

Creating Health & Nutrition



Balance, Breathing, and Flexibility

Participating in a weight training program is not just about lifting weights. In this fact sheet we will discuss the importance of balance exercises, proper breathing, and flexibility as they relate to a weight training program.

Balance

The phrase "stand still" is a little backward because when we try to accomplish this, our muscles are actually moving quite a bit! When we stand straight, the muscles in our ankles are making very small adjustments to keep our body weight over our feet. If those muscles are weak, we cannot make the proper

adjustments, and this increases the risk of falls and injuries.

Strengthening muscles that help you balance has multiple benefits. Not only will you be more stable while exercising, but improving your balance helps decrease the chance of falls or injuries. Balance also has many practical everyday benefits. Good balance allows you to stand up on your toes and reach things on the top shelf as well as walk on uneven sidewalks without falling. A trick to help you balance when completing balance exercises is to pick a spot in front of you to look at and focus on.

When you stand upright, there is a lot going on behind the scenes to keep you standing. Signals are sent to your brain from your eyes, inner ear, and sensory system, which

includes the skin, muscles, and joints. This balance system is known as the vestibular system. Your inner ear is made up of three canals that contain fluid and sensors that detect movement of your head and then send nerve impulses to your brain to help you know where you are in space and whether or not you are moving. Sensory receptors in your eyes send signals to your brain to provide visual cues identifying where you are in relation to other objects.

One way to help you keep your balance is to strengthen your abdominal muscles, also known as your "core." Every time you feel off balance and try to regain stability, you are using your core. A strong core supports and stabilizes the pelvis and spine, and in turn improves balance. The abdominal muscles

also affect your legs and the way you stand and sit. By completing core-strengthening exercises, you are helping your body support your spine so your body weight is not placed just on your bones. When you complete exercises, having your core engaged and using your abdominal muscles is important to stay balanced. Balance exercises can be completed almost anytime and anywhere, as long as you have something sturdy nearby like a chair or a wall to hold onto for support.

If you ever start to lose your balance or feel dizzy or lightheaded while exercising, stop the exercise immediately and sit down or find something stable to hold onto. Lightheadedness while exercising can be caused by various things, including dehydration, overexertion,

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low blood sugar, or even underlying health issues. If it is a common occurrence, consult your doctor.

Breathing

It may surprise you that breathing is important while exercising—and that there is a correct and incorrect way to breathe. People often hold their breath while lifting weights without realizing it, which is the last thing you want to do! Holding your breath or taking shallow breaths prevents oxygen from reaching your muscles and brain, and raises your blood pressure. When not enough oxygen is being delivered, muscles fatigue more quickly. This causes your muscles and brain to experience extreme stress, which can lead to a blackout or stroke.

To avoid this, exhale while lifting weights, and inhale when lowering weights. This encourages regular breathing since lifting the weight is when holding your breath is most likely. Some call this "breathing through the exercise." It may seem like the opposite of what you want to do (breathe out when lifting weights, breathe in when lowering weights), but exhaling when completing the most difficult part of the exercise is proper form. A tip for remembering when to exhale is to combine the E's: "Exhale on Exertion." This means you will breathe out when you are working

hardest, or exerting the most energy. This is usually when you are lifting the weight, like when you do an arm curl holding a weight or lift your leg with an ankle weight on.

Diaphragmatic breathing—also called abdominal breathing, belly breathing, or deep breathing—is a method of breathing during which your diaphragm, which is located below your ribcage and lungs and above your stomach, expands and contracts while you breathe. When you inhale, the diaphragm contracts, providing more space as air enters your lungs. This results in your stomach expanding instead of your chest when you inhale. When you exhale, your diaphragm expands, pushing the air out and causing your stomach to fall. When more oxygen is able to enter your lungs and then bloodstream, your body is able to distribute more "fuel" to your muscles. If your stomach puffs out when you breathe in and falls when you breathe out, you have proper technique.

Flexibility and Stretching

When we talk about flexibility, we aren't expecting gymnastic-like moves. Flexibility is important during exercise for many reasons and involves not only your muscles but the tendons that attach your

muscles to your bones and joints. Once your muscles are warm, they are more flexible and ready to be stretched during exercises. Flexibility allows your muscles, tendons, and joints to complete exercise activities and increases their range of motion. Flexibility also decreases your chance of injury.

Stretching is a key aspect of flexibility. It also warms your muscles and increases flexibility, blood flow, and circulation. Increased circulation allows blood to reach your muscles and flush out any waste in the muscle tissue. It also helps shorten your recovery time after exercising or if you have been injured. Stretching prevents your muscles from getting too tight, which results in improved posture. Maintaining proper posture reduces discomfort and pain in your back and shoulders. Stretching not only reduces tight muscles, it can also reduce stress.

Tips for Stretching Properly

- Do not bounce. Bouncing while you stretch can cause small tears in your muscles. When these tears heal, they form scar tissue, which tightens your muscles even more, making you less flexible.
- If you feel pain, you've stretched too far. You don't want to be in pain while stretching. Keep it on the gentle side.

- It is important to stretch after completing exercises.
- Remember to breathe while stretching—don't hold your breath.
- Stretch both sides to help your range of motion be as equal as possible.

Some benefits of flexibility include the ability to:

- Look over your shoulder to see what's behind you as you back your car out of the driveway
- Make your bed
- Bend over to tie your shoes or put on boots
- Reach for food items on a kitchen shelf
- Pull a sweater over your head or easily put your arms into the sleeves of a winter coat

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