



WCCTC Tri News

Cycling in a Group Safety Reminders

There are few keys to riding safely in a group. First the lead person is the primary communicator. He/she tells and points out to the person behind of dangers ahead, cars, dogs, pot holes, when to slow or stop, etc. That information is then propagated down the line. Second, keep a reasonable and safe distance between you and all bikes around you. Third, always look ahead at the riders in front of you and be ready to anticipate sudden changes in speed keeping your hands in and around the brake hoods.

The Mechanics of Freestyle Swimming

Most people think it's what your arm does to propel you. Your armstroke though is only part of the reason you move through the water. Learning to cut that drag by improving your body position to be more "fishlike" could well give you a 20- to 30-percent speed boost in a short amount of time versus spend years on improving your armstroke.

"Fishlike" swimming skills improve propulsion in three ways:

They maximize the available power by using the hips, not shoulders, as the "engine."

They increase the effectiveness of the pull while reducing injury potential by using the shoulders and arms mainly to transmit the power produced by the hips.

They make your stroke effortless by improving coordination between body movement and the arms and legs. (Swim with your body, not your arms and legs.)

All three combine to maximize the economy of your propulsion.

Shifting your "engine":

If you're a typical triathlete, you've thought that the workload in swimming fell on the arms and shoulders. Your new goal is to have the torso do the lion's share of the work while the arms simply transmit that effort to the water. You'll increase your swimming speed through faster trunk rotation instead of

faster arm turnover. Once you've learned to minimize drag by skating from one side to another, you also tap your most powerful source of propulsion: the kinetic chain.

Arms, shoulders are your transmission:

Unlike the kinetic chain, the shoulders simply aren't designed to generate the force necessary to power your body through water. Using body roll as our engine frees up our arms and shoulders to perform a task for which they're much better suited: just holding onto the water, while we let the body's rolling action carry us along. This, in turn, greatly reduces the misuse of the shoulder that is responsible for most swimming injuries.

In swimming, the ideal action is to use the hand mainly to hold onto a spot in the water while body roll moves the body past your anchored hand. The shoulder muscles will be asked only to bear the tensile load that action creates, rather than perform a ballistic action of pulling/pushing water back. Learning to "anchor" the hand in the water involves what many coaches call "feel" of the water. Here are two ways to do it:

1. Monitor the speed of your hand pulling back versus the speed of your body moving forward. If your hand moves back faster than your body moves forward, you're pulling your hand back. If

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Swimming Drills part 2 of 5

In developing the skills to improve your swim technique and stroke it is necessary to try to isolate the different phases of the stroke as well as body position. The following drills are the most common

Drill: ONE ARM

This drill is used to develop proper hip rotation and full body/arm extension. During this drill you are swimming with one arm only while the other arm is position out in front of you. It is important to maintain a good kick while performing this drill to keep high body position in the water. Do not let the forward arm drop, particularly at the elbow. As you are swimming breath to the side of you're stroking arm and concentrate on getting powerful hip rotation to drive the arm forward to full extension during any 25-yard length. Advance swimmers may place the forward arm at his/her side while performing this drill. This drill is best done in 50 yard increments (25 yards of right arm swimming then 25 yards of left arm swimming) followed by 50 yards of traditional swimming.

Workout Nutrition part 1 of 3

The essentials of endurance training do no include just training principles and accessories but also the nutrition behind the training. The following information is to be used as guidelines to develop better nutrition and eating behaviors habits that will assist you in managing your nutrition requirement during your training.

Ingestion of Liquid and Solids During Training Racing:

Pre-Exercise– tops off CHO (carbohydrates) stores and spares muscle glycogen:

- 1) Do not eat a full meal 2-3 hours before exercising. 20 – 30 minutes before you exercise:

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The Mechanics of Freestyle Swimming continued

your body moves forward at the same speed as your hand pulls back, then you're anchoring your hand in the water and letting body roll move you past it.

2. Set your stroke rhythms in your trunk. When you want to swim at a faster tempo, instead of moving your arms faster, move your belly button faster and let the arms be driven by that rhythm. You should also feel a true connection between the hip and the hand. Instead of reaching forward with a disconnected arm, you should feel as if the hand is being pushed forward by the hip/torso/shoulder.

Increase your "fuel economy"

Using body roll for power not only taps into a far superior power source, it also helps us generate that power effortlessly by making sure our stroke rhythms are body rhythms. Most triathletes are aware of their stroke rhythm only as an arm rhythm. They swim faster by turning the arms over faster - which also means they stroke shorter, getting a lot more tired, but gaining very little speed. In fishlike swimming, we change the stroke rhythm from an arm rhythm to a trunk rhythm.

If we think of freestyle as a series of side-glides ("skating") linked by the propelling arm stroke that transmits the force to the water, how quickly we get from one skating position to the next and back again is our stroke rhythm. How do we do this?

Mainly by coordination and synchronization. When you learn balance and learn to roll the whole body as a unit (including the head on each breathing stroke), you also create the opportunity for a lot more power to be released because you're moving the maximum amount of body mass at the same time. You maximize the force while minimizing the energy cost. That's fuel economy.



Mastering the Mental Challenge of Endurance Sport

by Kim Cussimano

There is a saying in sports psychology: "Given two athletes with similar training, nutritional wisdom, and technical know how- it is the mental game that will separate them come game day." Most of us put a lot of effort into our physical training, not realizing the importance of strong mental skills in our preparation for an event. The mental challenges associated with endurance sports are numerous. Knowing what to do in response to these challenges will enhance our chances of success. Here are a few things to keep in mind.

Increase Your Confidence

Enter an endurance event with the idea that you can endure the challenges and persevere. To do this you must:

- 1) *Expose yourself to adversity.* Adversity ingrains confidence. Be willing to subject yourself to the adversity you may experience in the event (e.g. headwind, hills, rain, heat).
- 2) *Acknowledge success and progress.* Success validates confidence. Recognize the small wins and successes that occur each training day. Charting this will assist you in seeing improvements and affirm your confidence levels.

Know Where to Focus

An effective focus is one that focuses on *performance relevant cues*. For example: pace, stride, cadence, stroke mechanics, etc. Give yourself a "key word" that emphasizes what is important for you and will remind you of something you can do at any given moment to stay in the game (breath easy, long and loose, relax). Picking a key word to focus on when things get tough will help you to maintain a positive and useful focus and reduce wasted energy.

Pain and fatigue are a natural part of an endurance event. To fight them with negative emotion will only increase their impact and a vicious cycle has begun. Recognize that the pain is your body giving you valuable information. When it presents itself, use it to make adjustments to your: pace, food intake, or mechanics (relax shoulders and face) etc. Positively talk yourself through it: "I am feeling tired, if I drop my shoulders and relax my face, this will pass quickly." Remember that the physical pain that you endure in training and races in no way compares to the emotional pain that you will experience if you do not achieve your goals because you cannot deal with the pain.



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Workout Nutrition continued

Fluid Intake: 300 - 500 ml, 10-16oz of carbohydrate drink. 1 hour prior to workout or race. Carbo drink should contain 30-50 gm of carbohydrates.

Solid Intake: 200-400kcal, 1-3 hours prior to workout, a mix of carbohydrates, protein and fats. Banana and Peanut butter, bagel and peanut butter are a great solid pre-meal options. Other options that should be eaten in combination include most fruit, dried fruit, breads, fig nuetons, pretzels, saltines, crackers w/ peanut butter, peanut butter and jelly sandwiches, pancakes and potatoes.



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Peanut Butter

Freestyle Stroke Phases part 1 of 5

In order to better understand stroke mechanics and make improvements the arm stroke is broken down into 6 different phases - entry, catch, down-sweep, in-sweep, up-sweep and recovery. Each arm goes through this cycle in about on second.

Entry phase: This is the point at which the hand enters the water. This point is 8-10 inches in front of the head and before full extension. Upon entry the hand is tilted inward at about 45 degrees so the thumb enters the water first. Entry is slightly to the side of the midline of the body. The wrist, elbow and shoulder should then follow the same entry position into the water as the hand to insure linear movement of the body. At the completion of the entry phase the arm should be fully extended and the elbow locked. This extension is again, generated by the skating driving motion of the hips as you roll side to side, as previously mentioned. In order to keep proper lateral alignment it is important not to overreach the hand and arm as it enters the water so that the hand crosses the centerline of the body. When this occurs, the legs counter balance that movement by moving in the opposite direction and thus creating a snake like movement in the water.

