

The Best Thing You Can do for Your Body

How many times do you get up to move feeling stiff and tight all over your body? Do you wake up feeling stiff as a board the day after you work out? As a physician specializing in the musculoskeletal field, I cannot stress enough how beneficial stretching is for the body.

Why is Stretching Neglected?

There are a number of reasons as to why people do not stretch. Not having enough time, not knowing what to stretch or how to stretch, not understanding the benefits of stretching, thinking that stretching looks boring, or fear of getting ridiculed because you look like a dork sitting on the floor.

Many people are in such a hurry to get to their workout that they rush through the warm up and skip the post workout stretching. Forgoing the post workout stretching leads to shortened tight muscles and stiff, less mobile joints. This is what you experience the next day when you get out of bed-- that feeling of, "ah, it hurts to move..."

You are putting in the time to get better by working out, why cheat yourself by not taking full advantage of the benefits from working out? Stretching is a part of the work out. It should be included in your training program. Make time for it.

How Does Stretching Work?

Before explaining how stretching works, it is important to understand how muscles work. Without making this an anatomy lesson, muscles are comprised of fibers and fibers and more fibers and then some connective tissue. Imagine if that was how biology class was taught. We would all have been A-students. In addition to the make-up of muscles, the function of muscles needs to be explained.

Muscles can contract 3 different ways. The first way is easiest to comprehend and most common example utilized. **Muscles shorten as they contract.** Imagine curling a dumbbell in one hand. The bicep muscle is shortening (both ends of the muscles attachments are brought closer together) and the bicep muscle contracts. The muscle is firm, flexed, and contracted.

The second way muscles contract is by doing the complete opposite of shortening; **muscles can contract as they are lengthened** (both ends of the muscle's attachments are pulled further apart). Using the same example as above, imagine holding the dumbbell at the end of the bicep curl, now begin lowering the weight slowly to the starting position. As you lower the dumbbell, the muscle is lengthened and remains firm, flexed and contracted.

The third way a muscle contracts is by not moving, sounds hard to believe? **Muscle can contract by remaining still** (keeping both ends of the muscle's attachments from moving results in contraction of the muscle without changing the length of the muscle). Imagine



Images are from 1918 version of Gray's Anatomy textbook.



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performing a front plank or front bridge core exercise. You lay on the ground and then rise up positioning yourself onto your toes and elbows. You remain motionless as you distribute your bodyweight onto all fours (both elbows, both toes). As you maintain the front plank position, you feel your core muscles firm, flexed, and contracted; yet, no movement is necessary.

Great, so how will knowing this help you with stretching?

It will help you understand what you are doing during your workout and, therefore, guide you to understand what you need to do for a faster recovery decreasing or eliminating those stiff joints and tight muscles.

When a person contracts a muscle in any way as we learned above, the muscle fibers come into play. Depending on the amount of resistance during the exercise, a muscle will contract a certain amount of fibers. The amount of muscles fibers that will contract will continually increase as you become fatigued or as you increase the resistance. With that being said, **as muscle fibers break down, which is normal to exercise and growth, the muscles become intertwined resulting in shortened tight muscles post workouts.**

After workouts, muscles need to repair themselves and **fibers that are entangled inhibit the recovery process.** When you stretch a muscle, tension in the muscle is created, resulting in realigning the entwined fibers—imagine a wrinkle shirt that is pulled apart; the lines begin to fade away. As you continuously repeat the stretch, you begin to remodel those fibers from a disorganized entangled state to an organized linear fashion. **Continuously repeating the stretch will result in restoring normal length of the muscle, which is very important for safety, health, and performance.** Do not wake up the next day with tight muscles and stiff joints. Stretch after your workouts!

Are those the only benefits?

In addition to reducing tight muscles and stiff joints, the benefits of stretching extend much further than simply improving stiffness.

- **Improves flexibility** - thus increasing overall physical ability in everyday life and during athletic participation
- **Increases range of movement** - improves the quality of movement for joint health decreasing injury risk
- **Restores normal resting length of muscle** - reduces the tight and tender areas of muscular discomfort
- **Improves circulation** - increases the blood flow to your muscles which is very important muscle health and a faster recovery
- **Used for stress relief** - much of our stress is manifested in certain areas of musculature, most commonly developing tension behind the neck

- **Decreases risk of injury** - having relaxed muscles will allow us to move properly and not compensate our form or technique
- **Increases power and strength** - restoring normal muscle length promotes optimal joint positioning, muscle recruitment, and muscle transference

Stretching does not require any fancy equipment. It requires consistency and time. It is the most neglected part of the fitness and health. One of the most important aspects within our lives is the freedom to move pain free.

Be active in your recovery process and health by making stretching just as important as the workout itself.

Train Hard. Stretch Regularly. Transform Your Life with Chicago Fit Performance.

Author:

Dr. Artemio Del Real D.C., CSCS

Latest Favorite Quote: "Time flies is the old expression and 12 months from now, we will see who made a difference..." (Unknown)