid Posterior Deltoid Rhomboids Supraspinatus Teres Major Teres Minor Anterior Serratus Pectoralis Major Clavicular Subscapularis Pectoralis Major Sternal Coracobrachialis Latissimus Dorsi Triceps	$\begin{array}{c} \text{Spinal refve} \\ C1 - L5 \\ C1, C2, C3, C4, C5, C6, C7, C8, T1 \\ C1, C2, C3, C4, C5, C6, C7, C8, T1 \\ C2, C3, C4, C5 \\ C2, C3, C4, C5 \\ C3, C4, C5 \\ C3, C4, C5 \\ C5, C6 \\ C7, C8 \\ C7, C8 \\ C7, C8 \\ T1 \\ \end{array}$
Tranverse Abdominals Quadratus Lumborum Rectus Abdominis Oblique Abdominals	T1,T2,T3,T4,T5,T6 T12,L1,L2,L3,L4 T5,T6,T7,T8,T9,T10,T11,T12 T5,T8,T9,T10,T11,T12,L1
Iliacus Psoas Gracilis Quadriceps Sartorius Anterior Tibial	L1, L2,L3,L4 L1,L2,L3,L4 L2,L3,L4 L2,L3,L4 L2,L3,L4 L2,L3,L4 L4,L5
Adductors Fascia Lata Gluteus Medius Gluteus Minimus Popliteus	$\begin{array}{c} L2, L3, L4, L5, S1 \\ L4, L5, S1 \end{array}$
Gluteus Maximus Hamstrings Peroneus Piriformis Posterior Tibial Soleus	L5,S1,S2 L5,S1,S2 L5,S1,S2 L5,S1,S2 L5,S1,S2 L5,S1,S2 L5,S1,S2
Gastrocnemius	\$1,\$2

### **REACTOR/REACTIVE MUSCLE REPATTERNING**

The steps listed below are the basic repatterning procedure. Keep in mind the muscle we are looking for is the one which causes the greatest number of muscles to "switch off".

- 1. Balance. It is best if all 42 muscles are tested and balanced.
- 2. Locate the general area in which you suspect the reactive muscle to be.
- 3. Test all of the muscles in the area and any others you may suspect are related, in the "clear". Look at spinal nerve chart for other possibilities.
- 4. Next, test the suspected reactor muscle, then quickly test another muscle. If the second muscle "switches off", it is the reactive.
- 5. Make a list of all of the reactive muscles "switched off" by the reactor muscle.
- 6. Go to the belly of the reactor muscle. Going in the direction of the fibers, push the muscle spindle together until the muscle tests "switched off".
- 7. Quickly test all of the reactive muscles which were "switched off" in relation to the reactor muscle.
- 8. Test the reactor muscle. It should now be "switched on".
- 9. Challenge by testing the former reactor to the former reactives. All of the muscles should now remain "switched on".

### HOMOLATERAL MUSCLE REPATTERNING

This correction, discovered and described by Dr. Paul Dennison, is a powerful tool for "clearing" muscle circuits for ease and grace of movement.

### To Check For Homolateral Muscles:

- 1. Test and balance all muscles.
- 2. Cross crawl (opposite arm/leg). Test muscles. Note which remain "switched on" and which "switched off".
- 3. Do homolateral (same arm/leg) movement. Test muscles. Note which "switched on" and which "switched off".
- 4. Make a list of the muscles which "switched on" with homolateral crawl. These are the homolateral muscles.

### To Repattern Homolateral Muscles:

- 1. Cross Crawl up to 25 repetitions with eyes UP LEFT, sometimes UP RIGHT, while humming. [Note: the number of repetitions can vary and you may want to test for it, however 25 repetitions will definitely repattern.]
- 2. Test the homolateral muscles. They should now be "switched on".
- 3. Do homolateral movement up to 25 repetitions with eyes DOWN RIGHT, sometimes DOWN LEFT, while counting.
- 4. Test the muscles determined to be homolateral. They should now be "switched off".

### To Anchor the New Pattern:

- 1. Sensing your hemispheres in your right and left hands bring them together, feel your hemispheres integrating.
- 2. Cross crawl moving your eyes in all directions. Test the previously homolateral muscles. They should be "switched on" without any tensions or "tightness".
- 3. Do homolateral movement moving your eyes in all directions. Test the previously homolateral muscles. They should now "let go" in a relaxed manner.
- 4. Cross crawl briefly to "switch on" or allow the relaxed state continue a while longer, your muscles will reset on their own.

### **MYO-FASCIAL RELEASE**

Our muscles are held together by sheathes called fascia. These sheathes relate to the overall "elasticity" of the muscle. Sometimes the fascia is not as elastic as it could be. The Myo-Fascial Release helps restore the muscle's elasticity.

#### To check:

- 1. Test and balance all muscles.
- 2. Select the muscle(s) you want to release. [Note: If you have previously done the Reactor/Reactive Muscle Repatterning, start with the reactor.]
- 3. Test the muscle(s) "in the clear".
- 4. Put the muscle(s) into extension for about 5 10 seconds, bring it back to test position and test.
- 5. If the muscle(s) tested "switched off" after being in extension, then move to the correction phase.

#### To correct:

- 1. Put the muscle(s) back into extension.
- 2. With your thumbs, gently and firmly "iron" along the length of the muscle(s) going with the direction of the fiber. Make certain the person is exhaling. Do this 3 times.
- 3. After "ironing", put the muscle back into extension for 5 10 seconds, and test again. It should remain "switched on".

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