

The Oft Ignored but Highly Important Elbow

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Following practice one recent Thursday, I announced to my Master's team that our Saturday workout would be titled "Elbow Day". Although they have come to expect strange announcements from me, this one was especially confounding, I believe. Whether expected or unexpected, they all arrived on Saturday to a practice devoted specifically to technical work involving the elbow on all four strokes.

Watch any elite swimmer in the pool and you quickly realize that a great deal of their talent and speed is derived from their technique. While watching the preliminaries of the 200 freestyle at this year's Ultra-Swim Meet in Charlotte, I had the privilege of watching many of the top freestylers in the world compete. One of the major things I noticed that differentiated the early heats from the last heats (which featured many Olympic medalists) was the difference in technique. All were great swimmers, but in the later heats, the strokes were much more efficient. One of the major differences I noticed was the height of elbows on the out of water recovery.

Proper technique is easily one of the most important things in competitive swimming. A technically proficient stroke most often means a more efficient stroke and in a race, greater speed. At the same time, proper stroke technique also lessens the possibility of injury. After all, who has not had their arm slapped during a freestyle set by somebody with low elbows and a hand that crosses the middle of the lane? I have seen some of the strongest men I know reduced to tears from such an injury.

Outside of freestyle, we most likely do not think of the elbow during our stroke work. And yet, a fundamental understanding of its purposes can easily be the difference between a good stroke and a great stroke. Consider the elbow in all four strokes:

Freestyle: We are all familiar with the importance of a high elbow on the out of water recovery. Under the water, keeping a high elbow greatly assists in a more powerful down stroke and when incorporated into the full stroke, can easily subtract a couple of strokes per 25 yards.

Backstroke: Masters swimmers who did not come up through the ranks of age group swimming are highly likely to swim 100% of their backstroke with a straight arm, by either performing a circle or simply slapping their arm to their side after entry. Watching an underwater video of Natalie Coughlin's backstroke shows that her underwater recovery is very similar to freestyle. With a good rotation, she gets a good bend of the arm upon entry and pushes the water towards her legs, shooting past the hip.

Breaststroke: A novice breaststroker typically swims with an arm stroke that looks more like someone trying to swim to the bottom of the deep end. An efficient breaststroke can be broken into three distinct parts, with the beginning and ending being in the glide position in front of the head. In the first part of the stroke, if we measure from shoulder to elbow, the arms should come out at a ninety degree angle or slightly less. This provides less strain on the shoulders and places the arms and hands in good position to move to the second part of the stroke when the arms are brought in and the fingertips meet.

Butterfly: One of the greatest challenges in coaching an age range of swimmers from 5 to 75 can be summed up in one word: clearance. We are all familiar with what our arms must do underwater to draw a letter S with both arms. The out of water recovery is another story. Technically, we do not want to necessarily have much bend in the arm. However, the positioning of the elbows is important. By pointing our thumbs downward and facing our palms to the rear, our arms are more likely to get more clearance from the water during the recovery (raised

elbows). I equate it to being a marionette controlled by a puppeteer, with strings attached to the elbows and having them pulled around during recovery.

The importance of proper technique in swimming should never be downplayed. A swimmer can swim thousands of yards at an elevated heart rate, yet with poor technique, they are at greater risk for injury and not necessarily improving as a swimmer. There are many facets to focus on with each stroke and the elbow is simply one facet. Although it offers almost nothing as far as body strength, the importance of its use must not be overlooked in training and drilling.