



### The Deep Difference

Abdominal (core) training is a popular exercise focus in group exercise. Current research supports that a strong and stable core is the best foundation for improved strength, endurance, balance and agility. Creating safe and effective abdominal exercises in the buoyant environment of deep water is challenging. With the body completely suspended there is little or no leverage (gravity) to provide a force to work against, and stability is compromised without a solid base of support. Additionally there is the complex issue of buoyancy equipment—what, how much and where do we place it on the body to provide the ideal amount of support and assistance for performing abdominal exercises?

### Taking it Deep

Traditional approaches to abdominal training tend to focus primarily on spinal flexion and extension with repetitive exercise like crunches or curls done in a supine or lying down position. As aquatic fitness professionals, we can take advantage of the unique physical properties of water to balance the bias toward flexion/extension and incorporate exercises that lengthen and stabilize the spine. The way we begin is by teaching students to brace with their abdominal muscles while maintaining spinal extension in a vertical position. Then, by adding movement patterns that work against water's resistance, we can further challenge the muscles of the abdomen to lengthen and stabilize.

### HYDRO-FIT Exercises

Try these two deep water exercises with HYDRO-FIT Cuffs and Hand Buoys. In both exercises Cuffs are placed around the upper arms to provide functional support for the shoulder girdle and Hand Buoys are held at the surface for added support and leverage.

#### Exercise Series 1 — XC SKI on Side / Extend and Shoot Through

**Core Task:** Off-Axis Stabilization

To begin, assume a side lying position in the water with shoulders and hips vertically stacked, arms extended straight out and legs straight.

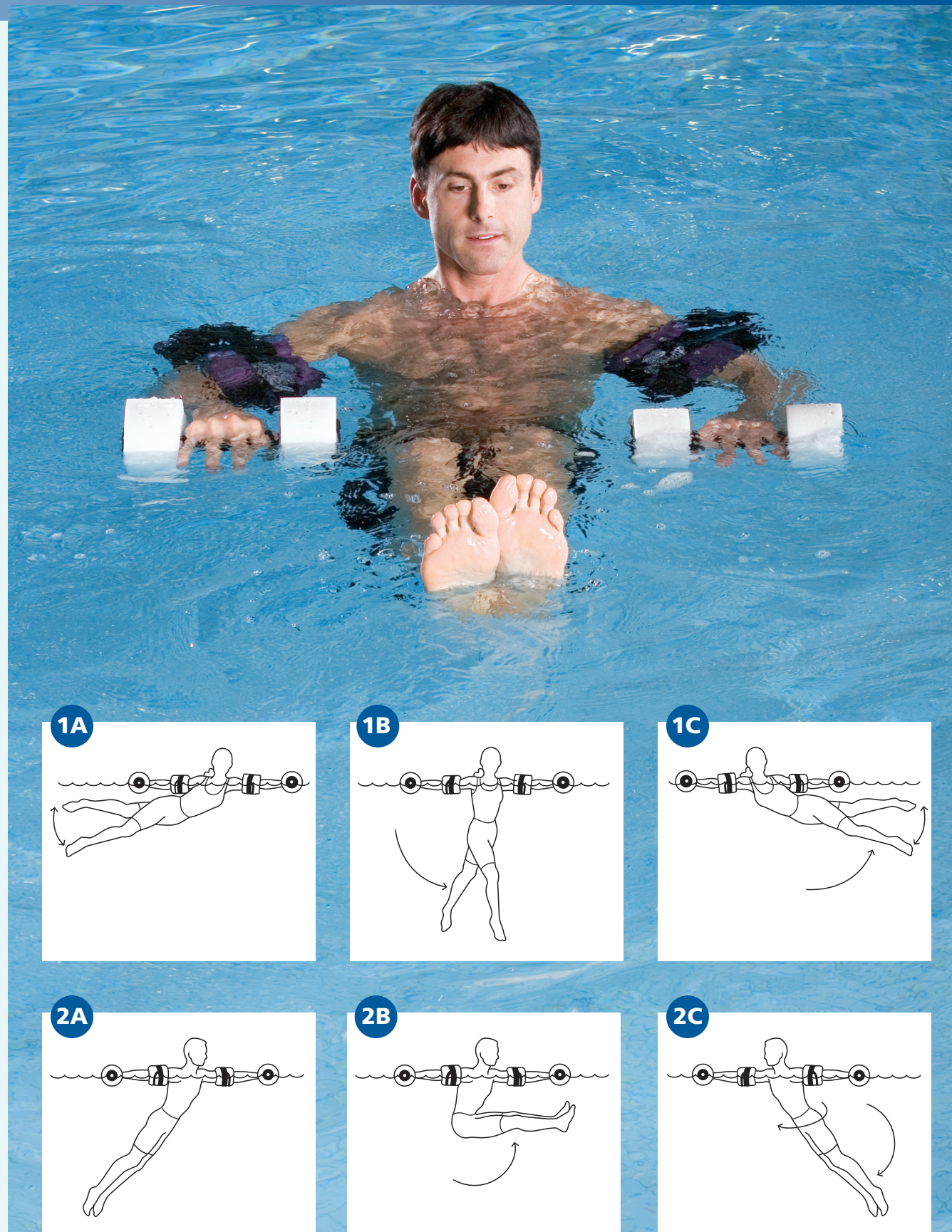
**Exercise Action:** Engage your abdominal muscles and cross-country ski your legs front and back. Maintain a lengthened spine and neutral pelvis as you slowly bring your body to a vertical position and then through to the opposite side lying position. Control your speed and count eight cross-country skies to complete the transition from one side through to the other side. Breathe normally and brace with your abdominal muscles. Repeat the exercise action, side lying to vertical to side lying, for 4–8 repetitions.

#### Exercise Series 2 — JACK KNIFE / Shoot Through and Rotate

**Core Task:** Vertical Core Stabilization with Rotation and Hip Flexion

To begin, assume the same side lying position in the water as Exercise 1 with shoulders and hips vertically stacked, arms extended straight out and legs held straight.

**Exercise Action:** Engage your abdominal muscles and rotate your hips (pelvis) downward and inward. Stabilize with your ribs and shoulders and brace your abdominals as you pike (flex at the hips) and lift your straight legs up and through the water. At the top, extend your legs straight and roll your body to face the opposite direction. Repeat the exercise action in the opposite direction. Breathe normally and brace with your abdominal muscles. Complete 4–8 repetitions.



**“Bracing refers to an isometric contraction of the TVA by contracting the muscles of the abdomen and holding them tight without movement. Bracing is not holding the breath, pushing the stomach out or trying to pull the belly button through to the spine.”**



— By Craig Stuart, President and Founder, HYDRO-FIT, Inc.



### HYDRO-FIT Cuffs and Hand Buoys— A Winning Combination

Water provides an ideal training environment for working the abdominals and challenging the core. Water's natural buoyancy creates instability and water's increased density offers enhanced levels of resistance that both assist and resist movement. No matter what type of class you teach, you'll enhance the experience by helping students engage their core muscles more effectively.

Combining **HYDRO-FIT Cuffs** (worn around the upper arms) with Hand Buoys offers an excellent way to support and stabilize the body in deep water for even more effective abdominal toning. HYDRO-FIT Cuffs are available in both **Classic** (buckle closure) and **Easy-Close** (velcro-like fastening) options.



**HYDRO-FIT Hand Buoys** are available in three progressive sizes: **Jumbo**, **Regular** and **Mini**, as shown at left. For more deep water abdominal exercises, visit [hydrofit.com](http://hydrofit.com) and click on Choreography Library under FOR INSTRUCTORS.