

Core Strength for Swimming

What is “core”?

The core consists of your abdominal, back, spinal rotator, and upper back muscles, as well as your hip muscles and pelvic girdle. Think of core strength as developing functional strength: training muscles and joints to work as they do when we move in the water - multiple muscle groups, multiple joints and complex planes of movement, all at once. Learn to use your most effortless power source: the core body

Why is core important for swimming?

1) Injury prevention

One of the most important keys to preventing shoulder injuries is developing and maintaining your core strength. The majority of the force produced in swimming is done with the trunk and shoulder, however, most swimmers rely too much on their shoulders. Developing a strong core will reduce the stress on your upper limbs to move you through the water and reduce the occurrence of shoulder injuries.

2) Efficiency and power

Efficient swimming means rolling side to side (think of a fish). A side-lying position in the water reduces drag. To develop a faster swim, it is more important to reduce drag than to increase power. When trying to increase power, change your focus from using the arms as the engine, to the core. Core is the engine which drives you.

Exercises

The following exercises focus developing the muscles required to maintain a streamlined body position in the water. For all exercises, be sure engage lower abdominal muscles – Transverse Abdominus.

1) Superman



Keeping the ball stable, lift one arm and opposite leg parallel to trunk. Hold 5 seconds. Repeat 10 times each side.

2) Sideroll Streamline



Start lying over the ball with both hands and feet on the floor. Lift left arm overhead and leg parallel to trunk. Slowly roll onto right side, keeping right arm and leg on the floor. As you roll, your left arm will follow a “swimming pull” motion and finish by your left hip. Hold 5 seconds maintaining a stable core. Repeat opposite side. Repeat 10 times.

3) Plank



With arms underneath shoulders, hold yourself in straight plank position. Ensure your abdominals are engaged, and your low back does not sag. Perform this exercise sideways to a mirror to check your alignment. Hold 20-60 seconds. Repeat 4 times.

4) Plank with twist (streamline)



Start in the plank position (as per exercise #3). Slowly take weight off your left arm and rotate your body to the left. Maintain a straight body position. As you turn, your left arm will go through a swimming pull motion. Hold 5 seconds. Return to the starting position and repeat on the right. Repeat 10-15 times.

5) Ball Plank



Set up as per exercise #3, but with the ball under your lower extremities. To make the exercise easier, bring the ball closer to your knees. For a challenge, bring the ball further towards your toes. Ensure you do not sag in the low back. Hold 20-60 seconds. Repeat 4 times.

6) Leg Lifts



Start in the plank position (exercise #5). Keeping your low back and trunk steady, lift your right leg approximately 25 cm in the air. Do not let the ball roll. Make sure you do not arch your low back. Hold 5 seconds, repeat on the left. Repeat 10-15 times.

Drills In the Water

Focus on working on side balance to improve the roll:

1. Count hip rotations instead of arm strokes per length.
2. Imagine your belly button as a third eye looking from side to side.
3. Practice side flutter kick and rolling side to side drills.

Happy Swimming!

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