www.breakwatersportstraining.com

## **Core Strength and Stability Exercises for Swimmers**

by Sharon Johnson and Bill Steele

© 2007 Breakwater Sports. All rights reserved.

#### Introduction

This sequence of exercises was developed by Sharon Johnson. It is intended to build core strength and stability, which is essential for good swimming technique. In addition to the exercises illustrated here, simply practicing good posture will do much to strengthen your core. Core exercises such as these, which are performed using your own body weight, can be performed frequently – as often as daily.

All movements should be done carefully, rather slowly, and under complete control. You should perform 12-20 repetitions of each movement. The entire routine should take less than a half hour to complete.

**Acknowledgements:** The sequence of exercises using the foam roller is inspired by the work of Jane Quick on her Swimlates video.

**Caution**: Not all exercise programs are suitable for all people. You should consult with your physician before attempting any of these exercises.

#### **Exercise 1: Pelvic Tilt on Roller**

On this exercise, check the amount of pelvic tilt with your hands. Try to feel each vertebra individually as you raise it from, or lower it onto, the roller. Do not use your leg muscles to move your pelvis – use your core (check that your upper thighs are relaxed). Alternately and slowly:

1. Tilt and arch (a plate on your pelvis would spill water towards your feet).

Press your spine flat onto the roller (the plate would spill water towards your head).





#### **Important Note About the Neutral Spine Position**

For all of the remaining exercises using the roller, unless specifically stated otherwise, your spine should be *neutral*, which means that there is very little arch to your back – it is nearly flat along the top of the roller, but not forced into roller at any given point. The chin is tucked and the neck is long. Your shoulders should be back and down. Your core muscles should always be engagged. Both your hips and your ribcage should be "heavy" on the roller.

Breakwater Sports Revised: January 18, 2007 Page 1

www.breakwatersportstraining.com

#### **Exercise 2: Double Arm Extension**

1. Spine neutral. Begin with both arms straight up.



2. Lower both arms overhead together, stopping parallel to the floor.



### **Exercise 3: Opposing Arm Movement**

1. Spine neutral. Begin with both arms straight up.



2. Lower one arm overhead, while lowering the other towards feet, stopping both arms parallel to the floor.



### **Exercise 4: Butterfly**

Spine neutral. Begin with hands over forehead.



2. Open chest, lower elbows to the floor, keeping the back muscles relaxed.



www.breakwatersportstraining.com

#### **Exercise 5: Single Leg Raise**

1. Spine neutral. Raise one leg,

hold,

then lower.

2. Initially, repeat with same leg. When comfortable, alternate legs.



## Exercise 6: Single Leg Raise with Arms Raised

1. Same as above,

keeping both arms raised straight up.

2. Initially, repeat with same leg. When comfortable, alternate legs.



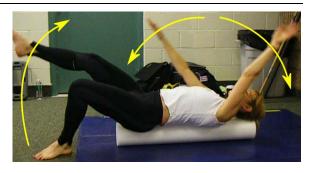
# Exercise 7: Single Leg Raise with Opposing Arm Movement

1. Raise one leg,

while lowering the same arm to the side,

and the opposite arm over head

2. Initially, repeat with same leg. When comfortable, alternate legs.



www.breakwatersportstraining.com

# Exercise 8: Double Leg Raise to Table Position

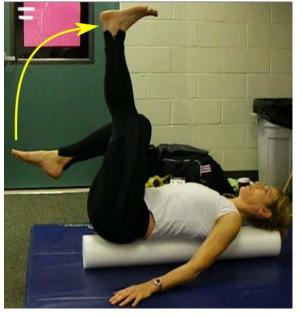
- 1. Begin as in Single Leg raise, with both feet on the floor.
- 2. Bring knees towards chest, raising both legs to table position (right).
- 3. Lower slowly together and repeat.



## Exercise 9: Leg Raise from Table Position

- 1. Begin with legs in table position.
- 2. Raise one foot straight up (right).
- 3. Lower and repeat with same leg.
- 4. When comfortable, alternate legs.

Provide minimal balance with the hands.



www.breakwatersportstraining.com

#### **Exercise 10: Crunch**

- 1. Begin with arms extended overhead.
- 2. Swing the arms in an arc to the sides....
  ...and continue swinging them forward,
  using the momentum to help crunch.



3. Slowly return to starting position, lowering back onto the roller, one vertebra at a time.



### **Exercise 11: Full Sit-Up**

Begin like the crunch,
 but come to a full sit-up position
 with arms straight overhead,
 pause,
 and return slowly to start position.



www.breakwatersportstraining.com

## Exercise 12: Side Plank with Extension

- 1. Begin on side, supported by elbow, upper arm resting on side.
- 2. Bring upper arm in an arc to the overhead position (right).



## Exercise 13: Raised Side Plank with Extension

1. Begin on side, supported by extended lower arm, upper arm resting on side.



2. Bring upper arm in an arc to the overhead position (right).



#### **Exercise 14: Side Kick**

- Begin on side, supported by extended lower arm and lower knee, upper arm resting on side.
- 2. Extend upper leg, high off of the mat, and kick from the hip (like in swimming!)



### **Exercise 15: Reverse Leg Raise**

- Face down. Raise both legs slowly, knees straight. Thighs are off of the mat, as high as possible.
- 2. Lower and repeat.



www.breakwatersportstraining.com

## Exercise 16: Reverse Leg Raise – Kick Apart

- 1. Begin as in previous drill.
- 2. When legs raised to maximum height, kick apart and bring together, repeating that motion without lowering the legs.



## Exercise 17: Reverse Leg Raise – Hamstring Curl

- 1. Begin as in previous drill.
- 2. When legs raised to maximum height, curl feet towards buttocks, repeating that motion without lowering the legs.



## Exercise 18: Reverse Leg Raise – Flutter Kick

- 1. Begin as in previous drill.
- 2. When legs raised to maximum height, flutter kick alternating legs, repeating that motion without lowering the legs.



- 1. Flat back supported by arms and legs, raise one leg.
- 2. Repeat using same leg. When comfortable, alternate legs.





www.breakwatersportstraining.com

### **Cool Down Stretches**

#### **Exercise 20: Downward Facing Dog**

1. Back straight, feel extension and warming stretch in arms, side, legs...



## **Exercise 21: Prayer**

 From Downward facing dog, come to all fours and sit back on ankles, releasing hips over thighs, back elongated and arms extended forward on the mat...



#### **Exercise 22:Swan**

 Slowly rock forward from prayer position, arching back fully but gently to swan position...

