

BONUS:

One Minute
.....
Rejuvenation
.....
Finishers



Proprioceptive exercises are exercises that assist you in retaining your position sense, also known as “joint sense.” Think of it this way: if you were to close your eyes and bend your elbow, you know that you’re bending your elbow and even roughly to what degree. You may not be able to see it, and likely don’t even think about it as it’s occurring, but this is your joint sense kicking in. A person without proprioception would not be able to feel their arm bending, and the process of doing it would be much more difficult and deliberate.

If you’ve ever watched an Olympic hurdler, you have seen how their legs just barely clear each hurdle. This is no accident -- it’s a complete mastery of the proprioceptive system. They are not looking at each hurdle and determining how high their legs must go each time; rather, their bodies are trained to understand the exact level they must reach.

Position sense comes from three factors: our vision, middle ear balance, and tiny receptors in the ligaments and joints. So when we close our eyes, we’re relying on our middle ear balance and the receptors in our ligaments and joints to keep ourselves balanced. This is why standing on one foot with your eyes closed is so much more difficult than when open.

The tiny receptors within the proprioceptive system are sometimes referred to as “stretch receptors” because they relay a message to the brain of how much a joint or ligament is stretched, and the brain will therefore recruit the appropriate muscles around the joint or ligament in order to keep everything aligned.

Now, what does this have to do with alleviating joint pain? Well, following an injury to joints and ligaments, those tiny receptors crucial to the proprioceptive system also become damaged, so the information the brain

receives is often impaired. That's why a very simple movement can have that "not-quite-right" feeling.

Fortunately, there are exercises that can be used to repair your receptors, and that is what we're going to work on here. These are simple "mini workouts" that can be implemented at the end of your normal routine, which are specifically designed to build up your proprioceptive system and position sense. This will help you become more balanced, remove that feeling of something being out of place during movement, and allow you to move more freely.

One-legged toe touch



Standing on one leg, bend at the waist and bring your fingers as close to your toes on the floor as possible. If you can only touch your knee, that's alright. Once you reach your maximum extension, return to starting position. Keep your leg straight with only a slight bend. Repeat for a total of 5 reps, then switch legs.

One-legged mini-squat



Lift one foot off the floor. You can keep one hand on a table or touching a wall for balance. Drop your hips so that you squat 1 to 2 inches only. This may not seem like a lot but it's an intermediate maneuver, so if it seems too difficult, don't worry -- you can come back to this later. Make sure your heel stays on the floor throughout the exercise so that you aren't bending forward too much. Your knee shouldn't go past your toe, and you want to make sure your knee is aligned between your second and third toes, not moving inward. Repeat for a total of 5 reps, then switch legs.

Standing table exercise



Stand straight up with your toes pointed forward and your feet shoulder-width apart. Interlace your fingers and turn your palms outward. With your arms straight, reach straight up so that your interlocked hands are directly over your head. Tense your quadriceps (thigh muscles). Then, in a controlled motion, bend forward at the hip so that your back is parallel to the floor. Keep your hands interlocked over your head. Your back should not be arched at all. Try to do this in front of a mirror so that you can see if it is completely straight (your back may even be concave toward the lower part). Hold this for 30 consecutive seconds.

One-legged cone touch



Stand with your feet pointed forward. Place two cones or similar items (cups work just fine) at about 10 and 2 o'clock. Standing on your left leg, bend down and touch the right cup with your right hand. Return to starting position and touch the left cup with your right hand. Repeat so that you touch each cup 5 times (10 touches total). Then switch to your right leg and touch each cup 5 times. If you don't quite have the flexibility or balance to reach your objects just yet, go down as far as you comfortably can.

The Compass



For this finisher, you will need some tape to place on the ground. Using 4 strips about 18" long each, stick them on the ground, first in a " + ", then in an " x " so you have an 8-point star (it should look something like a compass). Begin with one foot standing firmly in the center. With the other foot, you will reach out as far as you can in the direction of each line (imagine the lines go on forever). Once you stretch as far as you can, gently touch your toe to the ground and return to the center. Then move to the next point on the compass. Do this for every point on the compass, then switch legs. Each day, you should try to stretch even further than the day before.

Seated Knee Tensors



Sit down on the ground with your legs straight out in front of you and your toes pointed upward. Tense your thighs for 10 seconds and release. Repeat for three total sets.

Fire Hydrants



Get down on all fours and lift one leg to its side. Don't bring your leg up further than you can hold comfortably. Hold that position for 15 seconds each side, bring your leg back to the starting position, and switch legs.

Plie Squat



This is similar to a wall sit, but here you will point your toes outward with your back against a wall. Your spine should be straight, and you can hold onto a chair or wall if need by. Drop your weight so that you are in a squatting position. You don't need to go down much further than a few inches when you first start. You should have all of your weight in your heels, to the point you can actually pick up your toes. If your knees start to hurt, come up an inch or so. Hold this position for 30 seconds.

Donkey Kicks



Drop down onto all fours on the ground. Keep both legs 90 degrees. Pick one leg up as high as you can comfortably stand and hold for 15 seconds, then switch legs. If that's causing too much pain on your bottom knee, feel free to skip this exercise, or try the other leg.

Single leg balance



Standing straight up, pick one leg off the floor and balance yourself on the other leg for 30 seconds, then switch legs. You can use a chair or a wall for balance. Challenge yourself to keep your eyes closed to increase your proprioception.