



Next Step Newsletter

Next Step
Physical Therapy
(516) 681- 8070

May, 2010

Giving you information and answers to any physical therapy, health or fitness related questions

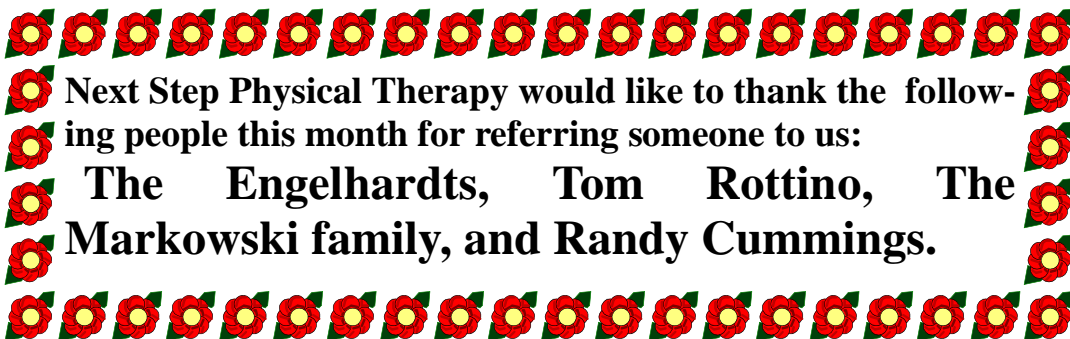
Fun Facts About Muscles!

Let's go over all of the important information you should know about your muscles. We all know that muscles can get weaker or stronger and longer or shorter but how exactly do they do that? The wonderful (or not so wonderful) thing about muscles is that they adapt to what, when, and how you use them.

For instance. If you use them more than what you normally do, they will get stronger. If you use them less than normal, then they unfortunately get weak. A muscle gets stronger by two different mechanisms. The obvious one is that a muscle will grow bigger (hypertrophy). A bigger muscle is stronger. This doesn't occur until at least four weeks of training your muscle by exerting it more than it is used to. The other way a muscle gets stronger is by increasing the signal that the brain sends to the muscle. This is called neural drive, and what this means is that a muscle may have hundreds of connections to the brain, but it may not use all of those connections at the same time. The more connections used, the more parts of the muscle that actually generate force. Neural drive can increase after one bout of exercise, making you stronger the very next day.

A muscle's ability to adapt is still the driving factor in determining or changing a muscle's length. If you posture yourself so that a particular muscle is kept in a shortened position for prolonged periods, that muscle will shorten. Not sure what type of posture could shorten a muscle...how about sitting? Muscles in your hips commonly get short on people who do a lot of sitting,. The same can be said about postures that keep a muscle in a lengthened or stretched position; it will cause the muscle to become longer. The longer you maintain the posture, the more profound the change can be. For instance, after being put in a cast for several weeks due to a broken bone, there are usually muscles that have shortened due to the prolonged shortened position that they were placed in.

The great news about muscles' ability to adapt is that we can affect them in a positive way through controlled exercises and stretching, no matter how old you are. It's never too late to get stronger or more flexible.



**Next Step Physical Therapy would like to thank the following people this month for referring someone to us:
The Engelhardts, Tom Rottino, The Markowski family, and Randy Cummings.**

QUESTION of the Month:

K.M. asks...How did the field of physical therapy first begin??
Great Question! Physical therapy first started as a result of the Civil War. There were so many injured soldiers (many missing limbs) that there was a need for someone to help these people learn to walk and move around again. It then became prominent again in the 1920's with the Polio epidemic. There were many individuals with this debilitating neuromuscular disease that needed help. The field continues to grow and expand and hasn't looked back since.

Updates

Welcome to the Next Step Newsletter!

Win a pair of movie tickets!!

The first 2 people to call us with the answer to this question wins a pair of movie tickets.

What were the two major events that helped form the field of physical therapy????

- If you have a friend or family member that you think could use our help please let us know or have them call us.
- If you would like more information on any of the topics discussed here please give us a call.
- If you have a question that you would like to have answered (maybe in the next newsletter) please don't hesitate to call.
- What topics are you interested in and would like to see in the newsletter? Let us know.

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