

# Proprioceptive Exercise 1: Seated Arch & Flatten

The Seated Arch & Flatten is the first proprioceptive exercise taught to every student. The exercise involves sitting in a chair and gently rolling the pelvis forward and backward until the student feels that their pelvis and spine are straight. The Seated Arch & Flatten allows clients to release and regain control of the lower back and abdominal muscles, and improve their seated and standing posture.

#### **EXERCISE DESCRIPTION**

**Starting Position:** Use a chair with a flat seat. Put the chair in front of a full-length mirror, a few feet away from the mirror. Have the chair turned to the side, so that you can see yourself from the side when you are sitting in the chair. Sit in the chair, toward the front of the seat. Your knees and feet should be pointing straight ahead, a comfortable hip width distance apart. Your feet should be either directly under your knees or in front of your knees, so that your thighs are parallel to the floor or sloping downward (with your knees lower than your hips). Your hamstrings should feel relaxed. Relax your arms either by your sides or with your hands in your lap. Close your eyes.

**Movement:** Inhale into your lower belly, and slowly and gently start rolling your pelvis forward so that your lower back arches and your belly sticks out. Feel the gentle contraction of your lower back muscles, then slowly and gently release your lower back muscles so that your pelvis rolls back to a neutral upright position. Once you've reached your neutral starting place, start gently contracting your abdominal muscles so that you're tucking your pelvis under and rounding your lower back. Then very slowly and gently release your abdominals to let your pelvis come back to your neutral starting place. Continue going back and forth from the arch to the flatten, as slowly as you can, just like you do the Arch & Flatten on the floor. Each time you do the movement, you can make it a little smaller. After a few minutes you'll get to a point where you feel like your pelvis and your back are straight up and down. When you get to that point, open your eyes and just turn your head to look in the mirror, leaving the rest of your body where it is. See if what you see in the mirror matches up with what you feel in your body. If not, try making minor adjustments and gently releasing muscles that you are holding tight so that you can sit easily with your pelvis and back straight up and down. Take the time to notice how this feels internally, so that you can incorporate this posture into your daily life.

### ANATOMY OF PROPRIOCEPTIVE EXERCISE 1

For the list of muscles involved in arching and flattening the back, see "Anatomy of the Arch & Flatten."

**Breathing in Proprioceptive Exercise 1:** Students should breathe as they need to, but if possible they should inhale as they roll their pelvis forward, and exhale as they roll their pelvis backward.

# CONDITIONS HELPED BY PROPRIOCEPTIVE EXERCISE 1

Proprioceptive Exercise 1 directly addresses the following conditions by releasing involuntary muscle contraction in the lower back and abdominals, and alleviating compression of the lumbar vertebrae:

Muscle tightness in the lower back and abdominals Lower back pain
Disc problems in the lumbar spine
Sciatica
Hyperlordosis
Sway back posture
Flat lower back (tucking pelvis under)
Seated and standing posture

#### **HOW TO TEACH PROPRIOCEPTIVE EXERCISE 1**

Get the student in their starting position. You must use a chair with a flat seat. Put the chair in front of a full-length mirror, a few feet away from the mirror. Have the chair turned 90 degrees to the side. Have the student sit in the chair, toward the front of the seat. Their knees and feet should be pointing straight ahead, a comfortable hip width distance apart. Their feet should be either directly under their knees or in front of their knees, so that their thighs are parallel to the floor or sloping downward (with the knees lower than the hips). The student's hamstrings should feel relaxed. The student can relax their arms either by their sides or have their hands in their lap.

**Instruct the student to close their eyes.** It is important that students keep their eyes closed during proprioceptive exercises so that they focus on their internal sense of their posture and not on what they look like in the mirror.

**Teach the exercise.** Instruct the student to gently roll their pelvis forward as they inhale down into their lower belly. Ask the student to be aware of a gentle contraction of their lower back muscles while they are in the arched position. When the student is ready, they should focus on slowly releasing their lower back muscles to return to their

neutral starting position. They should not engage their abdominal muscles to help them release out of the arch. When they have reached what feels like a neutral upright position, then they can roll their pelvis backward, engaging their abdominals and getting the feeling of rounding their lower back. When they are ready, they can slowly release their abdominals to return to their neutral upright position. They can repeat the arching and flattening as many times as they want, and they should gradually make these movements smaller each time. They should take their time and not feel rushed. Eventually they will get to a point where they feel like their pelvis and back are straight up and down. When they get to this point, they can open their eyes and just turn their head to look in the mirror. Ask the student to notice if what they feel in their body matches up with what they see in the mirror. They can take the time to make further adjustments to their posture if they wish, noticing how these adjustments feel internally.

## Common mistakes:

The most common mistake is to do this movement more with the middle or upper back. Make sure your student is focusing on the movement of their pelvis, rolling it forward and backward. They must focus on the movement of their pelvis so that their pelvis and lower back end up in a neutral upright position at the end of the exercise.

Another common mistake is rushing between the Arch and the Flatten without finding neutral in between. Your student should return to a neutral, upright position after each Arch and each Flatten, and take a moment to really notice what that neutral position feels like. This exercise is all about finding a neutral, upright position, so the student should be trying to find it each time, and then they will end up in a straighter position at the end of the exercise.

# The following is an example of how I teach Proprioceptive Exercise 1:

Start by standing up. Stand normally, letting your arms hang by your sides, and don't try to have perfect posture. Close your eyes. Take a few moments to notice how your body feels today. Bring your awareness to your lower back and pelvis. Just notice what you feel—don't try to change anything. Do you feel like your lower back is relaxed and your pelvis is straight up and down? Or, do you feel like your lower back is arched and you're sticking out your belly? Or do you feel the opposite—like you're contracting your belly muscles and flattening your lower back?

For this exercise, you should wear a tight-fitting shirt so that you can really see your alignment. To set up for this exercise, get a chair or stool with a flat seat. Place it in front of a full-length mirror at a 90 degree angle to the mirror, so that when you sit in the chair you can see yourself from the side in the mirror.

Sit toward the front of the seat, and let your knees and feet point straight ahead. Let your knees and feet be a comfortable hip width distance apart. Make sure that your ankles are either directly underneath your knees or slightly forward of your knees, so that your thighs are parallel to the floor or sloping slightly downward. Let your arms rest by your sides. Close your eyes and keep them closed for the whole exercise.

Inhale into your lower belly, and slowly and gently start rolling your pelvis forward so that your lower back arches and your belly sticks out. Feel the gentle contraction of your lower back muscles, then as slowly and as gently as you can, start to release your lower back muscles so that your pelvis rolls back to a neutral position.

Once you've reached your neutral starting place, start gently contracting your abdominal muscles so that you're tucking your pelvis under and flattening your lower back. Feel that contraction, and feel the flattening of your lower back, and then very slowly and gently release your pelvis back to your neutral starting place.

Make sure you're focusing on the movement of your pelvis, rolling it forward and backward. Sometimes people will tend to do this movement more with their middle or upper back, but in order to get the maximum benefit from this exercise, you need to be focusing on the movement of your pelvis.

Continue going back and forth from the arch to the flatten, as slowly as you can, just like you did on the floor. Make sure to find a neutral, upright position in between each arch and each flatten. Each time you do the movement, you can start making it a little bit smaller. Arch a little less and flatten a little less each time. Take your time, and eventually you will get to a point where you feel like your pelvis and your back are straight up and down.

Once you have reached that point where you feel like your pelvis and your back are straight up and down, you can open your eyes, and just turn your head to the side so that you can see yourself in the mirror. Does what you're seeing in the mirror match up with what you feel in your body? This is a good opportunity for you to experiment—you can make some minor adjustments in your posture and compare what you see in the mirror to what you're feeling in your body.

When you're ready, slowly come to standing. Stand normally, letting your arms hang by your sides. Close your eyes. Notice how your lower back and pelvis are feeling after doing this exercise.