



Swim Bike Run

PART 1 - Understand Forces

Your size, speed, shape, orientation, and the density of the medium (i.e., air/water/ground) it moves through affects how fast the object is able to move

Key Points:

- The Greater The Frontal Area - The Greater The Drag Force
- The Greater the Friction (interaction between 2 surfaces) - The Greater The Force Required to Move Forward

Question:

What 3 sources of frontal resistance do you have control over (Hint - C.P.H.)?

PART 2 Swim Technique and Gear

Swim Technique #1 - 3 points of contact

Ideal Body Position For Least Frontal Resistance/Drag

Key Techniques:

- Head, Hips, and Heels Contact the Surface of Water
- Avoid High Head Position - Leading With Forehead High
- Head Stays Low to Keep Hips and Feet Up
- When sighting - only goggles out

Swim Technique #2 - One Eye Breathing

Key Techniques:

- Initiate the breathe by turning the chin to top side shoulder - bottom eye stay submerged
- Exhale and blow bubbles out the entire time head in water between breaths - helps to keep hips and feet closer to the surface and allows you to stay relaxed

ENDURANCE JOURNEY

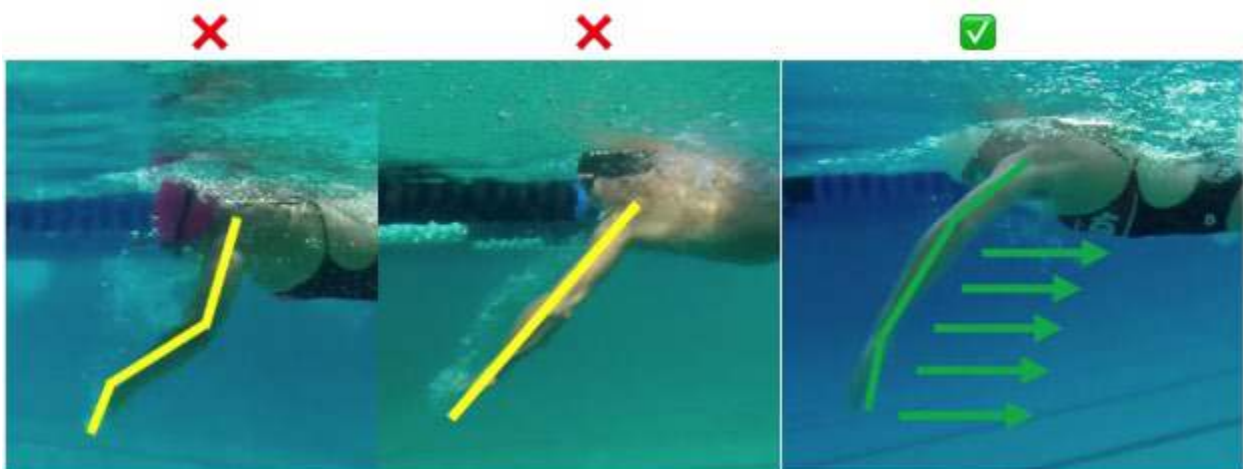


Source: ThinkStock

Swim Technique #3 - High Elbow Vertical Forearm Push

Key Techniques:

- Get forearm vertical (pointed to bottom) - Hand/wrist firm
- Push water straight back behind you
- Hands in tracks throughout the stroke to maintain alignment



Source: VS Sports

Swim Gear And Tips

- Goggles, Wetsuit, Tri Suit, Swim Suit, Swim Skin, Fins, Front Facing Snorkel, Pull Buoy - try before you buy when possible to ensure proper fit
 - Front Facing Snorkel - help to focus on technique drills without having to worry about turning your head to breathe
 - Fins - give propulsion and help develop ankle flexibility and proper kick mechanics
 - Pull Buoy - gives hips lift to help during breathing drills and to mimic wetsuit position
- Wetsuit and swim skin - give you some more options regardless of conditions (i.e., cooler and warmer water conditions)

ENDURANCE JOURNEY

- Add buoyancy and warmth
- Considerations - thickness, ease of use, and flexibility

Tips

- Practice, Practice, Practice - swim in groups when you can.
 - Open Water - warm up always, get comfortable breathing in the water before you start swimming
 - Tri/Master Swim Group - coaching helps!
 - Get used to sharing space and contact with other swimmers
 - Practice Drafting (up to 40% drag reduction when a 1m or less behind lead swimmer)
 - Practice Transitions (i.e., swim to bike)
 - Get comfortable swimming the distance required for your event + 10%
 - Open water practice - with buddies, swim side by side, practice sighting

PART 3 Bike Technique and Gear

Technique

- Master easy and moderate effort before all else

Zone	How does the effort feel?	Heart Rate % Of Threshold	Pace/Watts % Of Threshold
1	<ul style="list-style-type: none"> ● Easy ● Comfortably able to talk in sentences ● Moving the body to loosen up/recover 	<68%	<55%
2	<ul style="list-style-type: none"> ● Moderate ● Can talk in broken sentences ● A comfortable effort for the duration of the session ● Eat and drink comfortably at this effort 	69-83%	56-75%
3	<ul style="list-style-type: none"> ● Moderate Hard/Tempo ● Can say words but not sentences ● 10 to 60 min intervals 	84-94%	76-90%
4	<ul style="list-style-type: none"> ● Hard/Threshold ● Breathing is heavy/difficult to talk ● 5 to 20 min intervals 	95-105%	95-105%
5	<ul style="list-style-type: none"> ● Fast/Sprints/Strides ● Completely focused on the effort ● Fast with great technique and form ● 30 seconds or less 	>106%	>106%

3 Pedaling cues

ENDURANCE JOURNEY

- “Kick the ball”: At the top of the pedal stroke imagine you are kicking a ball, this will bring your foot through quicker
- Scrape the mud off your shoes: At the bottom of the pedal stroke imagine scraping the mud off your shoes as you pull the pedal back
- Unweight the pedal in recovery: During the recovery phase don’t waste energy “pulling up” but do unweight the pedal so that your pedaling action becomes smoother

Training Drills for Pedalling

1. Slow Cadence Drills – Climbing at 40RPM will help identify dead spots in your pedaling technique
2. High Cadence Spin Ups – Spinning up from 90RPM to the point where you bounce in the saddle will help smooth out your pedal stroke
 - Start with 30 seconds intervals with 30 seconds to a minutes easy effort spinning between each - start with a total of 5 minutes and work up to 20 minutes
 - Always finish feeling like you can do more
 - Learn to ride in a gearing that allows you to maintain the maximum speed while at an easy to moderate effort on various types of terrain (e.g., flat vs uphill, and standing)
 - Take note of the cadence that you normally ride at - most triathletes ride between 75-95 RPM depending on the conditions and terrain
 - Avoid Cross Chain Gearing

Cycling Gear - Prioritized by importance

1. **Helmet** - Proper fit. ANSI/SNELL approved. Check for cracks, deformities, or broken/ripped straps and replace as needed prior to use
2. **Operational bike** - get a tune up at your local bike shop prior to heading outside
3. **Bike Shoes/Tri Shoes** - Worth the investment to help transfer power to pedals and save your arches from stress.
4. **Bike Shorts** - Take care down there...need I say more.
5. **Chamois Creme** - again your friend you should never forget
6. **Indoor Trainer** (smart, fluid magnetic): Convenience of riding your bike at home
7. easier to stay consistent with your riding in the winter months or if there is really poor weather during outdoor season. Many indoor cycling group option to join
8. Check out <https://www.dcrainmaker.com/> for excellent gear and tech reviews

PART 4 Run Technique and Gear

- Same effort guidelines as bike
- "Run Tall"
- "Chest Up, Chin Back"
- Thumbs Scrape Bottom of Ribs

ENDURANCE JOURNEY

- "Feet Land Under the Hips"

Run Gear

- Tri Shorts Run Shorts/Top can where your tri suit save time cycling top, tri shorts or separate run top
- Comfortable Running Shoes (+socks), hat, and Speed Laces: Allows for easy transition between bike and run
- Chamois Creme - enough said
- Practice bike run "brick" sessions throughout the year: this will help prepare you for the unique feeling and use your gear most efficiently (start with 5 to 10 minute runs off the bike)

Looking for support with your next event preparation? We offer training plans, one-to-one coaching, and group training to help you achieve this season. Learn how we can help you [here](#).