

## Joint and Tendon Health: Why are isometrics important?

In the past when injuries happened they often said let it rest and apply ice. The rules have changed in a variety of ways. Now even ice may not be recommended for some injury cases ([see Article](#)). Isometrics (tightening of a muscle with no length change) was often not considered an important part of a fitness or functional routine. Now it might help if you have a sore joint or muscle and may help you function better.

By applying constant tension to the muscles, isometric exercises can be useful for improving physical endurance and posture by strengthening and stabilizing the muscles. This is an important concept since posture and stability are key elements to balance and overall movement. Many of the essential core exercises require an isometric hold ([Sidebridge](#), [Plank](#), [Glute Bridge](#), and [BirdDog](#)).

A [2012 study](#) found that isometric exercises are suitable for people with osteoarthritis. It may be because the joint is not being moved. Other research suggests that isometric exercises may help with pain relief for [lower back pain](#), [knee pain](#), and [neck pain](#). Isometrics for tendon pain has been shown to give immediate and sustained pain relief ([Study](#)). The exact science behind why it works is still under going further research. However, they have shown that it works on the cortical representation via the brain, which helps change the view of what is and is not painful ([Study](#)). It is not a magic bullet though or replacement for other forms of conditioning ([See Report](#)), but it can be a useful tool to decrease pain and to aid joint while it is recovering.

**Isometrics should not take the place of other motions, but as an adjunct to them and as a tool when there is pain.**

When performing isometric exercise the goal is to perform moderate to heavy and sustained holds for 5 to 30 seconds for 1-5 reps. The goal is to be at 6-7 based on a 1-10 exertion scale. Performing isometric exercises with poor form can lead to injury. If you experience any pain or discomfort while performing an isometric exercise you should stop immediately.

