

Swimmers Posture



Leaflet 4 - Balance & Core Strength Exercises for Swimmers



By




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The following balance exercises are designed to improve your balance and proprioception (joint position awareness). This is important to improve your ability to regulate shifts in your body's centre of gravity while maintaining control. Balance exercises have been shown scientifically to prevent injury and are an important component of rehabilitation following lower limb injury. It is important to discuss the suitability of these exercises with your physiotherapist prior to commencing them.

Usually, balance exercises should be performed for 5 minutes per day initially and progressed to 10-15 minutes or longer provided they do not cause or increase symptoms. Generally you should select a range of exercises that challenge your balance without causing an increase in symptoms. Always set up your environment to ensure safety and prevent falls, incase you lose your balance (e.g. practice at a bench or with a spotter).

Basic Balance Exercises

<p>Single Leg Balance</p> <p>Standing on one leg, maintain your balance (figure 1). Try to hold for 1 minute. Once this exercise is too easy progress to eyes closed.</p> <p>Figure 1 – Single Leg Balance (right side)</p>	
<p>Single Leg Balance on Pillow</p> <p>Begin standing on a pillow on one leg with your eyes open and maintain your balance (figure 2). Try to hold for 1 minute. Once this exercise is too easy, progress the exercise by closing your eyes. Once this is too easy stand on 2 or more pillows eyes open and eventually eyes closed.</p> <p>Figure 2 – Single Leg Balance on Pillow (right side)</p>	
<p>Walking Heel Toe</p> <p>Walk very slowly in a straight line, carefully placing the foot in front so that the heel of the front foot touches the toes of the rear foot. Once this exercise is too easy progress to eyes closed (figure 3).</p> <p>Figure 3 – Walking Heel Toe</p>	

Intermediate Balance Exercises

Ball Around Back

Standing on one leg, take a ball around your back whilst maintaining your balance (figure 4). Once this exercise is too easy, progress to eyes closed.

Figure 4 – Ball Around Back Balance Exercise



Ball Under Leg

Standing on one leg, take a ball under your leg whilst maintaining your balance (figure 5). Once this exercise is too easy, progress to eyes closed.

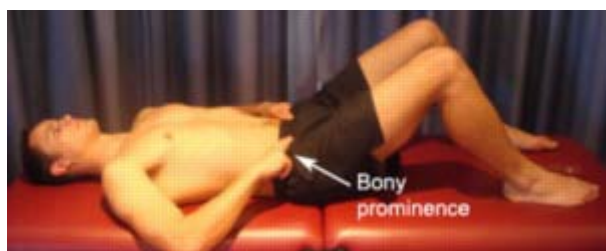
Figure 5 – Ball Under Leg Balance Exercise



The following Core Exercises are designed to improve your core strength, core stability, balance, co-ordination and posture. The exercises target the main core muscles of the body such as the abdominals, gluteals and lumbar extensors. Core stability is an important component of injury prevention and athletic performance. You should discuss the suitability of these Core Exercises with your physiotherapist prior to beginning them. As a rule, they should only be performed provided they do not cause or increase pain.

The following Core Exercises should be performed approximately 1 - 3 times per week. Ideally they should not be performed on consecutive days, to allow muscle recovery. As your core strength and control improves, the exercises can be progressed by gradually increasing the repetitions, number of sets or frequency of the exercises. Generally, you should begin with the Basic Core Exercises, once these become too easy, gradually progress to the Intermediate Core Exercises, and once these become too easy, gradually progress to the Advanced Core Exercises.

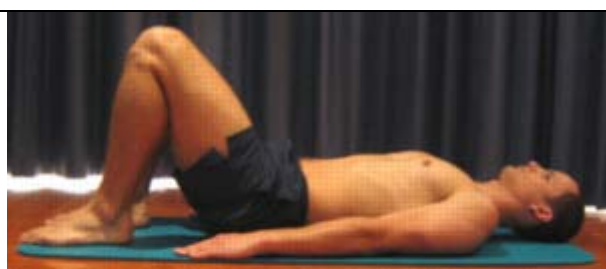
Core Exercises – Basic



Transversus Abdominis Activation

Begin this core exercise lying on your back as demonstrated (figure 1). Slowly pull your belly button in, "away from your belt line", and breathe normally. Your rib cage should remain relaxed and should not elevate during this process. You should be able to feel the muscle contracting if you press deeply 2cm in from the bony prominence at the front of your pelvis (figure 1). Practise holding this muscle at one third of a maximal contraction for as long as possible during everyday activities (e.g. when walking etc.) provided it is pain free. Repeat this core exercise 3 times daily.

Figure 1 – Transversus Abdominis Activation



Bridging

Begin this core exercise lying on your back in the position demonstrated (figure 2). Slowly lift your bottom pushing through your feet, until your knees, hips and shoulders are in a straight line. Tighten your bottom muscles (gluteals) as you do this. Hold for 2 seconds and then return to the starting position. Perform 1 - 3 sets of 10 repetitions provided the exercise is pain free. Maintain activation of your transversus abdominis muscle throughout the exercise

Figure 2 – Bridging



Abdominal Crunch

Begin this core exercise lying on your back, with your knees bent and your hands on the sides of your head as demonstrated (figure 3). Keeping your neck straight, slowly lift your shoulders and trunk off the ground, tightening your abdominals. Perform 1 - 3 sets of 10 repetitions provided the exercise is pain free. Maintain activation of your transversus abdominis muscle throughout the exercise.

Figure 3 – Abdominal Crunch



Prone Hold

Begin this core exercise propped up on your elbows and toes, in a tall, straight posture as demonstrated (figure 4). Maintain activation of your transversus abdominis muscle during the exercise. Try to keep your spine and pelvis still and breathe normally. Hold this position for as long as possible provided it is pain free and you are maintaining good posture. Repeat 3 times.

Figure 4 – Prone Hold



Four Point Kneeling Opposite Arm & Leg Raises

Begin this core exercise in Four Point Kneeling as demonstrated (figure 5). Maintain good posture and activation of your transversus abdominis muscle throughout the exercise. Slowly raise one arm and the opposite leg and then return to the starting position. Keep your spine and pelvis still throughout the exercise and breathe normally. Perform 1 - 3 sets of 10 repetitions, provided the exercise is pain free, alternating between sides.

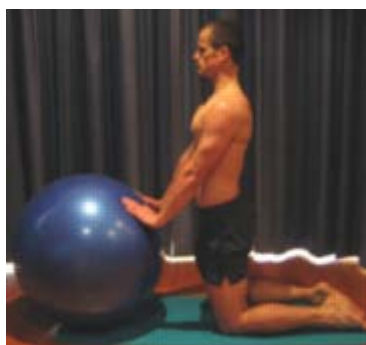
Figure 5 – Four Point Kneeling Opposite Arm & Leg Raises



Side Holds

Begin this core exercise propped up on one elbow and foot with your back straight as demonstrated (figure 6). Maintain activation of your transversus abdominis muscle throughout the exercise. Hold the position for as long as possible provided it is pain free and you are maintaining good posture. Repeat 3 times on each side.

Figure 6 – Side Holds (left side)



Roll Outs

Begin this core exercise in kneeling with your hands on a Swiss Ball and in good posture, as demonstrated (figure 7). Maintain activation of your transversus abdominis muscle throughout the exercise. Slowly roll the Swiss Ball forwards, moving at your knees, keeping your back, hips and arms straight, then return to the starting position. Keep your spine and pelvis still throughout the exercise and breathe normally. Perform 1 - 3 sets of 10 repetitions provided the exercise is pain free.

Figure 7 – Roll Outs