# WHAT WE'RE READING...



#### Article's Month Year | active.com | Matt Fitzgerald | Fitness

NOTE: Some sentiments contained within "What We're Reading" articles may not strictly conform with Simple Again's nutritional outlook. We read articles containing opposing information all the time and derive our nutritional philosophies from the latest science, the opinions of experts worldwide and our anecdotal experiences in the field. We keep an open mind and a strong affinity for fact-based evidence to help make the world of nutrition "Simple Again" for you.

## 3 Swimming Sets for a Faster 1,500 Meters

The 1,500-meter swim that constitutes the first leg of an Olympic-distance triathlon is a unique test somewhat different from the challenges presented by both shorter and longer triathlon swims.

It's short enough so the well-trained athlete can sustain a very high intensity from start to finish, but it's also long enough so even the well-trained athlete must hold something back and pace evenly.

The main cause of fatigue during a 1.5km swim is muscular acidosis, or loss of pH balance in the working muscles, which inhibits further muscle contractions. Thus, you can improve your performance by decreasing your susceptibility to muscular acidosis through appropriate training.

There are two physiologically distinct ways to achieve this effect. The first is to increase your swimming-specific aerobic capacity--that is, to increase the rate at which your muscles are able to use oxygen to release energy during swimming-because aerobic metabolism does not produce the chemical byproducts that cause muscular acidosis. You can also enhance your body's ability to neutralize, or buffer, the metabolic byproducts that cause your muscles to lose their pH balance.



I asked three top triathlon coaches--LifeSport head coach Lance Watson, 2004 U.S. Olympic triathlon team coach Gale Bernhardt and former ITU triathlon world champion Siri Lindley--to share some of their favorite Olympic-distance swim sets, and they generously obliged. Be sure to warm up thoroughly before and cool down after each of these main sets.

#### Lance Watson's Lactate-threshold Test Set

**Benefit:** This main set divides the 1,500-meter race distance into three work intervals of decreasing length. By swimming each at maximum intensity and then recovering, you train your body to sustain a faster speed over the total distance.

#### Format:

800 TT (i.e. time trial, or 100-percent effort) 200 easy/recovery 200 TT 200 easy/recovery 100 TT

If possible, get splits at each 100 (and at each 50 for the 100) to monitor your pace. Also note your finishing heart rate after each timetrial swim.

Alternative main set if you want to trim some yardage: 200-400 TT, 200 easy/recovery, 100-200 TT, 200 easy/recovery, 50-100 TT.

Coach's comments: "This is a set I regularly use with my athletes to mark progress," says Watson. "It is usually on a Tuesday morning after a very easy recovery day on Monday that may or may not include a light swim to tune up. This set helps me determine my athletes' fitness at threshold and race start speed, which is crucial for getting out fast and getting a good draft.

#### Siri Lindley's 300s

Benefit: This main set enhances your ability to get a fast start and then ease into a sustainable race pace.

#### Format:

8 x 300

Line up side-by-side with a partner of similar ability. The first 100 is done as fast as you can go, as in the start of a race. On the second 100 you hang on for dear life. If one athlete is slower than the other he can pop in behind the quicker swimmer and do whatever he can to hang on the other's feet for the second 100. The third 100 is an easy recovery swim. Rest for 45 seconds after the easy 100.

Alternative set: 3-4 x 300

Coach's comments: "This set is very race-specific. Get out fast and you can get away from the chaos and have a much quicker swim. If you go out too slow, you may get stuck behind swimmers that are slower than you."

#### **Gale Bernhardt's Aerobic Set**

**Benefit:** The first requirement for success in an Olympic-distance triathlon swim is a solid foundation of swim-specific aerobic fitness, and this main set provides it with a few little twists, such as lead changes and fist swimming.

#### Format:

900 steady swim. Change who leads the lane each 75
1- to 2-minute rest interval (RI)
3 x 600 steady swim, alternating 100 fist drill/100 swim
1- to 2-minute RI
400 pull (paddles and buoy)
1- to 2-minute RI
200 pull (buoy, no paddles)
1- to 2-minute RI
6 x 50 backstroke on 1:10
Alternative set: Cut everything in half

Coach's comments: "This workout is most fun if you swim the 900 with three to six other people that swim roughly the same speed," says Bernhardt. "Rotating the lead position makes the time go fast and help you practice drafting.

"The broken 600, alternating fist swimming and regular swimming, forces you to use your entire arm to catch water and can help increase cadence. Don't cheat on the fist portions. When you open your hands it feels like you're wearing paddles." Finally, says Bernhardt, "I like to add backstroke at the end to work a few different muscles."

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