



## What Is Proprioception?

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Have any of you ever been in physical therapy where they had you stand first with your eyes open and then with your eyes closed and wondered why? Or maybe you have sprained your ankle and wondered why your balance may have been a little off? Both situations pertain to proprioception. Proprioception is the ability to sense where and how your muscles and joints are moving without having to look at them. Proprioception occurs without conscious thought. It is the sensory feedback of our central nervous system for motor control and posture. Proprioception is carried out by receiving messages from receptors in our muscles that can judge the muscle length and the tension being placed on the muscles, ligaments and joints. All the input coming into the nervous system is processed and then sent back to the muscle to make adjustments for movement and balance.

Proprioception is a key component with everyday movements and even more so in sports that require precise coordination. Without proprioception we would have to physically see where every part was and we would have terrible balance. An injury to the ankle or knee for example, causes the body's spatial perception to be altered which can then limit your ability to perform flexibility, strengthening and endurance exercises correctly. This could possibly increase your risk for further injury. Proprioception can be improved or challenged with exercise. A few simple exercises include doing squats on a wobble board, playing catch with someone while standing on one leg, and standing in one place with your eyes open and closed. Overall, proprioception is a critical component for our ability to function no matter what our activity level is. For further information you may contact your local physical therapist.