



**Upper Arlington
Preventative Primary Care**

Proper Breathing During Exercise: Importance for Safety and Performance

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The simple act of breathing correctly during both stretching and strengthening exercises is critical to make the movements you are doing as effective as possible. Practicing safe breathing techniques will also help you stay safe and avoid injury. And breathing correctly while exercising can influence not only the quality of our workouts, but also the speed of our recovery from a workout, and our overall daily energy levels.

If you have some experience with exercise you may already be familiar with some basic breathing techniques. Breathing correctly is important while exercising for many reasons, but one of the most important is that proper breathing is a guaranteed method to improve your posture. The same muscles responsible for breathing are also the key muscles involved in standing and sitting up straight - the posture muscles of your core region. Proper full depth breathing literally equates to improved posture while sitting, standing, and during exercise.

Generally speaking, most people tend to breathe one of two different ways during exercise: either from their stomach area or from their chest. If you practice yoga chances are good you are already familiar with breathing from your stomach region as this permits deep full breaths that completely inflate your lungs. Breathing from your stomach region has many benefits, including shorter recovery periods between sets of exercises, and an overall increase in energy and stamina.

Drawing in breaths from the chest is not advised during exercise as each breath tends to be shorter and not as deep. And shorter more shallow breaths do not fill the lungs as well, and then the muscles that need oxygen to do their work are not completely fed. Bottom line, if you are not bringing air deeply into your lungs, it will not be transported to the working muscles very well.

All of this comes back to maintaining good posture while sitting, standing, and during exercise, which is so important for many reasons. Good posture helps to create the physical space that is necessary for stomach breathing by properly positioning your diaphragm (your primary breathing muscle) in relation to your rib cage. Drawing deep breaths in down through the “belly” allows us to take in more breath and fully inflate the lungs.

The most common mistake people frequently make with breathing while stretching or exercising is to hold their breath and/or breathe shallow and rapidly. Neither of these techniques, especially breath holding, should ever be done during activity due to both decreased performance and an increased risk of injury. When stretching or doing strengthening exercises your muscles absolutely need to be fed oxygen. Holding your breath or rapid fast breathing makes the transport of oxygen to those muscles very difficult. Additionally, holding your breath while performing movements greatly increases internal body pressures, and this significantly increases the risk of an injury.

One of the most highly effective breathing techniques that is utilized during stretching or a workout is to inhale on the “way down” and exhale on the “way up”. To practice this technique while stretching or doing exercises inhale deeply for a count of two and then exhale for a count of two. For example, during a chest press (i.e., a bench press) you would breathe in (count 1 then 2) as you lower the bar down toward your chest, then breathe out (count 1 then 2) as you push the bar up and straighten your elbows. The key is to keep breathing, never hold your breath, and focus on deep stomach area breathing – fill those lungs.

Keep these tips in mind as you work on proper breathing technique during both stretching and strengthening exercises:

- Heavy straining, groaning, or grunting during your exercise indicates you are not breathing correctly and likely increasing injury risk and compromising performance.
- Do not blow air out by pursing your lips and/or puffing out the cheeks. Also avoid making a “hissing” sound by forcing air through a grimaced mouth, or burst air out after holding it in. Loudly breathing does not mean increased air flow.
- Breathe through your mouth primarily – your mouth is far bigger than your nostrils and this equals more air coming in and an easier exhale. Keep your jaw loose, not clenched tightly, and your mouth should be open. Proper breathing will allow you to bring in more air with far less effort.