



Ways to Create Change in a Muscle

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If you want to make a change in a muscle, you need to communicate with the nervous system. Most often people are looking to release tightness and tension, which is also a goal when working with tight muscles. The reason for involving the nervous system is so that the changes you make in muscle tension is communicated throughout the body, and creates more lasting change. Keeping the muscle change “neuromuscular”, meaning working with the nervous system and muscle, also allows relief in related muscles and connective tissue that may be compensating for the over tightness in the first muscle.

In order to work with the neuromuscular system, we need to understand the receptors that pick up information and communicate through the nervous system. There are three different types of receptors in soft tissue:

1. **Pressure receptors.** (Ruffini receptors and Pacinian corpuscles) When pushing into soft tissue, feeling is perceived via pressure receptors, which then send that information to the central nervous system.
2. **Stretch receptors** (Golgi-tendon apparatus’ and muscle spindles) Stretch receptors pick up their signals from stretching activities, whether this includes you stretching or someone else stretching you.
3. **Temperature receptors.** These receptors pick up hot and cold.

Since there are two types of pressure receptors, two types of stretch receptors, and one type of thermal receptor, we have a total of 5 types of receptors. Therefore, if you stretch and don’t use heat or pressure, you are accessing 2 out of 5 receptors. If you press (or get massage) and don’t use heat or stretching, you are using 2 out of 5 types of receptors. If you heat / ice, you are using 1 out of the 5 types. If you heat, stretch and press, you actually access 5 out of 5 receptors. The more receptors you are using, the faster you can expect to get results when recovering from pain, injury, trauma or tension. The more you use, the more efficiently you facilitate change.

This is a technique used often in professional settings, and once you understand everyone can use it. So next time something hurts, don’t just heat or just stretch – combine your methods. Stretch after a hot shower, or do some stretching and a little self-massage. You’ll get results faster and feel better!

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