Efficient Open Water Swimming
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Preventing Cross-Over at Your Stroke Entry

Crossing over the center line in front of your head, at the stroke entry, compounds a number of reactions that limit the efficiency of your stroke. An improper stroke entry results in improper body rotation, diminished propulsion forward, “fishtailing” or hips and legs swinging side to side, and potential shoulder injury. Most swimmers with this problem do not realize they swim this way. These inefficiencies are exaggerated when open water swimming, particularly in rougher conditions. Since there are many simultaneous components or motions to a proper swim stroke, I will only address a few major symptoms and solutions to correcting cross-over.

A major component of proper swimming is a balanced streamlined body position. Think action – reaction, cause – effect. Any action or motion that causes your body to move from a balanced streamline disrupts your energy flow that propels you forward. Proper stroke entry is in line with your shoulder, palm down flat hand, finger tips spearing the water.

The most common mistake I see is a thumb first entry that causes the hand to slice across the center-line, then trying to correct by pulling laterally to the outside. Any motion or action that does not contribute to a forward reaction and disrupts the “energy line” is wasted energy. A lateral sweep across the front of the body pushes the body to the side, often seen in swinging hips and feet, and impinges the shoulder resulting in a painful shoulder over time. One solution is think “pinky first”. Because you cannot see your hand enter as you swim, thoughts that produce a feeling of change bring you toward the goal motion. For example, “pinky first” doesn’t not mean karate chop the water upon entry, but to become aware of trying to enter pinky first which results in converting from the thumb entry to a corrected flat, palm down entry. Because you are ingrained to the feel of thumb first, an exaggerated feeling of pinky first results in an actual flat entry which is our intended goal. It all evens out in the end.

Another impediment to efficient propulsion forward is swinging the hand and arm across the front and entering at or past the center-line. This is often accompanied with a dropped elbow. I see two main potential causes to this action. One may be that a swimmer is compensating for an imbalance or improper timing after a breath. Another is “muscling” through the stroke. Although you are engaging virtually every muscle in your body, swimming relaxed is a key to a fluid efficient stroke. How often do you comment he or she makes it look so easy when you see an elite level athlete performing at top speed? As you concentrate on training and swimming hard and fast, the tendency may be to tighten up, particularly your shoulder, upper body areas. A solution is to maintain good relaxed posture (7 or 8 in a scale of 10(when standing at attention)), gently hold your shoulders back and gently press your upper chest into the water. This brings your body into proper balance and clears the muscle path for your arm and hand to swing naturally forward in line with your shoulder. Your hand position is flat, leveling off a few inches under the surface (in line with your submerged shoulder rotated downward), fingertips angled slightly downward ready to begin the catch phase of the stroke.

Breathing is probably the number one motion that disrupts balance in the water. A late breath can cause a swimmer to rush a recovery and create an idea of needing to get the hand around quickly, to some off balance compensating position, causing an over stroke past the center-line. Worse than that, is pausing just before entry, placing the hand in what is believed to be the perfect entry
position, disrupting timing, balance and efficiency. The breath should be taken with your head in the water, rotated with one eye below the surface. It should be completed by the time your hand is passing your face during the recovery. In other words, your face should be facing down back in the water by the time your hand begins its entry in line with your shoulder. So you begin the stroke and catch phase in a streamlined position.

A drill we use to practice and reinforce proper entry is swimming with one hand holding the front of a kick board while practicing a perfect stroke with the free arm. This gives you an opportunity to literally see what motion your arm takes during the recovery and where to place your hand in the entry. Equally important is this drill allows you to “feel” what the proper motions are so, when you are swimming and can’t see, you will know what proper stroke feels like. Keep in mind how much you may think you are entering “pinky first” in relation to how flat your hand is actually entering. Remember you have been repeating improper technique and that is what your muscles perceived as normal. Change feels different and sometimes odd until it is properly learned by your muscles.

Another drill that exaggerates the recovery and entry is fingertip drag. By dragging your fingertips in the water along your body during the recovery, you slow down the motion to note the path and placement of your hand and arm. Another consideration is to practiced relaxed neutral shoulder action and leading the recovery with your elbow first. A relaxed shoulder and arm with a forward elbow allows your fore arm and hand to “swing forward” in a pendulous motion, finding the entry point in line with the shoulder. Enter the water with a relaxed spearing motion guided by proper body position rather than searching for the perfect entry point. Another note, fingertip drag is used to also lengthen your stroke by incorporating a catch-up motion. Catch-up should not be considered touching hand to hand, but catching up in 75% - 90% of your stroke. Touching hands pulls your hands and arms to the center-line, setting you up for potentially harmful cross-over. Catch up but keep your hands in line with your shoulders.

Practicing drills properly to reinforce efficient technique has more benefit to swimming long distances faster, than swimming more distance with improper technique. Particularly when combined with the natural forces and conditions in open water, efficient technique enables you to tap reserves needed for rougher open water swimming. Practice with a coach or view video of your swimming to better analyze what you are doing correctly and what you can improve.

As you practice drills, other nuances carry over to open water swimming. Such as, the “spearing” action at the entry can be imagined as you cutting your way through waves and chop to the finish line. As always, learn the feel of swimming correctly. You have few references in open water swimming, so knowing how you feel swimming efficiently is your best guide to better results. Whatever you can do to develop a smooth efficient stroke, dividends will be paid as you complete each kilometer of an open water swim.