



The Starting Block... *From the State Office* **Your Ohio LMSC Newsletter**



The State of the LMSC

By Cody Rasmussen

The Ohio Local Masters Swimming Committee (LMSC) is going through exciting changes and is doing its best to give back to the Ohio Masters swimming community. Check out the most recent:

1) A new “Best Quality Team Award” has been created and is mandated for all Masters meets held in Ohio. This award recognizes teams without regard to size; it is given to teams with at least four swimmers who score the most points per person at a meet. This award will add a level of team skill and will account for more than just team size.

2) The Ohio LMSC will provide two grants each year to motivated coaches to attend the annual American Swimming Coaches Association World Clinic. The grant is intended to improve

our state’s level of coaching knowledge and will improve the LMSC as a whole. These coaches will be responsible for hosting and running clinics for the LMSC. If you’re interested in applying for this grant, please E-mail me at OhioChair@usms.org

3) The Ohio LMSC has held several clinics recently. We held a swimmers clinic and a coaches clinic in October and a swimmers video clinic in January. We had a great turnout for the swimmer clinics where we had the opportunity to hold presentations on each stroke and film swimmers above and below water. We hope to make these clinics an annual event to better serve our Ohio LMSC swimmers!

We have a great newsletter for you this spring. We have several articles on technique, training, nutrition, and motivation. Don’t wait, turn the page now!



Photo courtesy of Katie Rasmussen

Charlie Raper is Ohio’s own “insane-swimmer” since he enjoys to swim such events as the 1650 IM and 500 fly at local Ohio swim meets.

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UPCOMING MEETS

9 Feb 08: Miami Redfin’s Mardi Gras Swim Meet, Oxford, OH

8 Mar 08: SouthWest Ohio Masters Swim Meet, Milford, OH

15 Mar 08: Anderson Barracuda’s St. Patrick’s Day Swim Meet, Cincinnati, OH

5 Apr 08: Great Lakes Challenge, Bowling Green, OH

12 Apr 08: Ohio State Masters Championship, Columbus, OH

UPCOMING LMSC MEETING

We will hold our annual LMSC meeting on 15 March at 9:00 a.m. at the M.E. Lyons YMCA. Come to the meeting if you want to get involved within the Ohio LMSC.

AUTHORS NEEDED

We need contributors for our next newsletter. It doesn’t matter your level of experience or skill, we want to hear from you! E-mail Jim at OhioEditor@USMS.org to submit an article. Feel free to write an article on almost anything. We will most likely accept it!

Fun: The Essential Ingredient

By Franklin Halley

Why on earth would anyone come day after day, month after month, year after year to complete challenging workouts? I would argue that it's because there's always a percentage of fun involved and usually, it's a large percent.

It's fun being an older athlete and staying in shape, it's fun ex-

periencing the encouraging spirit to succeed, it's fun to push past our self-perceived limits, it's fun to see the smiling faces of our teammates, it's fun to laugh in the locker room after a hard workout, and it's fun to go home and crash and let the endorphins take over.

Yes, I admit there are days when I wonder if I really should attend practice. My brain has lots

of excuses... I'm tired, my workday was too long, I'll just train later in the week, the water is too warm, the drive is too far, I'm too old for this... and then I remember... I love this, it will be fun... and it always is.

So, the next time your coach gives you an especially hard set, remember... this is fun!!

Nutrition Tips: Can Swimmers Get Dehydrated?

By Susan Keely

It's humorous to think of a swimmer becoming dehydrated when our playground consists only of water. Unfortunately, it does happen, and many swimmers are surprised when it does. This is because swimming makes us feel thirsty later than when we bike, run, or do yard work.

Feeling thirsty is the last sign of dehydration. If you feel thirsty, you have already created a water-intake deficit and have put yourself in a bad situation. Heat is carried away from the body in the form of sweat.

Swimmers typically feel dehydration later because the surrounding water masks the feeling of excessive sweating. Worse signs of dehydration include a lack of sweat or hot and clammy skin. This is also difficult to detect because of the water. Swimmers will typically get dizzy or pass out due to heat exhaustion before they even know they are dehydrated.

Don't let this happen to you! Here are some helpful tips for staying hydrated at the pool:

– Drink 16 oz. of water 45 minutes before exercise to put yourself ahead of the game.

– Drink 8 oz. every 15-20 minutes of exercise. That's a whole 36 oz. by the time a Masters workout is over!

– Consume carbohydrates with your fluids such as Gatorade or Powerade to replenish glycogen stores in workouts lasting more than an hour.

– Down a drink with a protein supplement for workouts lasting 90 minutes or more to sustain your energy. Your body uses up fluids and accessible glycogen stores in this amount of time. Try Accelerade or Heed.

After working out, continue to consume water to keep your body hydrated. It's difficult to drink too much water, but be careful after long workouts because too much plain water will continue to flush essential

salts out of the body. A snack that is full of water and delicious in the summer is watermelon (hence the name)! Stay away from drinks such as soda (even diet), coffee, extra large smoothies, and blended coffee drinks. Even though these drinks contain water, it requires even more water to absorb the caffeine and sugar that comes with it. Remember: think about your drink!



Age Doesn't Really Matter

By Tom Herringer

In the November 18, 2007 *New York Times*, the following article was published, "Torres is Getting Older, but Swimming Faster." Reading this article the day after the Miami RedFin meet was especially inspirational as my muscles reminded me that it had been over 23 years since my last competition.

What is so fascinating about this article is that Dara Torres is currently 40 years old, a 9 time Olympic medalist who competed in four Olympics (1984, 1988, 1992, and 2000) with plans to go to Olympics again in 2008. Her times have gotten better over time, not slower! Check out her stats:

	50 M Freestyle	100 M Freestyle
1984	25.61	56.36
1988	25.59	55.30
1992	26.01	55.48
2000	24.63	54.43
2007	24.53	54.45

This shows that you really can get faster with age. This is great proof that age doesn't always hold you back from improving. In other words, we can't always use our age as an excuse with our coaches...

An even more fascinating fact is that Torres did this on a five day schedule of four hours per day. This is actually much less than what an average Olympic swimmer does. Her four hours of training is split between 90 minutes of swimming (duh!), 90 minutes of dryland work outs, and 60 minutes of stretching.

Interestingly, Torres doesn't work out with weights every other day, like many of us did back in college. She uses a much more modern routine which consists of "Swiss balls, medicine balls, bands and resistance cables...the goal of her four 90-minute strength sessions each week is to stimulate her nervous system and strengthen her core muscles through a variety of multi-joint movements." And last but not least, she spends an amazing one out of the four

practice hours a day stretching.

Not all of us can afford to spend four hours a day nor do we have the luxury of a receiving \$100,000 per year from corporate sponsors. However, it should be clear that there is a very strong relationship between swimming, dryland and stretching. In addition, Torres makes it clear that we really can get faster with age.



Who says we can't do it all? Torres shows us it's more than possible.

Motivation Tips: "Why Do I Swim?"

By Ginny Miller

Have you ever stopped to think about *why* you swim? There are many potential reasons – you love the water, swimming keeps you in shape, it's that step-child-leg of the triathlon you love so much... Or maybe you still have something to prove, you thrive in the environment, or the team

draws you in. The list goes on, and chances are very good that any one reason is not the complete answer.

It is important for you to understand why you swim; once you fully recognize why you are drawn to the pool each week, you can create goals for yourself. With established goals, any time you are confronted with the de-

pressing thought of "why am I here?" you have a simple answer to get yourself back on track. Take, for example, a long hard set of 100s. Halfway through you wish it were over. You are tired and just not into practice at that time; the intervals seem impossible. Someone without clear direction might just give up and swim along, just doing the minimum to

make it to the end of the set. You might even question your sanity.

That's when your answer to "why swim?" will save you. Start thinking about that last race when you were out-touched, or about that next race that will require every ounce of effort you can muster. Imagine those extra calories you can burn by exerting yourself to the fullest. Or even jump forward a few hours and think about how you will be happy with yourself for trying your hardest during that one particular set.

Consider that person in the pool who needs external motivation and looks to you to provide it,

because you two often swim together. Remember, you may not be alone in being unmotivated, but the goal is to not let others catch you in that state. If you cannot motivate yourself internally, let others do the job for you – if you cannot swim for yourself, swim for everyone else who is there to work hard. In short, don't be the teammate who clearly doesn't care.

Each person has a unique set of reasons for swimming. I swim for numerous reasons – to detail them all would take several pages. I love the water, the competition, improving my times,

learning more about the sport, getting a good workout, and seeing my friends. There have been times in my past during which only one of those reasons even remotely applied, but I pressed on. Swimming is a part of who I am and I could not let it slip by the wayside.

Take the time to think about why you swim. Talk about your motivations with your friends and teammates. In the end, it will benefit both you and the team as you learn where your teammates are coming from. That next hybrid set might not seem so difficult.

Evolving Your Training: The Hybrid Method

By Cody Rasmussen

One central philosophy I believe in as a coach is that all swimmers need diversity in their training. This is an evolution from classical training methods. It is difficult to implement in a Masters program because so many swimmers have earned positive results from using classical training methods. I propose that new methods will prove even more successful. Swimmers need to be open-minded if these methods are to work properly.

It is an old philosophy that endurance swimmers only need to swim distance and sprinters only need to swim short stuff. This old philosophy has been proven wrong many times over.

The first group to disprove this philosophy was the Irvine Nova swim team in the early 1990s. They added a high level of qual-

ity training for all swimmers. It did not matter if they were distance swimmers or sprinters; they practiced with a large amount of quality in addition to developing and maintaining base endurance. It was a completely different way to think about training for distance events. The largest amount of success here was observed for distance swimmers who had experienced a plateau with respect to their best times.

New quality type workouts pushed them beyond their plateau with resounding success. After this, the United States transitioned to pure quality workouts. Regrettably, this was an overcorrection that was interpreted incorrectly.

A large team from Mission Viejo, CA helped spark the change back to distance glory. They considered Irvine Nova's success

through quality swimming but maintained some of the old philosophies. Mission Viejo tried to find the magic balance between quality and quantity. They observed great success with both sprinters and distance swimmers. The largest success observed was with the sprinters who had a hard time improving their best times. The aerobic training regiment added to sprint training pushed these athletes past their plateau.

If you're a distance swimmer, you will also need to focus on quality swims. If you're a sprinter, you will also need to develop your base endurance. Remember to be open to new training methods. As long as you work hard during aerobic and anaerobic workouts, you will improve at a faster rate than if you used traditional training methods.

Training Tips: Objective Measures in Swimming

By Cody Rasmussen

The most common question in the sport of swimming is: “How do you feel?” We are forced to rely on how we physically feel to judge our level of effort and stroke technique. It is impossible for us to watch our technique at every point in our stroke, so we are stuck relying on subjective physical “feelings” to judge our performance. Because such feelings can be unreliable, we must use objective measures provided by external sources.

Objective measures are used by the best swimmers today. Using coaches, peer feedback, video feedback, heart rate, stroke count, kick count, swim times, and pace times will help keep your evaluations consistent and objective. These methods are commonly used by advanced swim teams, resulting in a significant number of swimmers who are familiar with these measures and aware of their importance.

Unfortunately, many Masters swimmers do not employ them even though they know they should. This results in a swimmer who evaluates his or her stroke technique and training methods only in an internal and subjective manner. That swimmer does not improve at a reasonable rate and may quit after a short time because he or she becomes disgruntled after not seeing the desired improvement.

Using the suggested methods will help you properly evaluate your training and

technique and will help you improve at a rate that will keep you motivated throughout your swimming career. It takes work, but it’s more than worth it.

Observer Measures

Using an outside observer is the best external measure. This method may include a coach, a swimming peer, or a video camera. These resources are available to all swimmers.

Working with a coach is perceived as mandatory for youth and college aged swimmers. Unfortunately, for some Masters swimmers, the use of a coach has become optional. This is discouraging because coaches provide an experienced and educated background that is essential for every swimmer’s development. A coach provides feedback on your stroke technique and training methods. A coach knows what a perfect stroke should look like and how a swimmer should train for his or her specialty. The importance of a coach is not to be underestimated, but in some cases, working with a coach might not work out for the best. This might result from low coach availability or from a lack of quality coaching skill in your local area. Using other observational methods becomes valuable in these situations.

One of these methods is having a peer watch you swim. There is significant value in this method because a coach might not notice everything you do or you might not have a coach available. In these cases, having



Photo courtesy of Tracey Loper
One method of gaining objective measures is by having a coach observe and deliver feedback on technique, shown, above, by Coach Susan Keeley.

a friend, a spouse, or a team member watch you swim is a good way to get feedback. Even if you do have a great coach, getting peer feedback can only add to your swimming development or your understanding of the sport. Make sure you discuss any contradictory feedback with an experienced swimmer before implementing changes.

Another common observer tool is video. Most swim teams tape their swimmers in action at least once per season. This tool is used by the best coaches and swimmers; who watch video to help each swimmer internalize his or her stroke technique and to truly understand what needs fixing.

A common problem with video is that many swimmers just review their technique

above water. It's absolutely critical to review stroke technique below water since this is where the majority of the forces act on the body. A stroke technique error above water is nothing compared to an error below water.

Waterproof cameras are becoming cheaper, and there are some devices that consist of a small camera attached to a long pole. Your team should consider buying one to get full underwater video, as it will pay for itself 20 times over. If you do not have a waterproof camera, make sure you get video at angles that show the most underwater coverage and do not cut off the underwater portions of your stroke. Getting solid front, side and top views will help you review your strokes at the appropriate level.



Photo courtesy of Tracey Loper Coaches Cody and Ginny tape swimmer technique in order to allow swimmers to review what their strokes look like.

Quantitative Measures

Quantitative measures are used by most swimmers today. Many swimmers can tell you how far they swam and what interval they held. However, most Masters swimmers stop there and do not use the vast array of other available

quantitative measures. An Olympic-level swimmer can tell you at the end of a main set, their heart rate, stroke count per length, how many kicks they took off the wall, and what times they held for the entire set. Not only do world-class swimmers work hard physically, but they work hard mentally to monitor their performance. This is something that Masters swimmers can easily implement into their regular work outs .

The clock doesn't lie. It's an old cliché, but it is always relevant. As swimmers, we rely on the pace clock extensively. At a minimum, swimmers use it for interval send-offs. It is strongly suggested to use the pace clock for both swim times and pace times. A swim time is defined as the time it takes you to complete an entire swim from when you start to when you stop. A pace time is defined as the time you hold per 50 or per 100 during longer swims. For longer sets containing swims of 200 yards or more, looking at the pace clock during a breath to obtain your pace times can help immensely. Looking at the clock consistently provides pacing information throughout each swim. This is essential to help monitor your effort and to help you learn how to evenly pace longer swims. It is important to get in the habit of watching the clock at all times.

Pace times can also help you count laps. For example, if you swim 500 yards of continuous freestyle and you hold 1:15 per 100 you'll know that you should finish your swim in around

6:15. This becomes even more useful with longer distances.

Getting swim times is a good mark for judging speed, but times can mislead you if you do not have additional quantitative measures. Your speed is formed through effort and technique. Some people blame bad times on poor effort, which is not always the case. Poor technique may be a primary cause of slow swim times. To work on this, monitor your heart rate and stroke count per length. Heart rate provides information on your effort level and stroke count tells you if something is different with your technique. Consult your coach or an experienced peer for stroke technique assistance since they can tell you if the technique change is temporary or permanent or if the change helps or hurts your stroke.

As an example, suppose a swimmer holds 1:12 per 100 for a repeat 100 set. The swimmer normally has a heart rate of 160 beats per minute and normally takes 15 strokes per length. If that swimmer starts to swim a similar set of repeat 100s with an average of 1:16 (4 seconds slower than his typical pace), he should examine his heart rate and stroke count. If the swimmer has a heart rate of 160 beats per minute and takes 17 strokes per length, then that swimmer should realize that something might be wrong with his or her stroke technique. In this case, the swimmer should consult the coach or teammates for technique feedback.

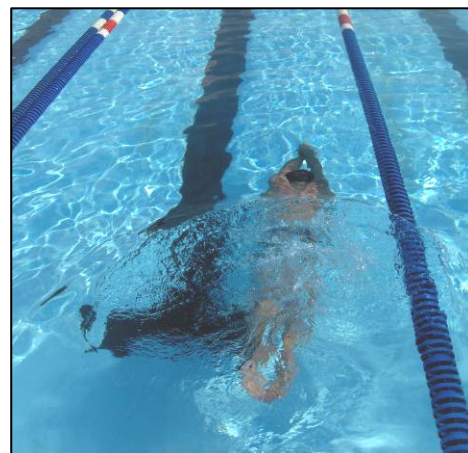
Another stroke technique measure is counting the number of kicks per stroke or counting

the number of kicks off the wall. Kicks per stroke can notify a swimmer if he or she is kicking too fast or too slow, which can help monitor aerobic or anaerobic effort. The number of kicks off a wall teaches you how to get proper distancing before beginning your pull.

Conclusion

Using external objective measures is difficult at first, but they are something every swimmer should learn to do habitually. Getting the proper constructive criticism is a

commonly missed ingredient in developing as a swimmer. Allowing a coach or peer to observe and/or videotape your swimming, provides feedback on your stroke technique. Getting quantitative measures during every swim, set, and workout provides feedback on your effort and training. It can also notify you if something is incorrect with your technique.



*Photo courtesy of Tracey Loper
Jason Hill pushes off the wall in streamline position, counting his kicks. Taking such a measure will ensure you get proper distancing off the wall before beginning your pull.*

Technique Tips: A Better Freestyle

By Trevor Warren

If I had a nickel for every time a coach has recounted to me the importance of “fundamentals” in athletics, I could have paid someone else to write this. Not unlike meddlesome advice from our parents, there is some inkling of truth to the old cliché. World -class competitors and novices alike may only hope to achieve desired performance goals through solid mastery of proper technique, thereby making it prudent to offer a discussion of such technique with the intent of facilitating internalization.

We shall begin with the forward crawl, the primary stroke for most. The stroke basis is spanned by five essential components. While a few nontrivial variations exist, the primary techniques are largely consistent for all strokes. These fol-

low in order of importance:

1. Body position
2. Hip rotation
3. High elbows (underneath the surface)
4. Distance per stroke
5. Proper kick

Body position is the most important component of all strokes. Proficiency therein is a necessary prerequisite for mastery of the other four components. Subcomponents of body position include the head, hips, and thorax. One should maintain head position such that the eyes look downward and the water breaks on the crown of the head. Hips should remain as near the surface as possible. This configuration minimizes the body’s profile and reduces drag in the direction of flow.

Likewise, the spine and thorax should remain parallel to the plane of the surface of the water. Avoid any tendency to achieve a false body position by arching the back, as this may lead to injury and negate the drag reduction inherent in the proper form.

Hip rotation clearly occupies a place of relative importance among the fundamental technique components of the crawl. Benefits of correct hip rotation include drag reduction, ease of breathing, and lateral stability. Hip position at full rotation should subtend an angle of 45° with the water’s surface and should be axially symmetric (i.e. the same on both sides of the body). Furthermore, hip rotation should lead the pulling and kicking motions and not vice versa. It should also be noted that over-rotation may induce a super-axial pull that

crosses the body's center-line thereby reducing efficiency.

When discussing subsurface elbow position, "high" is intended to denote the relative placement of the elbow and forearm. The pull begins with the arm extended in front of the body and transitions to the high elbow configuration with the upper arm held stationary for a longer period of time. Conceptually the arm now forms an "anchor point" over which the rest of the body travels. Ideally the forearm and upper arm subtend an angle of 60° during the pull-through. When properly employed, the high elbow pull optimizes contact of the water with the hand and forearm. It is important to make the distinction that a high elbow above the surface, during recovery, does not necessarily correlate the correct positioning under the surface. Variations in recovery style are typically inconsequential so long as they do not adversely influence subsurface technique.



Photo courtesy of Katie Rasmussen
Craig Murray shows how breathing can become much easier with proper rotation.

Successful execution of the high elbow pull improves efficiency, which translates into distance per stroke (DPS), the fourth component on our list. Although never trivial, maximization of DPS grows in importance with increasing distance. High elbows aside, DPS largely depends on what occurs at initiation and termination of propulsive motion. It is essential that one stretches out in front, while employing a "half catch-up" stroke for timing hand entry. The latter should follow as a direct consequence of proper arm acceleration through the pull. Completion of the pull is necessary as well, requiring full arm extension behind the hips; it follows that one should not truncate the end of the stroke in favor of increasing tempo. Counting strokes per lap is a useful tool to assess performance of this skill.

The final component of the crawl is the kick, whose primary functions are control and stability. An effective kick is necessary to balance the body and maintain proper position. During sprints or anaerobic swimming one may utilize kicking as a second source of propulsion. All power for the kick should originate in the hips and core, not the thigh. The leg should remain as straight as possible while retaining



Photo courtesy of Tracey Loper
A key element in freestyle, is good distance per stroke, demonstrated by Barb Riazzi as she fully extends her underwater arm in preparation for a good pull.

flexibility in the knee and ankle. A small amplitude kick is always desirable but one should adjust the tempo to satisfy stability requirements. In addition, the feet should not have a large sideways separation. This creates a large resistance to proper hip rotation and the hips would underrotate and "bodysnaking" would be evident.

In short, by remaining aware of and soliciting feedback on one's body position, hip rotation, elbow position, distance per stroke, and kick, one may improve stroke technique. Improvements in stroke can lead to faster times, more efficient swimming, and a reduced likelihood of injury.