### **Stretching Exercises for Swimmers**

#### Why should exercises for swimmers include stretching

Good flexibility allows a swimmer to perform better for the following reasons:

- 1. Greater mobility in some joints allows for kicking and recovery movements without disturbing body alignment therefore allowing for a more streamlined swim with less turbulence.
- 2. Greater mobility in certain joints allows for the propulsive force to be sustained over a longer time.
- 3. Greater flexibility may reduce energy expenditure and improve speed by decreasing intramuscular resistance.

#### **Dangers of Swimmers stretching**

Flexibility exercises for swimmers should concentrate on stretching the connective tissues of the muscles, but not the tendons and ligaments. Sprains and tears can result from ligaments and joint capsular structures being stretched beyond their normal extensibility.

Swimmers should only stretch to the point where resistance is felt. Stretching exercises for swimmers that should be avoided are those assisted by a team mate that stretch arms up and forward from behind the back, and those stretches that force the shoulders back at shoulder level. Both of these stretches force the head of the humerus (long arm bone) forward against the tendons and ligaments that become chronically inflamed in swimmers when they develop tendonitis. It is therefore best to avoid stretching exercises for swimmers that would exacerbate that condition.

#### Include a warm up and warm down period

Do a few lengths at a slow pace to allow your muscles to get used to the movement and warm them up. This will help prevent injuries. Studies have shown that an active warm up (as opposed to sitting in a warm room for a warm up) will improve your times more than a passive warm up for your first swim event. An active warm up brings oxygen and nutrients to the muscles and improves nerve conduction.

A period of active recovery has been shown to result in better performance in subsequent events. Studies have found that swimming after your meet at a pace equal to your lactate threshold is better than swimming around lazily and better than just sitting. You can determine your lactate threshold roughly by estimating how fast you think you could swim comfortably for an hour. Stretching during a warm down also helps the muscles relax before the next race.

## Stretching Exercises for Swimmers: Posterior Shoulder Stretch

- 1. Stand or sit with chest up and head in neutral position.
- 2. Bring your right elbow up and pull it over to the left at shoulder level with the left hand.
- 3. Hold this position for 30 seconds.
- 4. Repeat on the other side.



# **Stretching Exercises for Swimmers: Tricep Stretch**

- 1. Standing or sitting raise your right hand up over your head.
- 2. Bend the right elbow and grasp the right elbow with your left hand.
- 3. Pull your right elbow to the left overhead.
- 4. Hold this position for 30 seconds.
- 5. Repeat on the other side.



# Stretching Exercises for Swimmers: Mid Pectoralis Muscle Stretch

- 1. Stand with your right side facing a wall or door frame.
- 2. Put your right hand up on the wall, thumb facing up, at shoulder level.
- 3. Slowly rotate your trunk to the left until a stretch is felt.
- 4. Hold this for 30 seconds.
- 5. Repeat this on the left.



## **Stretching Exercises for Swimmers: Lower Pectoralis Muscle Stretch**

- 1. Stand with your right side facing a wall or door frame.
- 2. Put your right hand up on the wall overhead, thumb facing up.
- 3. Slowly rotate your trunk to the left until stretch is felt.
- 4. Hold this for 30 seconds.
- 5. Repeat this on the left side.



# Stretching Exercises for Swimmers: Latissimus Dorsi Stretch

- 1. Stand facing a wall or pole about three feet back.
- 2. Put both hands on the wall as high as you can reach, one hand on the other.
- 3. Step back with one foot.
- 4. Let your chest sag toward the floor while maintaining your hand position.
- 5. Hold this for 30 seconds.



# **Stretching Exercises for Swimmers: Upper Pec and Anterior Deltoid Stretch**

- 1. Stand tall with your chest up.
- 2. Reach behind and grasp both hands behind you.
- 3. Pull your shoulders back and shoulder blades together.
- 4. Lift your hands away from you with arms straight.
- 5. Hold this for 30 seconds.



# Stretching Exercises for Swimmers: Quadricep Stretch

- 1. Standing, grasp your right ankle with your right or left hand behind you.
- 2. Pull your foot up and your knee back.
- 3. Hold this for 30 seconds.
- 4. Repeat this on the left side.



### **Hamstring Stretch in Standing**

- 1. Stand and face a chair or table.
- 2. Put your foot up on the chair.
- 3. Keep your chest up and back straight.
- 4. Bend forward at the hips until you feel a stretch in the back of your thigh.
- 5. Hold this position for 30 seconds.
- 6. Repeat on the other side.



#### **Calf Stretches**

- 1. Stand about three feet from a a wall and put your right foot behind you ensuring your toes are facing forward.
- 2. Keep your heel on the ground and lean forward with your right knee straight.
- 3. Rotating the toes in and out slightly will target the medial and lateral parts of this muscle separately.
- 4. Hold this for 30 seconds.
- 1. Stand away from a wall and put your right foot behind you and be sure your toes are facing forward.
- 2. Lean forward at the ankle while bending the right knee and keeping your heel on the ground.
- 3. Because the knee is flexed, tension is taken off the gastrocnemius and placed on the soleus.
- 4. Hold this for 30 seconds.

Repeat both of the above on the left side.



### **Hip Flexors Stretch**

- 1. To stretch the right hip flexors kneel on your right knee and put your left foot in front of you such that your left hip and knee are about 90 degrees.
- 2. Put a noodle or board on the floor for your knee if you find this uncomfortable.
- 3. Put your right hand on your right hip and push your right hip forward so that it is in front of your right knee.
- 4. Keep your chest up and don't bend forward at the hips.
- 5. Hold this for 30 seconds.
- 6. Repeat this on the left side.



#### **Long Hip Adductors**

- 1. Kneel onto your left leg or simply squat down on the left.
- 2. Place your right foot in front of you to assume the lunge position.
- 3. Slide your right foot out to the side and place both hands on the floor in front of you.
- 4. Try to straighten the right knee and lean your body forward while relaxing your hips.
- 5. Rocking the hips forward and back will change the pull slightly to get all long adductors.
- 6. Hold this for 30 seconds.
- 7. Repeat this on the other side.



### **Short Hip Adductors**

- 1. The quickest way to stretch the short adductors is to stretch them both at the same time in sitting.
- 2. Sit on the floor with feet together, knees bent.
- 3. Gently apply pressure to your thighs as you lift your chest up and bend forward at your hips.
- 4. Try to maintain a neutral pelvic position. (Don't bend at the waist and don't let your tailbone roll under)
- 5. Hold this for 30 seconds.



#### **Neck Stretches**

- 1. Sit or stand with your chest up and looking straight ahead.
- 2. Gently push your chin back while looking straight ahead(so that you have a double chin)
- 3. Keep your head upright, don't look up or down. Keep eyes facing forward.
- 4. While holding your chin back with one hand, use your other hand to reach over the top of your head.
- 5. Stabilize your chin back as you gently pull the top of your head forward. This is a tilting motion.
- 6. Hold this for 30 seconds.
- 1. Sit or stand with your chest up and looking straight ahead.
- 2. Reach over your head with your right hand.
- 3. Gently pull your head over to the right side.
- 4. Hold this for 30 seconds.
- 5. Repeat this on the other side.
- 6. If you feel pain or pinching on the right side doing this, stop. Your are no longer stretching but stressing joints. See your physical therapist.
- 1. Sit or stand with your chest up and looking straight ahead.
- 2. Look over your right shoulder.
- 3. Gently apply overpressure to your jaw to assist in this movement.
- 4. Hold for 30 seconds.
- 5. If you experience any pain in the neck or jaw, stop and consult your physical therapist.





