



### **8 QUESTIONS ABOUT MULTISPORT**

DO I REALLY NEED A TRIATHLON BIKE FOR TRIATHLONS?

Many new competitors start out on a road bike. You can ride on a mountain bike if you choose. It certainly wouldn't hurt to invest in a road bike or triathlon bike if you plan to be in the sport for a while. If you plan to purchase a bike, a proper fit goes a long way toward making sure you're comfortable on the bike and can go as fast as possible. Be sure to get a professional bike fitting at your local bike shop.

WHAT DO PEOPLE USE RUBBER BANDS FOR IN TRANSITION?

Many athletes notice when elites put rubber bands on their bike pedals. These rubber bands hold the athletes' bike shoes upright on the pedals until the athlete puts his/her feet in the shoes and starts pedaling, which snaps the rubber bands. This saves the athlete from fumbling around with getting the bike shoes upright on the pedals and ultimately, saves precious time in the fast-paced world of elite transition zones.

I'M WORRIED ABOUT THE SWIM. WHAT CAN I DO TO MAKE IT THROUGH?

Ask most beginner triathletes which discipline they're most concerned about, and they'll tell you the same thing, "the swim." The best way to make it through the swim is to be prepared. If you train in a pool, be sure to hit the open water for at least a couple training sessions. Join a group swim or bring a friend. Practice sighting, wetsuit stripping, swimming at race pace and swimming with a swim cap on because you'll have to wear one for races. In the pool, you can simulate open water by practicing turns without using the wall or touching the bottom.

WHAT'S THE BEST THING TO EAT BEFORE MY RACE?

This varies from person to person, but the one reverberating piece of advice is that you should never try something new on race day (this also includes trying brand new shoes or other gear for the first time). Just because you picked up a hyped new energy bar at the expo does not mean you should try it for the first time on race day. Experiment in training to see what types of food work best for your body. Eat and drink those tried and true foods and beverages on race day.

WILL I BE DISQUALIFIED IF I USE FINS, A SNORKEL, GRAB ONTO THE SIDE OF A KAYAK. ETC.?

The answers to these questions and more, can be found in the USA Triathlon Competitive Rules on our website at www.usatriathlon.org/resources/about-events/rules. Be sure to familiarize yourself with the rules, which will explain that no, fins are not allowed; yes, a snorkel is allowed; and yes, grabbing onto the side of a kayak is allowed as long as it does not make forward progress.



WHAT'S THE MINIMUM AMOUNT OF EQUIPMENT I NEED TO DO A TRIATHLON?

Swimwear, bike, helmet and shoes are all you must have to do a triathlon. Many people use additional gear to enhance speed (clipless pedals and tri shoes) or add comfort (wetsuit for those chilly swims) to their triathlon experience. See pages 33-34 for illustrations on key gear.

ARE WETSUITS REALLY THAT BIG OF AN ADVANTAGE?
In addition to making cold open-water swims more bearable, wetsuits add buoyancy, which allows you to swim faster. You'll often hear strong swimmers lament wetsuit-legal swims because it decreases their advantage over weaker swimmers.

WHAT IS HELPFUL TO HAVE IN TRANSITION?

In addition to your essential gear, you may want to have a water bottle and a towel to clean off your feet after the swim. You can use this same water bottle for pre-race hydration instead of drinking from your bike bottle. For the ladies, a spare hair tie is essential unless you want your long hair in your way the entire race. Many hair ties break during the rush of pulling the swim cap off while approaching T1.

Spare items, including socks, goggles and gels never hurt. Some folks even bring electrical tape for last-minute fixes, including taping a gel to their handlebars. Don't forget the BodyGlide!

For more race preparation tips, check out our race-day checklist — the tear-out card on this page.

Contributors: Jayme Ramson, Lindsay Wyskowski, John Martin, Tara McCarthy, Tom Therkildsen, Cait Borland, Liz Tucker



# MULTISPORT 101 GETTING STARTED

Triathlon is one of the most equipment-heavy endurance sports around. Don't fret about the jargon and intimidating amount of gear. Use our illustrations to learn the basics of swim, bike, run and even a potential transition set-up for your first event.

Not enough to get you started? Visit usatriathlon.org and click "Multisport Zone" or visit our Facebook page at facebook.com/usatriathlon and ask the triathlon community for advice.



Illustrations by Charlie Jahner















reathing — it comes completely naturally to all of us. It is an activity that will function without interruption or conscious thought under the control of the autonomic nervous system. When necessary, we can assume conscious control in order to increase oxygen supply while under stress or in a fight/flight state of mind. In our world, triathlon equals a fight/flight state.

Breathing is easy on the bike and run. While there are a few tricks to rhythmic breathing in both of these legs, you don't have to move around and ask your surroundings permission in order to get a breath. In swimming, you do.

From a beginner standpoint, the two most important aspects of breathing in swimming are becoming comfortable with:

1) your face in the water while swimming

2) a rhythm to your breathing

Keeping your face

in the water is step one,

#### **FACE IN THE WATER**

because if you swim with your head up or your face out of the water, your legs and hips will invariably drop. A high-head/low-hip position requires to push you more surface area through the water, creating more drag. This makes it harder to swim because there more

resistance. Imagine cycling with a parachute attached to your back. This will force you to take additional rest breaks in training or on race day as your heart rate increases and you cannot keep up with the

There are different tricks to keeping your face in the water. Be sure to have comfortable goggles. Focus on looking at the bottom or staring at the black line down the center of the lane in the pool. If you experience anxiety related to submersion, take a lot of rest breaks and remember that as far as pool training goes, you are never very far from the wall and an exit. Private swim lessons and a lot of practice will help.

#### RHYTHMIC BREATHING

Once you are comfortable keeping your face/head in the water while swimming, you need to figure out how and when to breath. The critical action here is to begin exhaling through your nose/mouth as soon as you finish breathing in.

The major problem I see with beginner swimmers related to breathing is that they hold their breath while their face is in the water, then tries to exhale and inhale very quickly when turning to breathe. This results in a poor, shallow breath and a quick buildup of carbon dioxide in the lungs. Swimmers will have to stop and take a break in training or roll over on their backs to catch a few deep breaths in racing.

You must exhale while your face is in the water. So when you turn to breathe, your lungs are mostly empty and ready to accept a fresh breath of air. You do need to force the rhythm a bit. You should forcefully exhale through your nose/mouth as soon as you complete the breath. There's no pausing. It is a constant rhythm.

#### **BILATERAL BREATHING**

The good thing about three-stroke or bilateral breathing? It will help you create and maintain an even stroke and improve mechanics on both sides of your body. The bad thing? It increases the time between breaths by 50 percent

over a two-stroke or one-sided breathing pattern. That is a huge decrease in total oxygen flow while swimming.

My advice is to include bilateral breathing in your workouts during warm-up, drills, easy aerobic sets and short sprints like 25s and 50s. Switch to one-sided breathing for moderate/ hard-distance and mid-distance sets. If you want to continue working on stroke balance, breathe to the left going down the pool and to the right coming back.

The main problem with breathing to one side all the time is that it usually creates a hitch or imbalance in one side. Typically one side becomes a bit stronger and you will veer off course in open water. The main benefit, however, is more air, which is nice when you are trying to swim fast.

Marty Gaal, CSCS, is a USA Triathlon-certified coach. He and his wife Brianne coach triathletes through their company, One Step Beyond. Marty has been swimming in ocean competitions since 1986 and racing triathlon since 1989. Read more about the Powerstroke®: Speed through force and form freestyle technique DVD and coaching services at www.osbmultisport.com and www.powerstroke-dvd.com.



"Swimming is extremely technique-based; therefore, in order to swim fast, first you have to work on proper technique. In the offseason, be sure to practice swim drills every workout — ideally at the beginning and end of your swim workout. Find a coach in the area if you don't already have one, and have him or her prescribe drills to help your personal stroke. An example of a drill to work on breathing, catch and timing of your stroke is known as catch-up (swim with one arm at a time while keeping the other arm out front and alternate arms each stroke). Good luck!"

Sarah Haskins, 2008 Olympian



The purpose of the set is to work pure (short) speed (50s set) in preparation for longer speed efforts in a few months. Sets between the 50s (600 total aerobic) are strength sets (pulling, polo, IM), taxing the muscles but not the heart. These should fatigue your arms as you go through the set so that in the last sets of 50s you really have to focus on holding your stroke technique together while swimming fast. To increase workout volume, you can increase the aerobic sets to 900 total, increase the 50s to 12 in each set, or do more rounds. For less volume, shorten the warm-up to 600, decrease the aerobic sets to 300 total, or just cut out the last round of IMs and 50s.

Barb Lindquist is a 2000 Olympian, a USA Triathlon Hall of Fame inductee and the Collegiate Recruitment Program coordinator for USAT. **WARM-UP:** 100 free/50 kick/100 drill/50 kick (3x) Total warm-up: 900 yards.

**MAIN SET:** Move from one set to the next without rest unless otherwise stated.

**8x50** — No. 1: 8 strokes fast off each wall. No. 2: middle 25 fast, so pick up speed in middle of pool through turn and back to middle. No. 3: all fast but controlled. No. 4: all easy. Pick interval that gives 9-15" rest and stick with it for the whole workout.

**6x100** — Aerobic pulling, slight descend to strong, 1-3, 4-6. Interval with 9-15" rest. Extra 30" rest before next set.

**8x50** — Same as above.

**2x300** — Aerobic as 50 polo drill/50 fast breast pull with fast flutter kick/50 back x2. 15" rest between and 30" before next set.

**8x50** — Same as above.

**6x100 I.M.** — (fly, back, breast, free) aerobic but free always faster. Can substitute polo drill for fly. Extra 30" rest before next set.

**8x50** — Same as above. **COOL-DOWN:** 100 yards

**TOTAL:** 4,400 yards



Being a triathlete is different from being a cyclist in one very distinct way; running off the bike. In that difference, it is important that you use your 20 gears (or 22), to allow for optimal performance without sacrificing your run. Here are a few ways to get a better bike split, and, ultimately, a better run split and why:

#### **HOW: CROSS-CHAINING**

The scenario: You just made the final click with your rear shifter and now all you hear is metal-to-metal grinding.

The solution: Your front derailleur should be equipped with a gap shift, or ghost shift, where you can shift up or down without moving the chain to the other chain ring. This ability allows you to accommodate for the angle of the chain. When the chain is in the big ring in the front and the little ring on the rear wheel, (or in the small up front and the biggest on the rear wheel), you experience "cross-chaining." Crosschaining puts undo stress on the chain and is an inefficient transfer of power from the pedals to the rear wheel. Your goal is to make the chain straighter by adjusting your gear ratios. This may require you to move the chain to the other chain ring up front, and then adjust your chain position on the rear wheel.

#### WHEN: ANTICIPATE THE SHIFT

The scenario: You begin ascending a hill. You ride fast and continue to push the pedals until your speed and cadence slow. You have to shift now because it's too hard to turn the pedals. The chain aches to shift with all the tension between the pedals and the rear wheel. It feels like the chain is going to snap. The amount of power you have to put out to maintain any speed is tremendous. By the time you get to the top of the hill, you've gone anaerobic, and now it takes you a minute to recover from the effort.

The solution: Anticipate the shift. Shift a second before your feet, or your cadence, slow down. Be one shift ahead of yourself always. The goal is to carry your momentum when going uphill and to maintain your resistance going downhill. If you can carry that momentum and resistance,

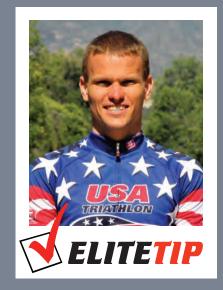
you will travel farther with less energy expenditure. When riding up a long or steep hill, this may require shifting a lot. That's fine. Shift a lot. Don't let your feet slow down, ever. If you are in the big ring and your cadence drops below 65, it's time to get into the small ring. A higher cadence can get you up the hill just as fast as a lower one with a lot less energy, and less time needed to recover.

#### WHY: CADENCE AND THE RUN

The scenario: You say you have strong legs and that you love to ride in a harder gear. It's just more comfortable than spinning at a high cadence like that instructor of your spin class. Or you feel the exact opposite.

The solution: There are typically two types of cyclists in triathlon — those who feel more comfortable with a slow turnover and those who spin very high. Neither is right nor wrong. A general cadence for triathletes, however, is in the area of 90 revolutions per minute. Being comfortable at 90 rpm depends on a few aspects such as muscle fiber type, riding experience and how fast you intend to run off the bike. But generally speaking, this number represents an ideal turnover rate for running and should allow for a better bike to run transition.

Matthew Clancy is a USAT Level II coach with a master's degree in sport psychology. Visit Compass Elite at www.compasselite.com or email coachmatt@compasselite.com for more information.



"The key to becoming a better cyclist is to the legs out; a rider of lesser ability than yourself should have no problem keeping up. Easy rides don't make you faster, therefore should be kept to a minimum. Aerobic rides are a different story. This is where I do most of my less intense riding. Although weaker training partners will have a tougher time keeping up, the goal for you is to become a stronger cyclist, not more social. It's generally about a Zone 2 or slightly higher effort. You can coordinate it with a weaker rider so it's their tempo ride. Lastly, honor the recovery aspect. If you do not allow adequate recovery time, aerobic rides will slowly begin to tire you out along with your other swims and runs."

Olympic hopeful Matt Chrabot is a member of the USA Triathlon National Team and won the 2009 USAT Elite National Championship.



The focus of this workout is to get a quick bike session in and work on endurance while also increasing efficiency through cadence work.

Greg Mueller is a Level II USA Triathlon coach and owns InnovativeEndurance.com. Greg works with athletes of every level but in 2010 he coached the national duathlon champion, national age group triathlon champion,U23 Elite national champion and an age group champion. Greg can be reached at Iammueller2@aol.com.

#### WINTER TRAINER SESSION

**WARM-UP:** 15 min. easy with progressive cadence

**DRILL:** 5 x 30 sec. individual leg pedaling, high

**SKILL NO. 1:** 3x1 min. @ LT watts w/maximum cadence/1 min. rest

**WORKOUT:** 3 x 10 min. tempo watts/5 min. easy pedaling between. Keep cadence above 90 rpms.

**SKILL NO. 2:** repeat skill set No. 1 and maintain cadence

COOL-DOWN: 10-15 min. easy spin



ne of the most interesting elements of a triathlon is the run. It is the final leg of the race, and because of that is always going to be when an athlete is the most tired. You don't get to run on fresh legs like you do in a 5k or 10k running race. And with that fatigue comes the potential for big differences between well-paced runs and poorly paced ones. In a 10k running race, the difference between a good run and one where you went out too fast may be 30-60 seconds. However, in an Olympic-distance triathlon, the difference can be 3-5 minutes. If you look at the variance in Ironman run times, a well-paced run can be 30 minutes faster than the athlete who went too fast too early.

The first tip for pacing your runs correctly is this: it all starts with a smart bike. If you are a strong cyclist and plan to blast the bike then hang on for the run, you are likely to have a very slow run with lots of struggling at the end. Just take a look at this year's Ironman in Hawaii. Chris Lieto was first off the bike but struggled in with a marathon time that was not even in the top five among the women. Chris is an amazing athlete who has won Ironman races many times, but his race is proof that riding too fast

on the bike will hurt your run.

So you are probably wondering how to pace the bike correctly. Here's the answer; bike at a pace that would allow vou to continue on and ride another 10-15 percent of the total bike distance at the pace you are choosing. Let's say you are in an Olympic-distance event. Pick a pace on the bike that you know you could sustain for another 2.5-3.5 miles. If you know you are barely hanging on for the final few miles or even start to slow your pace because you went too fast too early on the bike, your run will likely not be your best. However, if you come off the bike knowing that you indeed had a few more miles at that pace in the tank, then you have just set yourself up for the best run possible.

Now that you are on the run in good shape, how should you pace it? This really depends on the actual speed. Here's a general rule of thumb for all distance runs in triathlons. Divide the run into two segments. The first should be slightly more than 60 percent of the total distance and the second part slightly less than 40 percent. Run the first part at a pace you know you can build on for the second part. So in an Olympic-distance race, run the first 3.5-4 miles at a pace you can pick up in the remaining

miles. Don't speed up at the halfway point. Halfway is NOT halfway in terms of effort. Hold back your absolute best for that second part of the race.

The general feel is going to be very different depending on the distance of your race. For a sprint, the speed should feel just a little easier than you would feel when you repeat 1,000-meter intervals on the track. If you never have done this, now is the time! Go to a track and run 3x1,000m to see what that feels like to go pretty fast (anaerobic). In the sprint race, the run will be a bit easier effort than you did these in since you will not be as fresh and there is no rest between the 1,000s in a race.

For an Olympic-distance race, the feel is still going to be fast, but you will want to hold more in reserve during the opening miles since you have to cover 10k total. Keep a pace that feels fast, but is not struggling to maintain. Remember, you will want to up that pace when you get about 3.5-4 miles into the run. Your breathing should feel controlled and your muscles ideally will feel a little relaxed. Save that real topend for the final 2 miles.

A half-Ironman is where pacing really starts to be more important. The run will still be fast, but there should



"The best piece of advice I ever received about running is as simple as it comes: SMILE! When you run, it does hurt most of the time, but you still need to enjoy it. If you are out for an easy run, just let your body go and enjoy the feeling. If you are doing intervals, accept the pain and realize that it will help you next time you run this pace. When you smile, it relaxes your body and your muscles, which actually helps you go faster. In all of my workouts — no matter what pace I am running — I try to stay as relaxed as possible. I know that I am having a tough workout when my upper body is tense, and I cannot run as fast as I need to. So it's simple, just SMILE! "

- Jarrod Shoemaker, 2008 Olympian

be a feeling like you are floating, not pushing, during the early miles. It should feel similar to a steady-state tempo run. Breathing should be controlled and shoulders very relaxed. Land lightly on your feet, and get off them quickly, but don't force anything. Again, save that big effort for the final 5 miles or so.

The Ironman. There is never a point in the run where you should feel like you are really racing the run until you get to 10 miles to go to the finish. You can run relatively fast and light but never feel like you are in a race until that point. Those who get off the bike with a sigh of relief that they can now run, take off fast in the first 5 miles and will almost always pay a huge price at the end. In general, people are able to run the same

pace in an Ironman that they do during a long training run when they stay aerobic (not a long run where you pick it up at the end). Whatever that pace is will be a general target in your race. If you see you are going 30 seconds/ mile faster than that in the first 10, the final 10 will likely have a very different complexion!

Mark Allen is a six-time Ironman Triathlon World Champion and holder of the run record in Kona (2:40:04 set in 1989). He is co-founder of MarkAllenOnline.com and co-author of the award winning book titled Fit Soul, Fit Body: 9 Keys to a Healthier, Happier You. Go to www.markallenonline. com and www.fitsoul-fitbody.com for more information about Mark and his programs.



#### **RUN WORKOUT — TRANSITION STEP UP**

Brick work can be some of the most stressful workouts on the body. This workout is a good transition and introduction to brick training — more specifically running at intensity off the bike.

Start off on your bike spinning easy for 5 minutes, then gradually increase cadence to a level that slightly challenges your neuromuscular system — approximately 5 rpm over your natural cadence.

This portion may be performed on your indoor trainer or even a spin bike. Intensity should be EZ/LOW (zone 1 for heart rate training). Maintain a comfortably high cadence for 15 minutes, then immediately transition to the run segment. You may perform this 10k run portion on a flat section of road or treadmill. Start off running at a MODERATE (zone 2) pace/intensity for 2 miles, then proceed to a COMFORTABLY HARD (zone 3) pace/intensity for the next 2 miles. Finish the remaining 2.2 miles at a HARD (zone 4) pace/intensity with a strong finish in the last 0.2 of a mile. Cool down at least 10 minutes.

— Matt Russ



## MENTAL TRAINING WHEELS

By Cheryl D. Hart

heir faces reveal anticipation, anxiety and wonder as they toe the edge of uncharted territory and entry into the world of triathlon.

"How many of you are doing your first tri?" the race director asks via bullhorn as athletes, struggling with last-minute adjustments of caps, goggles and prerace jitters, gather at water's edge.

What goes on beneath those swim caps is crucial to perceived success and enjoyment of this first-time experience. The motto, "if you think you can, or think you can't, you're probably right," speaks of self-fulfilling prophecy. Sadly, negative thinking often drowns minds and dreams before the athlete even takes the first stroke.

Beginners think that they're the only ones who are afraid. However, the truth is that even the pros experience pre-competitive anxiety, which stems from fear and self-doubt. What are they afraid of? Failure. Failure to live up to the expectations of others. Fear that any weaknesses and frailties will deem them worthless. Too often, self-esteem becomes tangled in triathlon, because it is the prime source of an athlete's self-identity.

If I could share just one word of advice for new triathletes, it would be this: Don't allow your concern with race results and rankings to rob you of the joy of swimming, biking and running. Hang on to the initial reasons you were drawn to triathlon. Fear destroys fun. And, after all, isn't triathlon really an adult form of child play? Continue to "play with purpose."

Athletes spend too much time and energy seeking approval and affirmation from others rather than themselves. It's important to perceive each triathlon, especially the first, as an exciting challenge and opportunity for self-growth rather than a threat to the all-too-fragile ego.

Comparing ourselves to others increases precompetitive anxiety and diminishes any sense of accomplishment. Instead, it's important to establish definitions of success and failure based on our own values and standard of excellence.

Failure most commonly results when an athlete does not establish a clear, specific goal or deters from the original plan. Commit to a goal based on your training preparation and assessed abilities, and stick with it. It should be challenging, realistic and self-determined.

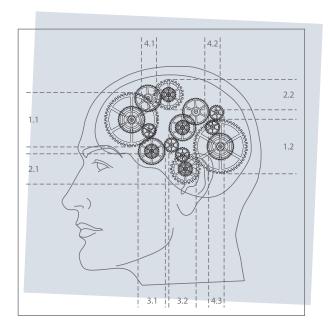
A first-time triathlete should consider it a success to cross the finish line with a smile and a feeling of pride in joining the ranks of those who call themselves triathletes.

Too often, as soon as we cross the finish, we dismiss that victory as insignificant and immediately turn thoughts and desires toward the next challenge. Take a moment to savor this moment, this accomplishment.

Having an unshakeable self-belief is far and above the most essential mental toughness attribute. This means not only having confidence in achieving our competitive goals, but also in being resilient when faced with any unexpected obstacles and setbacks.

So, how do we gain courage to face our fears? First, try to recall a previous accomplishment — a time in the past when you dared to take a risk and were surprised when it turned out better than you ever dreamed it would. You can do it again.

Next, break the triathlon into manageable increments, focusing fully on one specific task or step at a time. This allows you to enjoy each moment as it unfolds, even the challenges that arise,



while appreciating incremental successes.

Develop an effective training routine that will also be used before races and during transitions. Routines are psychologically beneficial. There is comfort in the familiar. Because routines are tried and true, they give a sense of comfort, control and confidence. Furthermore, in the midst of competitive distractions, routines give us something on which to focus that could positively impact performance. Directed attention also lends itself to clarity of mind and efficiency when faced with decisions.

If negative thoughts or self-doubt begin to creep in during the event, here's a suggestion: look closely into the faces of the spectators along the course. No matter how far back in the pack you are, you will see awe and admiration written in their eyes as you pass. Would you rather stand amongst them, in the safety of the sidelines?

It takes courage just to toe the starting line, to test what you once thought was impossible, to risk failure in pursuit of being fully alive.

Cheryl Hart, M.S., is the owner of 2nd Wind Motivation and Hart to Heart Talk Show. She is a sport psychology consultant, motivational speaker and instructor of Sport & Exercise Psychology at the University of Louisville. Hart conducts sessions face-to-face or via phone nationwide. Call (502) 693-7443, e-mail offrunnin@yahoo.com or visit www.2ndWindMotivation.com.