

Triathlon Swimming in a Nutshell

The swim portion of a triathlon is usually one of the biggest challenges for both newcomers and veterans in the sport. The swim of even the shortest sprint event presents a host of difficulties. You may find yourself surrounded by thrashing bodies, gasping for air, when someone inadvertently dunks your head. Or a current or riptide could sweep you a hundred yards off-course. You could lose sight of the marker buoy and swim the wrong way. You could cramp. Your wetsuit could be too tight. Your goggles could fog up or fill with salt water. Or any other combination of race day nightmares could take place. And that's just for starts!

And now that I've got you good and properly freaked out...how can you avoid these problems?

Simple. Preparation and practice. If you want to do well, remain calm, and enjoy the experience, you'll need to practice swimming laps and loops, and you'll want to prepare for the specific event you'll be competing in. Showing up at the starting line with a new pair of goggles and zero laps in your body, then asking somebody to point you in the right direction may sound like fun over beers on a Friday night, but on race day morning it's a different story!

Before we get into the meat and potatoes of swim practice and swim technique, I'd like to point out that often the best and simplest method to get into good swimming shape is to join a local master's team and attend practice regularly. Working with a proficient stroke coach is also very beneficial. If your master's coach can work with your stroke, you are in luck. If not, find a good swimmer or stroke coach and let them work with you. Spending a little extra time and money to iron out the kinks in your swim stroke early into your triathlon career will save you a great deal of frustration and will reap big rewards down the road.

Now that my coaching disclaimer is out of the way, let's break it down.

There are three fundamental aspects to swimming fast in open water racing and you need to have a good grasp on all to swim well in triathlon. Namely, stroke technique, interval training, and site-specific preparation, in that order.

Stroke Technique

Stroke technique has been well documented in a number of publications in recent years, and I'm only going to summarize some of the basics about front crawl, or freestyle, in this article.

In order to swim fast, you must first swim well. A few people are strong enough to barrel through the water with horrible technique, but that is inefficient and a waste of energy, and you'll need all the energy you can spare in this sport (since you still need to bike and run afterwards).

There are four basic parts to the swim stroke – hand entry, underwater catch and pull, hand exit, and recovery.

We'll start with the hand entry. Your hand should enter the water about 12 inches in front of your head, then thrust forward as you roll your shoulder to fully extend your reach.

You'll then start the underwater catch and pull. Ideally you should slightly tilt your hand at the beginning of the stroke -the catch- so that it is approaching a perpendicular angle to the bottom of the pool. As you pull your hand towards your body (or pull your body towards your hand), your hand and forearm will apply force to the water and you will be propelled forward.

Meanwhile, your upper body should roll to allow your shoulder to turn with your arm motion. As your hand and arm go under your body you may want to move them in a slight S pattern while maintaining a near-perpendicular hand-forearm angle to the bottom of the pool (in order to catch as much water as possible). As your hand and arm pass through the midline of the underwater pull stroke (your arm is straight down under your shoulder, ie, perfectly perpendicular), you will no longer be pulling your body through the water; you'll be pushing it. This part of the stroke is slightly weaker than the 'pull' but is not to be ignored. Continue to push the water while your hand maintains an angle reasonably close to perpendicular.

Once your arm is almost entirely behind you (parallel to the bottom – hand near hips), bend your elbow from the shoulder and lift your arm out of the water. You can give the water one last push with your hand (hand exit) and then begin your stroke recovery.

You'll want to keep your elbow higher than your hand, and run your hand forward in an imaginary straight line to the point where your hand will re-enter the water, 12 inches or so in front of your head. Do not flail your arm around and don't swing your hand higher than your elbow. That may feel faster, but I can guarantee you it is functionally slower and spends more energy. Remember this: Straight-line recovery. Practice it.

Meanwhile, you've got those big cyclist-runner legs down there just dragging along. In triathlon you'll want to use a two-beat kick to maintain a rhythm with your stroke and keep your lower body from sinking. Two-beat kick means you kick one time with the opposite leg in synchrony with your hand and arm entering the water at the beginning of the stroke cycle. The kick will give you a bit of additional forward propulsion as you extend your hand forward (some people have a slight pause here, just before they start their pull). Anyway, you can kick more or harder to go a bit faster, but you need to save your leg strength for the bike and run, so use your judgment. I kick a good bit in short events but barely at all in long events.

Interval Training

Now that you know what a proper stroke is all about, how do you translate that into fast swim splits? Get in the pool and swim! In swimming, consistency and frequency are crucial. If you have the time and motivation to swim five times a week, go for it. But just swimming back and forth isn't good enough. You need to break up those swims and complete interval workouts with various levels of effort. For example, instead of swimming 60 x 25 yard laps straight (1500 yds), try:

- 400 yard easy warm up
- 6 x 2 laps (50 yds), one lap easy, one lap fast, with :30 seconds rest between 50s
- 6 x 4 laps (100 yds), at 85% max effort, with :15 seconds rest between 100s
- 200 yard easy cool down

The purpose behind swim intervals is to adapt your body to higher intensity efforts and make you more comfortable with hard, fast racing, since, after all, triathlon is a race. If you're training for sprints, make sure your main interval set is between 500-1000 yards. For Olympic distance, keep it between 1000 to 2500 yards. For Half-IM and IM you may want to swim sets of up to 4000 yards in distance at lower intensities. In addition, when you swim intervals, make sure to continue to pay attention to your stroke technique. Remember, swimming hard with poor technique just teaches you to swim hard, poorly. Swim well - you'll smile more!

Now you know how to swim correctly, and you know how to train correctly. Next we'll discuss how to race correctly.

Site Specific Preparation

Each triathlon has its own set of challenges. Around these parts, you may be swimming in a bay, a lake, a gulf, a river, or an ocean. You may need to be prepared for any of the following – wind chop, waves, riptides, cold water, hot water, sand bars, jellyfish, and other swimmers. You'll want to swim in a straight line. You'll want to avoid getting smashed around by other swimmers. You'll want to remain calm and in control of yourself.

To do that, get out to a convenient open water venue and practice. If the race is in the ocean, get comfortable swimming through the break. In a lake – make sure you're prepared for wind chop. I suggest swimming with a buddy so you can keep an eye on each other, and stay out of areas with high boat traffic and or other dangers. If you can set a swim marker, practice sighting and swimming a straight line. You can lose vast amounts of time swimming in a zig-zag fashion if you are unprepared.

If it is a wetsuit legal swim, make sure you've tried out a few different models and are wearing a wetsuit that is snug but neither too tight nor too loose. Both cause problems. Practice in your wetsuit before you go to a race. Make sure your goggles are comfortable and don't leak too much. In other words, prepare in advance.

Finally, when race day arrives, remain calm. Don't freak out. Don't go all out for 100 yards and then blow a gasket – dial in your pace from the beginning. Don't get upset when you get bumped, hit, and smashed around on occasion during the swim. Remember that the person next to you didn't mean it and is just trying to get from point A to point B, like you. If you're a strong, confident swimmer, line up in front and blast off when they say, "Go!" If not, line up off to the side or back and let the more experienced athletes go ahead.

If you stick with it, there will be a day when you line up in front as well.

And that, my soon to be fish-like friends, is triathlon swimming in a nutshell. So get wet, have fun, and I'll see you at the races!

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