



# Does Posture Matter when it comes to Breathing?

Summary: Poor posture contributes to breathing pattern dysfunction. This is commonly seen in people who spend long hours sitting each day. Rounded shoulders and a forward head posture cause the muscles around the chest to tighten. If your posture is slouched and hunched over, your chest and rib cage will be in a position which is less favorable to your lungs filling with air. **Several studies have reported that a slumped, poor posture significantly reduces lung capacity, expiratory flow, and lumbar lordosis compared with a normal upright posture ( [Study](#) ).** **Pain can effect breathing rate and improper breathing can effect pain.**

**Nasal Breathing vs. Mouth Breathing**

- Cervical spine support
- Wide palate
- Good tongue posture

- Chronic slouching
- Narrow, high palate
- Low tongue posture

Neck posture is dependent on your breathing.  
Your bones mould themselves around your breathing patterns

# Why Posture and Pain Matters when it comes to Breathing

Poor posture also contributes to breathing pattern dysfunction. This is commonly seen in people who spend long hours sitting each day. Rounded shoulders and a forward head posture cause the muscles around the chest to tighten. That tightening limits the ability of the rib cage to expand and causes people to take more rapid, shallow breaths. **Several studies have reported that a slumped, poor posture significantly reduces lung capacity, expiratory flow, and lumbar lordosis compared with a normal upright posture ( [Study](#) ).** When this breathing pattern is accompanied by poor posture many muscles in your upper body aren't able to function properly. The longer you sit during the day, the less your body is able to fight the forces of gravity and maintain a strong, stable core. Tight accessory muscles around the chest take over and may cause a rounded shoulder and forward head posture. This weakens the back by inhibiting muscles that help maintain an upright posture. Tight accessory muscles and a weakened back can also cause instability and pain. **Research has shown that people with ongoing mild-to-moderate neck pain or sore, stiff neck muscles have problems using the lungs and respiratory system to their full capacity.**



**Know Your Joints**  
Muscle and Joint Care  
Suggestions

**Pain can effect breathing rate and improper breathing can effect pain.**

Sudden or chronic pain can activate a section of the nervous system that governs many bodily systems, including your breathing rate, heart rate, and body temperature. Chronic stress and strong emotions such as rage or fear intensify your fight-or-flight response, which can impair your breathing rate.

Research suggests a strong association between altered biomechanical breathing patterns and the development of musculoskeletal conditions, such as lower back pain, neck pain, chronic ankle instability, and temporomandibular joint disorders.