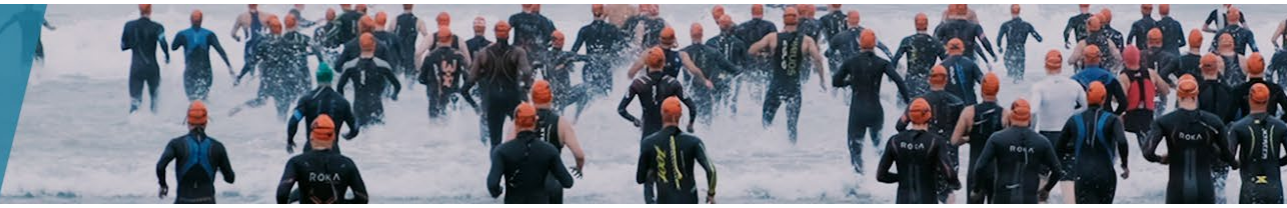




12 Week

# Herbalife24 Triathlon Los Angeles

Training Program (v.3)



## Guidelines for Starting Your Program

### Welcome to your triathlon training program!

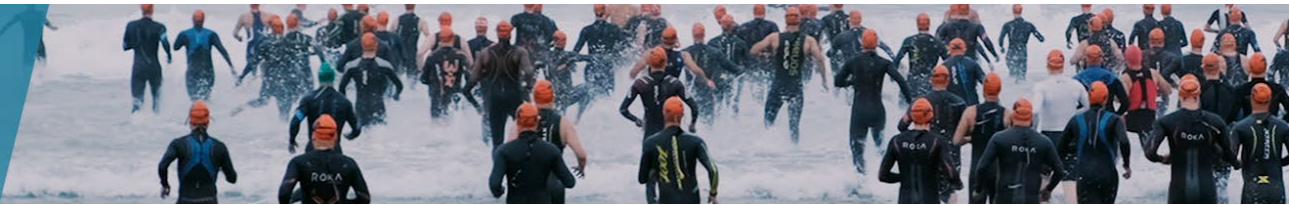
Training for a triathlon can be daunting, especially if you are new to the sport and are looking to do your very first race. I've designed this program with two clear objectives: to make sure you get all the essential information you need, and provide you with a solid framework for a successful training program. My name is Ian Murray. I've been a full-time triathlon coach for 20 years. I'm one of only 18 USAT Level III Certified Coaches, Head Coach of the LA Tri Club – and, in direct reference to the Herbalife24 Triathlon Los Angeles – this is my home town, I know the area like the back of my hand, and have helped thousands of triathletes – from first timers to elite – succeed here in LA.

In addition to this program, please look to my website and the Triathlon Training Series DVDs as an ongoing resource. Knowledge is power, and both our site and the series are LOADED with information that will help you.

Before you start training, we suggest that you read the entire program first so that you have an understanding of what will be asked of you and where you're headed. Remember to refer to the provided **Written Clinics** and **Workout Sheets** as you progress through the program.

Good Training,

Ian Murray  
USAT Level III Coach



## REQUIRED BASE TRAINING & MINIMUM EQUIPMENT REQUIREMENTS

Whether you are an expert or a novice, the following requirements outline the type of training you should be doing at the time you start your program. If you have questions now or anytime call or email me: 310-924-7362, [Ian@TeamTTS.com](mailto:Ian@TeamTTS.com)

**Swimming:** You should be currently swimming at least twice a week. Your workouts should be a minimum of 1200 yards or about 30 minutes of swimming or drilling. Initially this should all be freestyle stroke (“the crawl”). I’m adamant about technique and suggest the TTS Swimming for Triathletes DVD as a guide for beginner and intermediate swimmers.

**Cycling:** You need to be comfortably fitted on your bicycle. Road bikes, triathlon bikes and mountain bikes are all legit options. You should be riding twice a week, for 45-75 minutes. A spin class will work well for fitness training, but getting to know your bicycle is critical so ride the bike on which you’ll be racing as often as possible.

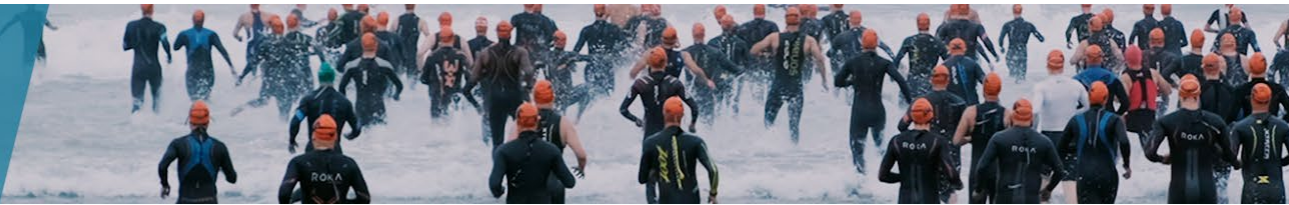
**Running:** You should be able to run three or four miles, and should be doing so two to three times a week. If you have trouble pacing by feel then either a heart rate monitor or a GPS watch can be a big help for many during training progress.

## BASIC INJURY PREVENTION

Proper technique reduces the risk of injury. Over the next couple months, your body will be creating new muscle pathways. When beginning a new training program, begin slowly and obtain good form the start. What you do now determines your performance this season. In other words make technique a priority! Every workout should start with the clear knowledge of the duration, the intensity and one or two focus points that speak to improvement of technique.

Keys to remaining strong and healthy throughout the training season:

- Flexibility in your training and personal life
- Proper Nutrition - before, during and after training
- Adequate Sleep
- Respecting Your Body’s Limitations



**LET’S GET STARTED**

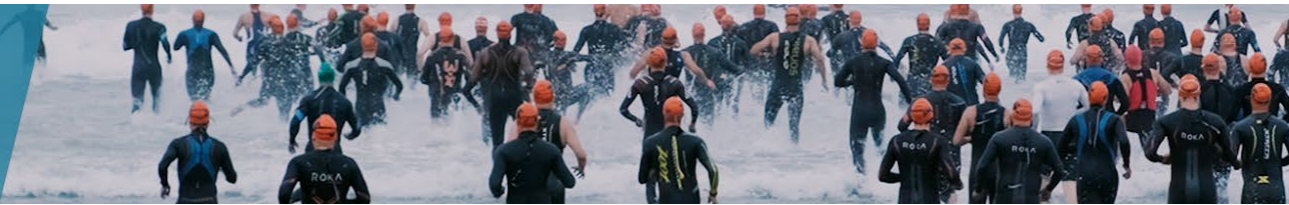
Your training program is scientifically designed to have you peak on the day of a race. Use the enclosed **Season Map** to help in this process. If for any reason you have missed workouts (illness, travel, etc), please do not try solve this by doubling up, just let those one or two missed workouts go. Simply stick to the plan and, most of all, adhere to the goals of each week.

**How to Read Your Workouts**

On your workout schedule, the days of the week will show various workouts detailed with this info:

- Type of workout: swim, bike and/or run
- Duration: either in time or distance
- Intensity: how hard or how easy to go

<b>Swim, Bike &amp; Run</b>	Swim, Bike & Run workouts. Sometimes we suggest “Other” workouts, special recommendations or planned “Rest” days.
<b>Brick</b>	Bike/Run in succession. Try to limit time between bike & run to 5min.
<b>Time vs. Miles</b>	Look for various workout durations either time and or miles.
<b>Sec</b>	Seconds.
<b>‘ or “</b>	When space is limited, we use an apostrophe to indicate minutes, quotation marks to denote seconds
<b>Z</b>	Refers to intensity “Zones” 1-5



**Your Season Map**

Each cell below represents one week of the triathlon training program. The height of each cell pertains to the “volume” of training. Volume is based upon the ever-changing mix of *Frequency, Intensity and Duration*. The total number of cells refers to the length of training comprised of one-week periods.

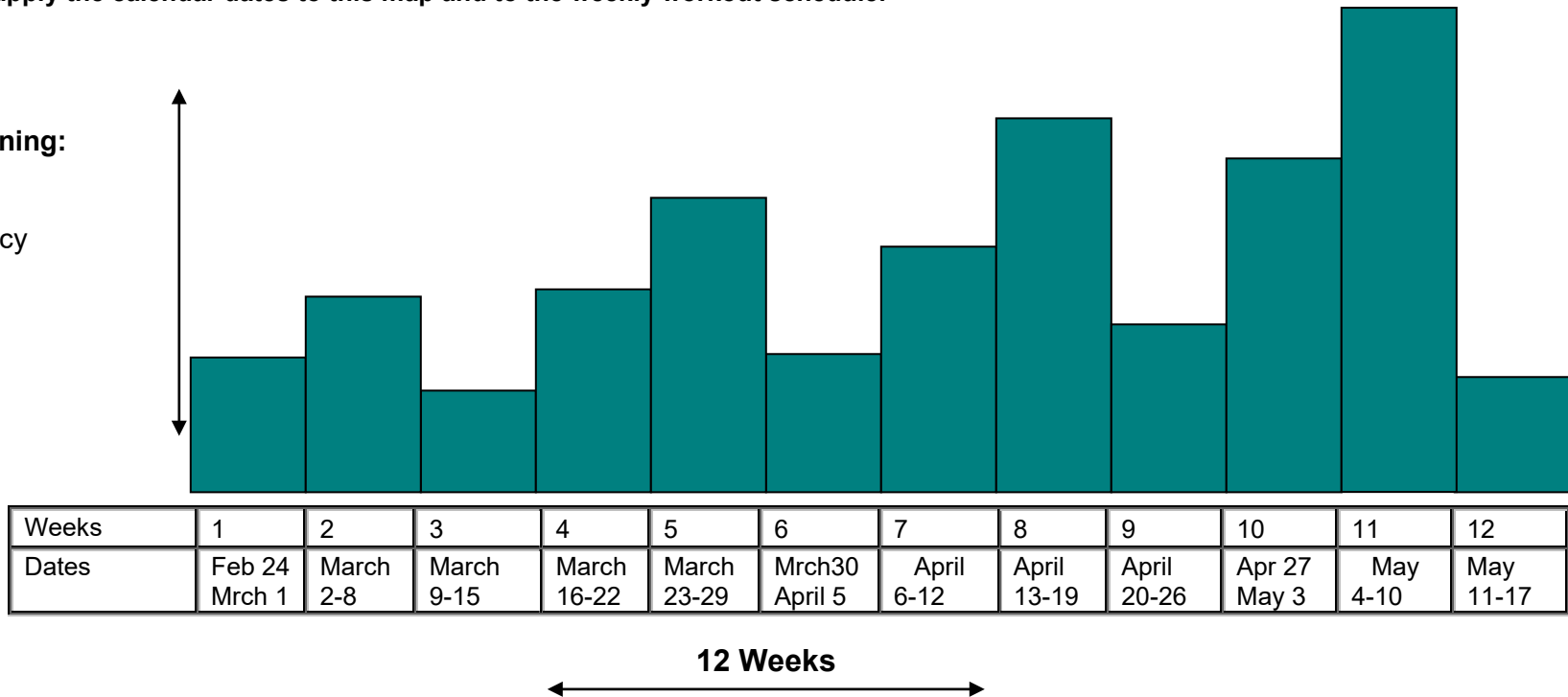
For example: **Week 5** on your program is a big week, but early in the program. This week is built of workouts with moderate frequency, very low intensity, and moderate duration. **Week 9** is a recovery week; it is comprised of workouts with moderate frequency, lower intensity, and reduced durations.

**Please look to the detailed weekly program for specific workouts. As we mentioned above, we recommend that you determine your race date or goal first and then apply the calendar dates to this map and to the weekly workout schedule.**

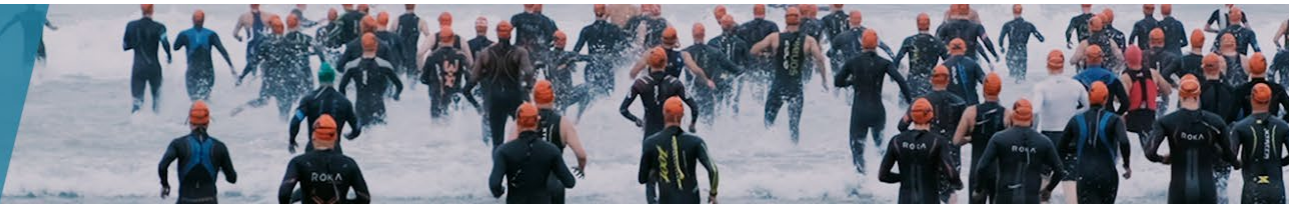
**Volume of Training:**

is created with:

1. Duration
2. Frequency
3. Intensity







### Training Intensity Zones

Intensity zones are used to target the level of effort for nearly every workout. The chart below speaks to Rate of Perceived Exertion or RPE. RPE is your primary measure and must always be used as a backup to all other monitoring devices. Heart rates can change due to heat, humidity, length of effort, bio-rhythms and more, but using the RPE will always tell you “how hard it feels”

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
<b>RPE:</b> Rate of Perceived Exertion.	Warm up and recovery pace. <u>Talking is easy.</u>	Feels like “I could go all day” pace. <u>Conversations shorter but comfortable.</u>	Race Pace. <u>Minimal Talking, 1-2 word sentences.</u> Could go 90-120 min.	Slight discomfort, could hold for ~10 minutes. <u>Down to basic Grunts</u>	All out max! Could only hold for a few moments. <u>Nothing but wheezing</u>

You do not need a Heart Rate Monitor (HRM), GPS watch, or power meter to succeed but those devices can be an objective companion to your workouts. If you choose to use an HRM then we’ll need to establish the correct heart rate for each zone and I’ll walk you through it below. If you want to train by feel I support that and you don’t need to bother with this math. The goal is to get as accurate as possible. If you know your maximum heart rate or your VO2Max (as the result of a scientific test), go to option B. If you have only your age to go by (and that’s fine), use option A.

#### Option A

You will need to do a bit of math to find the correct **beats per minute (BPM)** for each zone. THIS IS NOT DIFFICULT but requires a couple of days to establish: Take your pulse every morning before you get out of bed for a full 60 seconds. Take it for 5 mornings and find the average. This is your resting heart rate; once you have it you’re ready to plug it into this simple math equation.

Subtract your age from 220 (for males) or 226 (for females).

From this number, subtract your Resting Heart Rate (RHR) to get a Heart Rate Reserve (HRR).

Multiply your HRR by the percentages in each zone. Then, add the RHR back on to determine the boundaries for each zone.

**Example:** 34-year-old male with a resting heart rate of 55:

$$220-34 \text{ (age)} = 186$$

$$186-55 \text{ (RHR)} = 131 \text{ (HRR)}$$

$$131 \times .50 = 65 + 55 \text{ (RHR)} = 120 \text{ BPM, bottom of Zone 1}$$

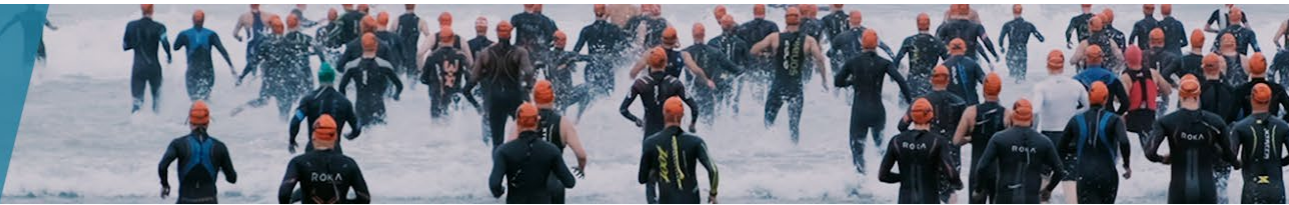
$$131 \times .65 = 85 + 55 \text{ (RHR)} = 140 \text{ BPM, top of Zone 1 \& top of Zone 2}$$

$$131 \times .80 = 105 + 55 \text{ (RHR)} = 160 \text{ BPM, top of zone 2.... and so on.}$$

#### Option B

Take your max HR or VO2Max (only if it has been established accurately via a scientific test) and multiply it by the percentages in each zone. Write your results into this chart to create your own personalized intensity zone

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
% of max Heart Rate	50%-65%	65%-80%	85%-87%	87%-92%	92%-Max
Enter Your Heart Rates Here					



**Week 1**

Do not begin exercise until you have read and understood all elements of the Guidelines (page 2 of this doc). We also advise that if you are new to endurance training that you check with your personal physician first to rule out any conditions that will prohibit you from starting this training program

**Goal of the week:** Gently introduce the body to frequent activity of three different sports. Don't rush this, we've got 12 weeks – plenty of time.

**Swim focus:** Confirm a level body at the surface of the water via head position, lead arm depth & torso pressure. You must be balanced level so shoulder blades, butt cheeks and heels are at the surface. That is the top priority.

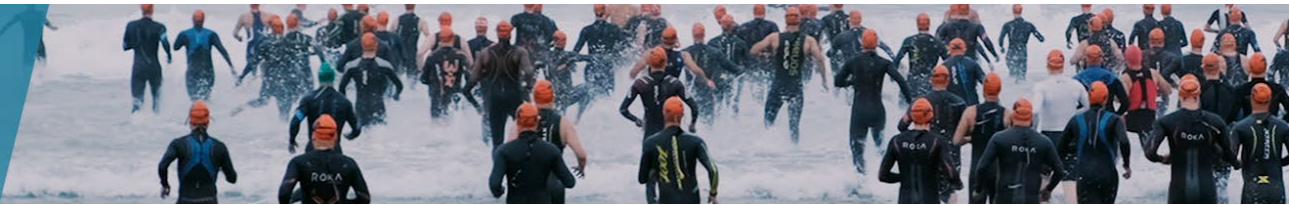
**Bike focus:** \*Get the bike fit to you and have an idea your pedaling cadence: slow is ~60rpm, moderate is ~75 rpm, a fast spin is ~95rpm.

**Run focus:** Manage heart rate zones by paying attention to your pacing.

\* See clinics at the end of this document for more information on basic equipment needs

Please Note: if your recent workouts and are longer or more intense than what's indicated on this training program, you could elect to sustain your current level. However, we recommend that you ease up, stick to this program and work on for and improving efficiency.

Feb 24 to March 1	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>SWIM BIKE RUN</b>		Run 30min flat or mill at 1% grade. 20min total comfort in Z2 then do 7min in Z3 Finish with 3min in Z3	Swim 40 min. Keep the swim pieces to 50s, 100s and 150s – stay mindful on technical fixes. Stop and rest 15 seconds between each effort. Keep body level at surface of the water via head position, lead arm depth & pressure on the collar bones. Then 20min of swimming 50s perfectly w/ 15" rest. Best technique is more important that swimming hard.	Run 40min. Focus on proud posture and short strides.  If you haven't run in a while do this as 3min run x 1min walk – 10 x through. And build each week by adding 1 min to the run segments before a 1min walk	Day Off!	Ride 75' on flat. Keep cadence between 85-95 rpm for the entire ride. Spin easy.	Swim 45min. Short bits of perfection with rest. Keep body level and now keep it level as you roll the entire body side to side to work hip power into each stroke.
<b>NOTES</b>			Swimming is a technique sport. If you need to learn how to swim See our <i>Swimming for Triathletes DVD</i> or contact me for a private lesson.			Reminder: Begin each ride with a warm up period and end every workout with a light stretch.	



**Week 2**

**Goal of the week:** Establish confidence. 11 weeks from now you'll be at the start of the Herbalife24 Triathlon Los Angeles. Confidence on that day will be built from all the workouts completed up to that day. Train with pride!

**Swim focus:** Confirm level body is maintained while rolling slightly side-to-side.

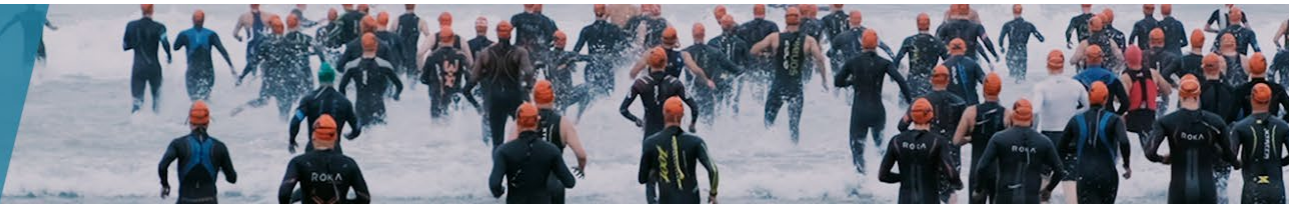
**Bike focus:** \*Get familiar with the gears and how to shift smooth and silently.

**Run focus:** Arm swing: at lowest point, hand near hip & tops out at chest level. Swing forward, not across.

\*See "clinics" for details.

March 2-8	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>SWIM BIKE RUN</b>	AM Ride 75min in Z2 on flat terrain. Focus on smooth, fluid circles.  PM Run 20min super easy.	RUN 45min – Focus on tall proud posture, short strides so foot meets ground just mm in front of hip.	Swim 45min. Confirm level body, long axis rotation. Keep the swim pieces on the short side (50s, 75s, 100s), keep the rest on the long side (10", 15", 20") but keep quality of your form ultra-high.	Run 45min on flat, mostly aerobic but include 5x3min in Z4 w/ 2' recovery in Z2	Day Off!	Ride 100min on flat. Smooth, fluid circles and confirm that hands, shoulders, jaw are all relaxed.	Swim 50min. Short bits of perfection, level at surface, reaching n' rolling to be as long as you can be.  Run 35min all easy
<b>NOTES</b>		Holiday 5 & 10ks are everywhere, consider registering and challenging yourself!	.				





**Week 3**

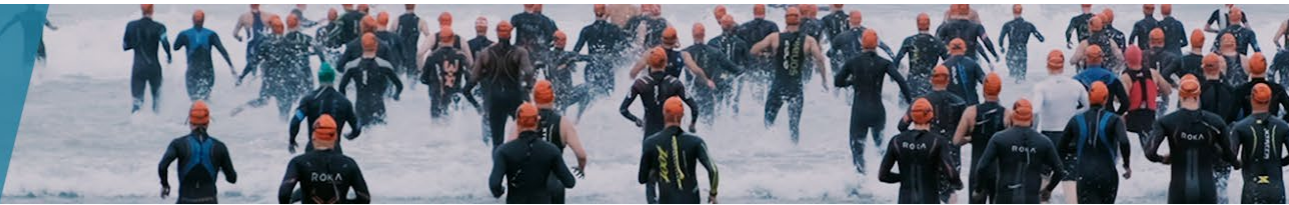
**Goal of the week:** Heal up. This is a recovery week, it's very light so keep it easy.

**Swim focus:** Level body, good roll: now focus on the "timing" of the arm switch.

**Bike focus:** Cadence – 85-92 rpm and more power to each pedal stroke.

**Run focus:** Remove all tension from your upper body during the run.

March 9-15	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>SWIM BIKE RUN</b>	Day Off 1 of 2	Run 35min flat and crazy easy, easier than you think it should be	Swim 45min. Level first. Rolling second. Now: the lead arm should still be waiting out front, near surface of the water when recovery fingers touch the water. This is referred to as "¾ catch up"	Run 40 min flat. Super, super easy.	Day Off #2	Swim 45min. Confirm level body, confirm reach-n-roll. Work on ¾ catch up.  Run 30min include 5x2' in Z4 w/ 1min easy	Ride 90min. All steady and smooth in total comfort on flat.
<b>NOTES</b>	Make time for extra rest just like you make time for workouts. This is the week where adaptation happens.		It you want a quick glimpse of this swim focus point: Watch just a few seconds of this <a href="https://youtu.be/LplmxO89t9U?t=33">https://youtu.be/LplmxO89t9U?t=33</a>				



**Week 4**

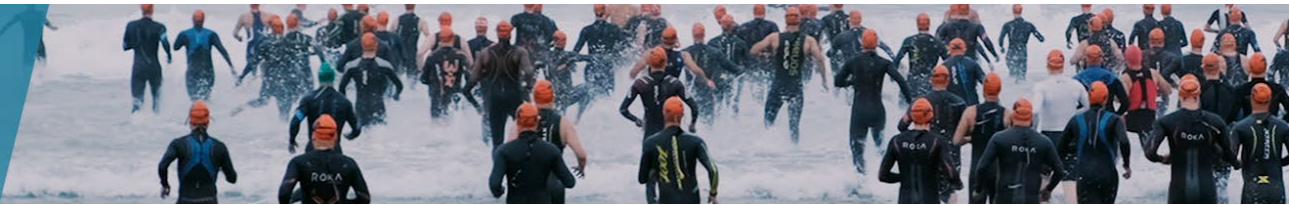
**Goal of the week:** Keep the frequency. Exercising short & frequent is better than long and sporadic.

**Swim focus:** Perfect the ¾ catch up swim so that you feel the “sweet spot” – the acceleration that comes from the hips powering that hand position.

**Bike focus:** Seated power. Make the bike go forward quickly by powering up that fluid spin.

**Run focus:** Sustained running with good form.

March 16-22	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>SWIM BIKE RUN</b>	Swim 45min. Still short pieces with complete rest and still 100% mindful of technique. Feel for sweet spot when hips connect w/ ¾ catch up arms.	Run 45min flat or mill at 1% grade. 100% aerobic in Z2	Ride 75min on flat. All in comfort but find 5 segments of 3min each where you go to a bigger gear and power the bike up to faster speeds. Complete recovery between each effort.	Run 45min. Rolling hills. Proud posture, short strides, now lift heel a bit higher towards butt when you pull the foot off the ground.	Day Off!	Swim 45min. 15min of 50yd swims of perfection. 15min of 100yds of mindful swimming. Then 15min of 50s all perfect. Complete rest between each and each swim has its own focus.  Run 40min on flat all in Z2	Ride 2hrs on flat. 100% aerobic, super, super easy. Easier than you think it should be.
<b>NOTES</b>							



**Week 5**

**Goal of the week:** Energy management. Don't give so much in the early stages of a workout that you are dead at the end.

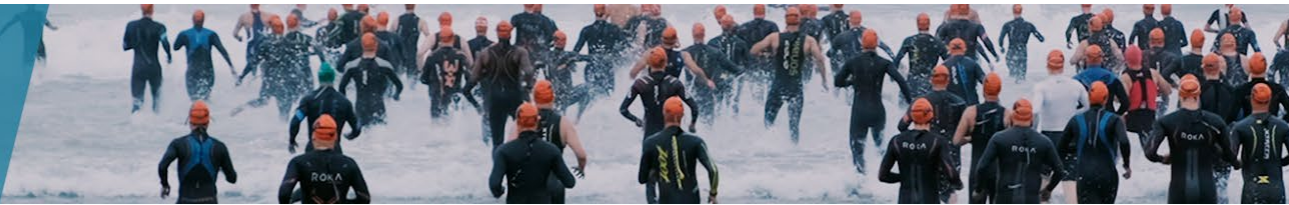
This is a big week, hold on through the efforts.

**Swim focus:** Level body, good roll, feeling for sweet spot - now add a clean, straight "entry" this week: hand slices into water with nary a bubble.

**Bike focus:** Cadence – 90 rpm and more power to each pedal stroke.

**Run focus:** 180 steps per minute. This may feel odd at first. Try timing and counting your strides: 30-steps/10 sec.

March 23-29	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>SWIM BIKE RUN</b>	Swim 50min. In the middle of this workout include this set: 6x150yds where the first 50 is in Z4 and is FAST then straight into 100yds in Z2 and get recovery while you swim. Rest 40 sec between each 150.	Run 45min flat or mill at 1% grade. 1 <sup>st</sup> 30min Z2 then do 6x1min in Z4 w/ 2min easy in Z2. Finish in comfort	Ride 90min. First 25min and last 25min are super easy – but the middle 40 needs to be stronger and steady in Z3, working but not killing yourself.	AM Swim 40min. Play with fluid arm motion. You still have to hit that ¾ catch up moment but let arms flow.  PM Run of 40min with some easy hills.	Day Off!	Swim 50min. Make sure you are exhaling 100% of gas (wring out those lungs) before you turn up for your inhale.	Brick /Combo: Ride 90min All flat in Zone 2. The last 20min in Z3. – off and run-Run 25min total.
<b>NOTES</b>		Stretch well after this workout!					Focus on short strides for the first 3min of run and be patient for legs to come around – they will.



**Week 6**

**Goal of the week:** Recovery. Give the body a chance to repair and grow stronger. EXTRA sleep and nap; use valet, elevator instead of stairs; pamper yourself.

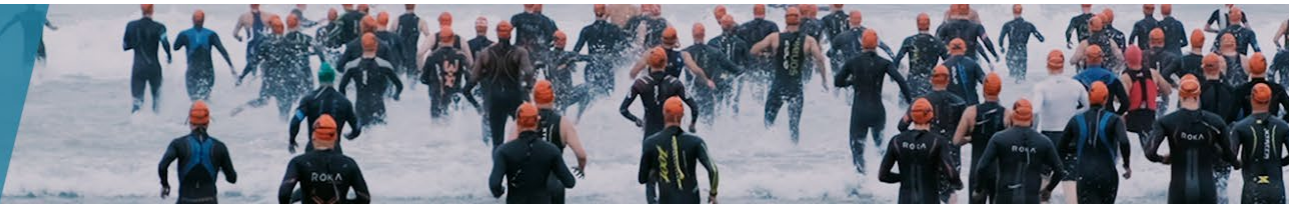
**Swim focus:** \*DPS – Distance Per Stroke. A straight, streamlined body and limbs will yield a big DPS.

**Bike focus:** Spin easy – see how fast you can make the bike go with the least amount of effort.

**Run focus:** Body position – run in a proud posture, mostly upright and lean forward from ankles.

March 30 – April 5	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>SWIM BIKE RUN</b>	Day Off 1 of 2	Run 30min on flat and make this easier than you think it should be.	Swim 40min. Try to relax so deeply that you can cross the effortlessly. This would be a great workout to break into the ability to breath to both sides. Try some super easy lengths of breathing bilaterally (every 3 <sup>rd</sup> stroke). During hard swims (and race day) you need to breath every 2 strokes (for most air) but it's nice in open water to have the option of side.	Run 30 min flat. Super easy.	Day Off #2	Swim 45min. Esoteric focus: forget about “pulling” water back, think about “holding water” and moving your entire body past that anchoring hand.	Ride 2 hours. All steady and smooth in total comfort on flat.
NOTES	Make time for extra rest just like you make time for workouts. This is the week where adaptation happens.	Go easy here.					





**Week 7**

**Some workouts are now based on distance and not time.**

**Goal of the week:** Keep the frequency. Exercising short & frequent is better than long and sporadic.

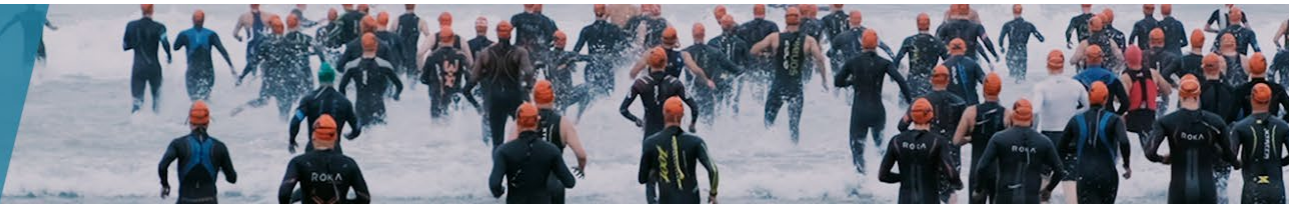
**Swim focus:** Time to build – hold perfect balance and ¾ catch up timing while the distances get longer

**Bike focus:** Muscular endurance, we start to add strength focus to the bike rides.

**Run focus:** Duration of run, let's start to draw out the run segments a bit further

April 6-12	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>SWIM BIKE RUN</b>	Swim 2100yds 200 easy warm 9x50s w/ 10" rest (descend x 3: so 1st easy, 2 <sup>nd</sup> is a hair faster, 3 <sup>rd</sup> is fastest – then 4 is ez, 5 faster, 6 fastest, etc) 6x200s w/ 30" rest – 1 <sup>st</sup> 50 fast, then 150 cruise. 10x25s on :40 odds fast, evens easy	Run 50min on flat. Do the whole run aerobic expect for 3x4min in Z3 in the middle w/ 2min easy jog between each	Ride 20 miles. All easy but include 4x4min where the bike is in a gear that's too big for the terrain and you have to muscle out circles with power. Spin easy for 2min between each.	Limiters: choose your weakest event and duplicate one of those workouts this week (even if it's the bike, ride back to back).	Day Off!	Ride Long – 35mi do this 100% aerobic. Super easy and fun.	AM Run a portion of the course with me. 7am at the south west corner of Figueroa & Olympic Bld downtown LA.  PM Swim 50min include 8x100yd w/ 15sec rest between.
<b>NOTES</b>	Stay mindful during the longer swims		The 4 min strength segments could also be done riding up hill, just spin down for 2min between each repeat.			As your workouts week over the 1hr mark you MUST incorporate some hydration during the workout and possibly some calories too.	.

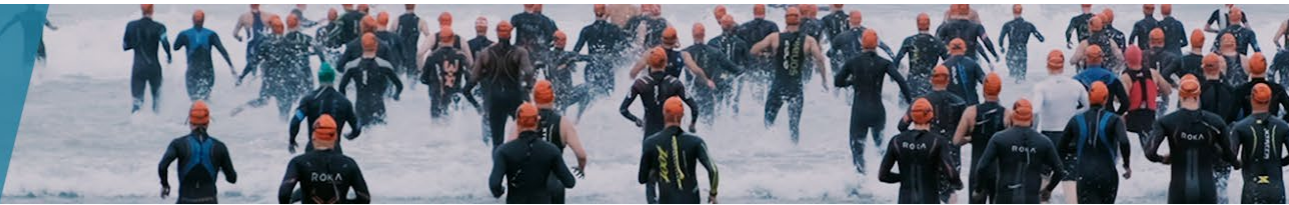




**Week 8**

**Huge week!** Find the magic balance between pushing the body to new levels while not overdoing it. 9 hours of sleep per night minimum. Eat well, drink plenty and thrive. You have only 4 weeks to race day and only 2 weeks are heavy so dig in now and treat yourself like the athlete you have become. An open water swim is requested. \*See clinic on open water swim.

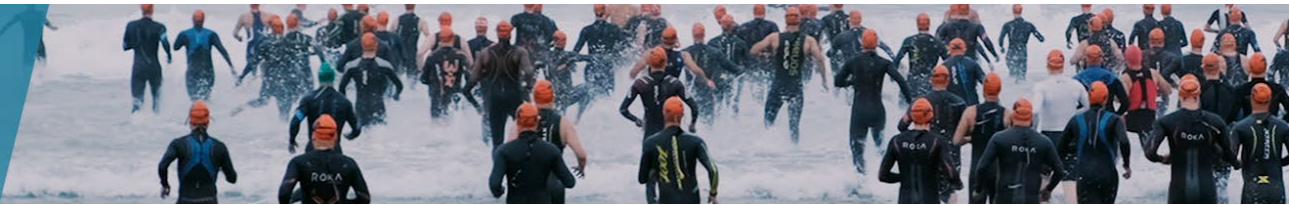
April 13-19	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>SWIM BIKE RUN</b>	Swim 2600yds 400 easy 10x50s w/ 10" rest odds are fast, evens easy. 4x100s steady w/ 10" rest Use a pull buoy and pull 3x300s steady, aerobic and focused on catch so that lat muscle is working. 4x100s swim (1 easy, 2 fast, 1 easy) w/ 20" rest	Run 55min progressive tempo: 10min easy Z2, 25min moderate Z3, 15min strong in Z4. 5min cool down jog	Ride 20 miles. All easy but include 4x5min where the big is in a gear that's too big for the terrain and you have to muscle out circles with power. Spin easy for 2min between each.	Limiter: choose your weakest event and duplicate one of those workouts this week (even if it's the bike, ride back to back).	Day Off!	AM Ride Long – 40mi do this 100% aerobic. Super easy and fun.  Run flat and easy for 35min	40min open water swim for sighting skills and surf management. Swim easy on this first one.  Run 50min flat, progressive tempo: 15min easy 12min moderate 18min STRONG 5min cool down
<b>NOTES</b>	Stay mindful of form during the longer swims.	Dig deep here, run further, faster than in the past.	The 5 min strength segments could also be done riding up hill, just spin down for 2min between each repeat.		Make time for rest just like you make time for workouts- big weekend ahead!	Your choice, you can run right off the bike or later in day.	



**Week 9**

Super easy week. Be good to yourself with great sleep every night (bail early on all social functions, tell 'em your training for a triathlon). Highest quality food, hydration, maybe even a massage this week?

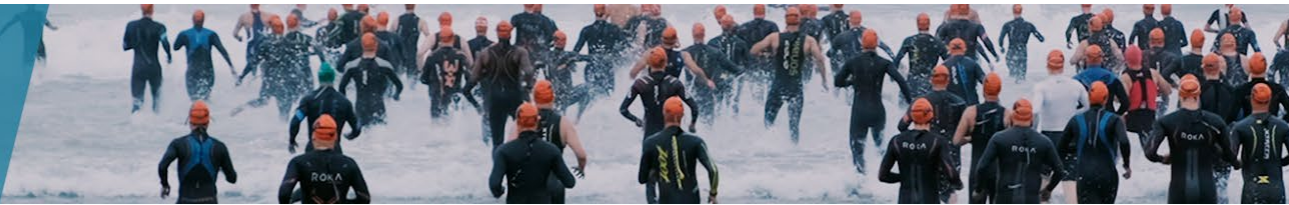
April 20-26	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>SWIM BIKE RUN</b>	Day Off!	Run 45min total comfort	Swim 1700yds 12x25s w/ 10" rest. Odds focus on level, evens focus on reach – 'n roll. 12x50s w/ 15" rest. 1 <sup>st</sup> length of each is level body, 2 <sup>nd</sup> length is ¾ catch up focus. 4x100s easy 12x25s w/ 20" odds are easy, evens are FAST.	Run 35 min flat. make the run even easier by relaxing everything: hands, arms, shoulders, jaw – do a diagnostic check while you run and take the tension out of all of it.	Day Off #2	Swim 2000yds 8x25s w/ 15" rest scroll thru focus points. 6x100s w/ 20" rest ---easy 50--- 5x100s w/ 15" rest ----easy 50--- 4x100s w/ 10" rest 4x25s easy w/ 20" rest cool down  Easy 30min run on flat.	Bike Course Inspection 7am where South Venice Blvd crosses Ocean Front Walk in Venice. We'll ride point to point and end at Staples Center
<b>NOTES</b>	Make time for extra rest just like you make time for workouts. This is the week where adaptation happens.	Go easy here.					



**Week 10**

Goal of the week, prioritize the workouts. All you really have left is this week and next (the final week is taper, it's easy) so make the training a priority this week and be ready for a break-through in fitness.

April 27- May 3	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>SWIM BIKE RUN</b>	Swim 2000 yds 12x25s perfect w/ 20" rest 12x50s w/ 10" rest – STEADY 10x100s w/ 15" rest – try for same time for each of the 10 swims.  Run 4 miles after swim. All Z2	Run 1 hour. 20min Z2 15min Z3 20min Z4 5min easy cool	Ride 20 miles. All easy but include 4x5min out of your comfort zone in Z4 (maybe even Z5 for the last 30sec of each). Spin crazy easy in Z1 for 2min between each effort.	Limit: choose your weakest event and duplicate one of those workouts this week (even if it's the bike, that's good but ride aerobic here for 75min).	Day Off!	AM Ride Long – 45mi do this 100% aerobic. Super easy and fun. Eat on this ride, drink on this ride.	AM Swim course inspection: 7am where South Venice Blvd hits the sand in Venice. Bring wetsuit, cap, goggles, towel.  Run 1 hour mostly Z2 but include 2x12min Z3 in the middle
<b>NOTES</b>	Start this day with early race breakfast and then do the swim/run in AM	Push yourself. If you go a bit beyond here, you'll reap the rewards on race day.			Drink in this day off – feet up often, use valent, pamper yourself.		



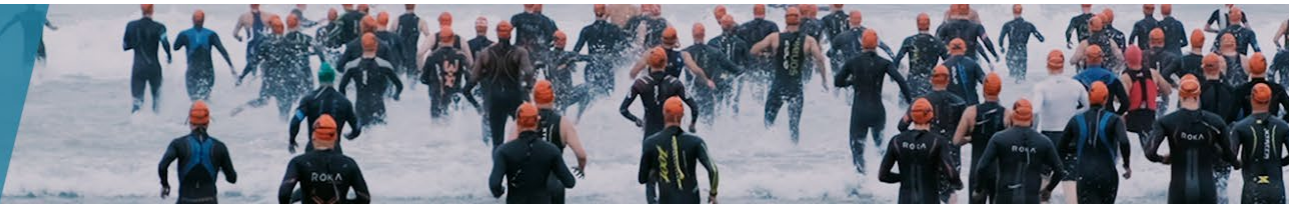
**Week 11**

Let your focus for this week be

- A) Breathing: make certain that you are getting a full, complete, deep breath even when in the upper zones.
- B) Mental toughness. Keep your thoughts positive, practice positive self-talk when it gets rough. Tell yourself: “you can do this” “you’ve got this”

May 4-10	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>SWIM BIKE RUN</b>	Swim 2400 yds 12x25s w/ 20” rest 12x50s w/ 10” rest – STEADY 3x200s 1 easy, one faster. 8x100s w/ 10” rest – note swim time and predict your swim split on race day.  Run 30 min after swim, all easy	Run 70min completely aerobic. Easier than you think it should be	Ride 20 miles. All easy but include 5x5min out of your comfort zone in Z4 (maybe even Z5 for the last 30sec of each). Spin crazy easy in Z1 for 2min between each effort.	Limiters: choose your weakest event and duplicate one of those workouts this week (even if it’s the bike, that’s good but ride aerobic here for 75min).	Day Off!	AM Ride Long – 45mi do this aerobic, save for the middle – put in 4x7min efforts in Zone 4. Super easy for all the rest and fun. Eat on this ride, drink on this ride.	35min open water swim with a partner in front of manned lifeguard station. Swim easy, work sighting and pacing  Run 1 hour mostly Z2 but include 2x15min Z3 in the middle
<b>NOTES</b>	Start this day with early race breakfast and then do the swim/run in AM		These 5 efforts represent the 5 hills you’ll deal with on the course. You are not allowed to burn more than 5 “matches” during your ride. Ride easy for the majority of the race and you’ll run well. Ride too hard and you might end up walking the run (poor R.O.I. and slower)		Heal thyself!		



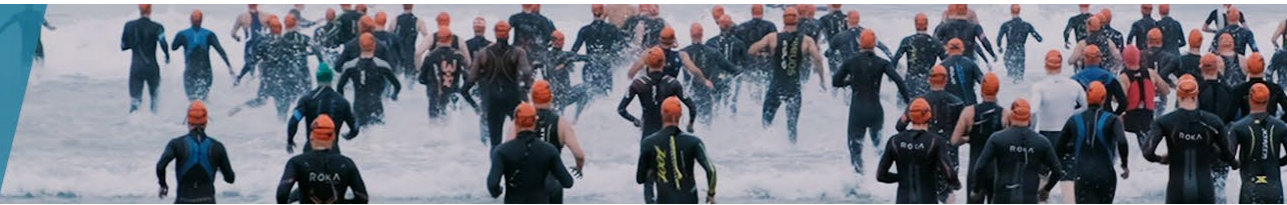


**Week 12**

**Race Taper:** Tues, Wed, Thursday nights get 9 hours of sleep minimum. Before dozing off, visualize yourself doing the race in comfort. Look back through the program and gain confidence from the work you have done. Stay calm and know that you will be in control on race day.

May 11-17	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>SWIM BIKE RUN</b>	Day Off!	Run 30min all easy but include 4x45sec in Z4 w/ 2:15 recovery jog.	Swim 1000yds 3x100s easy w/ 30" rest 8x50s (25 easy, 25 faster) w/ 20" rest 12x25s w/ 10" rest odds are FAST, evens are easy  Run 20' out of pool, in the first 7min do 4x30" faster w/ 1min easy between. 13min easy jog.	Micro Brick: Ride exact race bike set up for 45min on flat: 20min easy, 20min moderate, then 3x1' STRONG (beyond race pace) w/ 1' easy between.  Off and Run 4min: 1 <sup>st</sup> min crazy easy then build in minute 2 to race pace. Finish with 2min jog.	Day Off!	Run 10' flat with 3 super short pick-up-the-pace intervals, each lasting about 30 seconds with ample rest between.	Race Day!!!
<b>NOTES</b>	Resolve all equipment issues by Thursday.	Keep this easy  8+ hours of sleep tonight	Add a short Run immediately after your swim. Testing your legs after a swim is good practical training for the Swim to Bike transition!  8+ hours of sleep tonight	Make a checklist of everything you will bring to your event. There's a list on the <i>Basics for Triathletes</i> TTS DVD!  8+ hours of sleep tonight	8+ hours of sleep tonight	No stress, stay out of sun. Nap today	After race take time to reflect on what went perfectly and what didn't - Then, Plan next event!





## Your Clinics

### Basic Equipment Needs

#### Swimming:

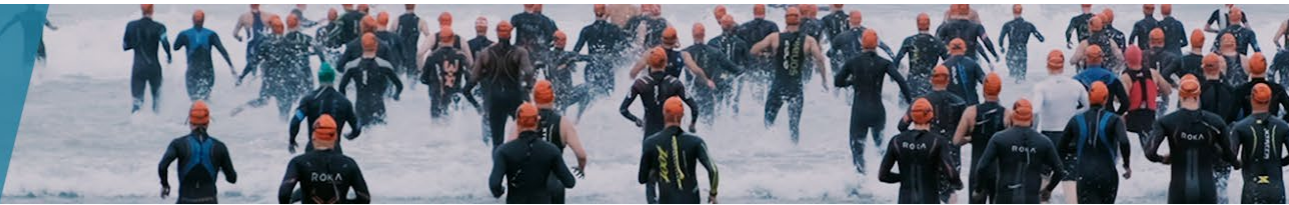
- **Goggles** - a good pair will cost between \$10-15\$. The best ones will stick on your face for 2-3 sec without the strap around your head. Test a bunch, find the best fit.
- **Swim Suit** - tight fitting suit made of Lycra or nylon which will hold up well in chlorine
- **Swim Cap** – latex or silicone

#### Cycling:

- **Helmet** - Must ride with an CPSC approved helmet at all times - No Exceptions!
- **Bike** - Although you may use a mountain bike in nearly all triathlons of this distance, a road bike is recommended. If you choose to train on a mountain bike, slick tires are best. In either case, your bike must be fully operational, shifting and breaking perfectly. The fit of your bike is crucial – an improperly fit bike leads to injuries; seek out a fit professional to ensure a proper fit. Call me about this, I'm arguably the best fitter in LA
- **Cycling Shoes** – Unlike other athletic shoes, cycling shoes have stiff soles. Stiff soles serve the dual purpose of protecting the bottom of the cyclist's foot from the pressure of the pedal and distributing force to the pedal. A softer shoe will result in lost energy and a sore foot! If you're freaked about the bike you can ride in run shoes + platform pedals. If you're able but worried about being "clipped in" use a Velcro closed mountain bike shoe and mountain bike pedal (inexpensive, easy to use). If you're competitive and confident – road pedal & tri shoe.
- **Tools** – A small tool bag attached to your bike should include the following: tire levers, spare tube, a patch kit, money, and emergency information.
- **Inflation** – either a pump or CO2 system.

#### Running:

- **Running shoes** - a good pair designated for just running - read more on the "Running" clinic
- **Thin running socks** - avoid cotton, there are many brands with synthetic materials that will wick away moisture and reduce blistering
- **Athletic Shorts & T-Shirt** – technical fabrics are preferable to cotton
- **Jog Bra (if applicable)**



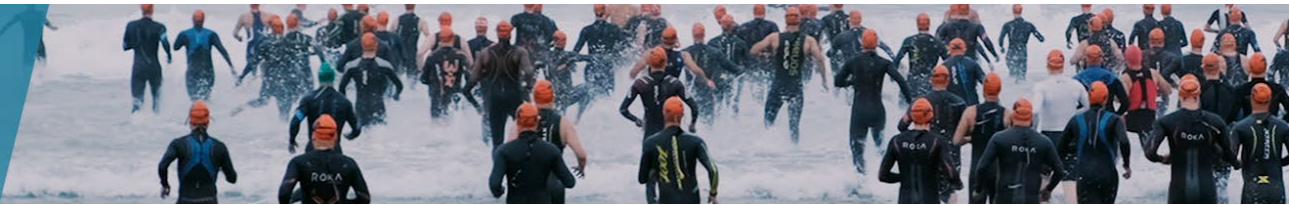
## Injury Prevention

Basic Logic: Getting hurt is the worst thing that can happen to you and your training. Build fitness slowly and invest a few minutes at the beginning of every workout with a complete warm up and end of every workout with a cool down and stretch to reduce the risk of injury.

The body can, and will adapt to athletic efforts if they begin at an appropriate level and progress upward slowly. Rushing into hard efforts, long efforts, hills, sprints or any highly stressful activity will increase the risk of injury greatly. Start slowly and build slowly; this TTS program progresses at a rate that will maximize your aerobic fitness and minimize the risk of injury. This gradual progression will allow for joints to adapt, connective tissue to thicken and muscles to strengthen. Every workout must begin with a warm-up. Let that warm-up include an easy, low intensity effort and, perhaps, a light stretch.

During the workout, if something hurts, **STOP**. It's important to discern between the slight stress that occurs during normal exercise and real pain. Pain means stop. If the pain persists after stopping the exercise then see a doctor. Pain in muscles and joints is often solved with stretching and icing. Pain in the back, chest or head area is obviously more serious. A medical professional should assess all pain that persists or reoccurs. As a triathlete, you clearly respect your health; to respect it fully, listen to the signals that your body is sending you.

Every workout must conclude with a cool-down segment. This gives the body a chance to flush lactic acid and other natural occurring toxins away from the muscles. After the cool-down, a long, easy stretch should also take place. This helps the muscles recover faster and stay loose for future efforts. If you are pressed for time during a workout, abridge the effort a bit, but don't cut out the cool down or stretch.



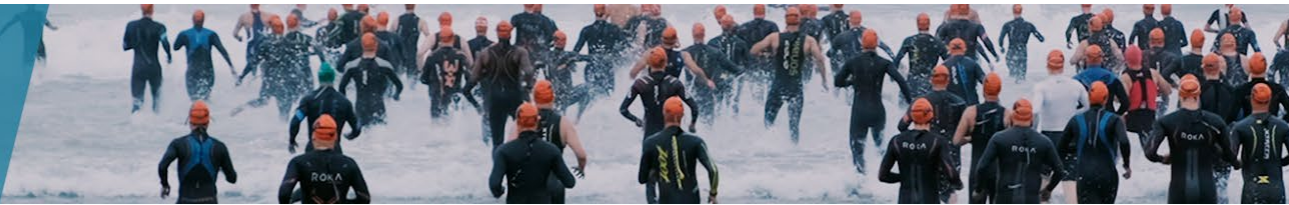
## Hydration

**Basic Logic:** Being well hydrated will only help your training, your racing, and your recovery, while being dehydrated will do nothing but hinder you all those areas. Don't wait until you are thirsty to drink - keep it coming in at a steady rate. Find separate categories in your mind; one for water and one for sports drinks. These are two different, but important, things. In training, and on race day, you will need to consume both water and electrolyte beverages to satisfy your body's needs for hydration.

Clean, cool water is the very best thing that a triathlete can drink, and you'll need plenty before, during, and after workouts and races. A 150 pound adult can lose a half gallon of water a day just living, and a triathlete in training can lose up to two gallons. Dehydration means the blood is thickening and the heart has to work even harder to pump that sludge around. The swim is the place where hydration is most often ignored. Even though perspiration is reduced due to the aquatic atmosphere, the body loses water with every exhale. Drink a moderate amount of water up to 20 minutes prior to swimming, and then drink plenty after a swim workout. The bike is the easiest place to hydrate during training and racing. Make sure there are at least two water bottle cages on your bike, and have full bottles in there for every ride. During the race drink 4-8oz every 15 minutes. You will need to drink enough to make up for water lost during the swim, enough to get through the bike, and enough to be ready for the run – so condition yourself to drink often on the bike and keep the fluids flowing. Drinking on the run is a must, but it's also the place where gastrointestinal distress is most likely. Your body's absorption abilities are trainable, so practice and they will improve. During training runs that exceed an hour, plan for drinking by either carrying a bottle or by running a course that takes you by an easily accessible source. Nearly all race directors today offer aid stations every mile of the run, so there is little need to carry water on race day, but check the details of your event to be certain.

Electrolyte replacement drinks such as Revenge, Gatorade, etc. help restore essential minerals like sodium, potassium and others. Some sports drinks contain too much sugar, and this can draw water away from the working muscles and back to the digestive system to help break down the sugar. The salt content in sports drinks is an essential part of hydration.

Clear urine is usually a good sign of being well hydrated, but doesn't confirm much. Obtaining clear urine from drinking water but without replacing the missing salt, electrolytes and other minerals means that the body has still not achieved a healthy state, and recovery will be compromised. Dark urine usually means you are dehydrated, but can also be the result of an excess of vitamins. Try to get your pee clear or straw colored after every workout via water and a sports drink, and remember caffeine and alcohol will likely work against the process.



## Nutrition

Basic Logic: Food is fuel for an athlete's body. Make sure you give it something it can really use and never run out of fuel.

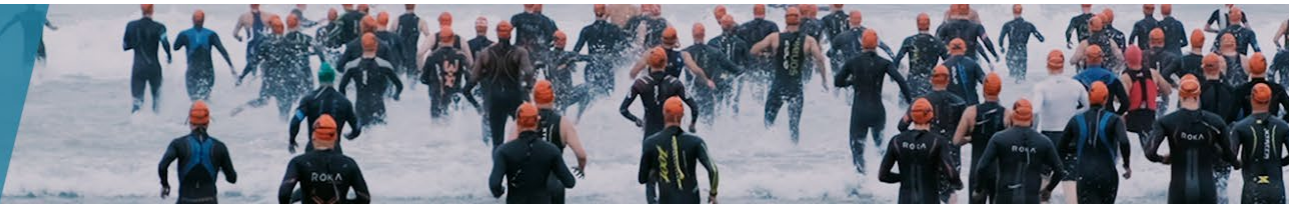
The first step in approaching a nutrition program for a triathlete in training is to look at how you might eat on race day: you'll need to rise early and eat early so that your stomach will settle before your start. You'll want to keep some calories coming in during the event to keep your energy up. You'll also want to eat well after the race to replenish all lost nutrients, restore muscle glycogen and to help restore broken down muscle tissue. That is exactly how you should eat every day of training as well.

A good physical effort, be it a workout or a race, starts with a good meal the night before. Dinners should have a nice mix of carbohydrates and proteins, a little fiber, not too much fat but not fat-free either, and should contain some fresh, nutrient dense foods. Avoid foods that can affect your sleep (sugars, hot spices, caffeine). Avoid foods that cause you to have a slight reaction. For example, dairy congests some people; some folks have a mild allergy to nuts; almost everybody knows of something out there that gives them gas. Keep your dinners simple, and eat what you like and what works well for you.

When you wake up in the morning, you should always eat. Think of a night of sleep as a mini fast; you need to be topped off before the morning's effort. Moreover, the body works best when it has a bit of fuel in the digestive system to help stoke the fires that will burn the biggest energy source in the body – stored fat. It's pretty easy to keep food down on the bike, but swimming or running on a full stomach can be problematic, so eat early, eat light and let it settle prior to exercising.

If your workout is over an hour, consider taking in some calories during the workout. If your workout is 90 minutes, you really need to take in calories during the workout. If your workout is 2 hours or more, you're going to jeopardize your goal unless you take in calories. Your body's ability to absorb calories is trainable, and you'll have to eat on race day, so get it working in training. Bananas, processed energy bars, PB&J's are all options on the bike, but many athletes find solids hard to digest during exercise - especially during the run - which is why products like gels & gus have become so popular. Those quick energy items contains ~110 calories per serving and will last you a good 30 minutes. They look, feel and taste just like cake frosting. They come in many flavors and should be taken with 4-6 oz of fluid. Test options in training so you know what works for you on race day.





## Recovery

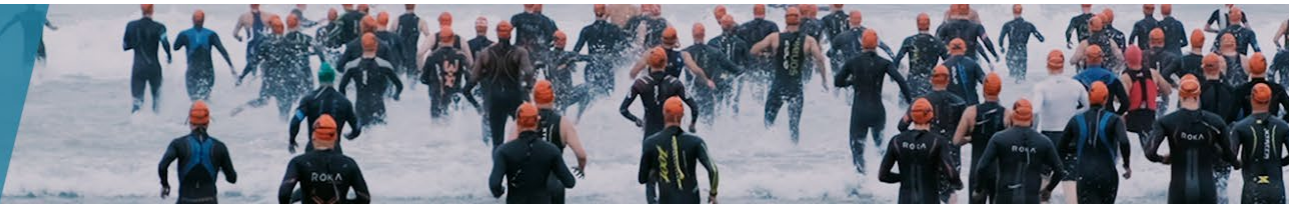
Basic Logic: Frequent, high quality workouts can be obtained as long as recovery is maximized. Recovery can and should include hydration, nutrition, stretching, massage (even self massage), REM sleep, icing and an oxygen rich environment.

Training for a long distance endurance event requires an athlete to perform long, intense efforts and it requires them to perform them day after day. Recovery starts before the workout ends: never let yourself run out of energy (bonk) during a workout. Learn to take in some easily digestible carbohydrates early and often during long workouts (more than 60-75 minutes). Eating after a workout is possibly the most critical nutritional consideration for an athlete. For the best recovery, it's important that you eat a high glycemic food "in the window", which is within 30 minutes of completing a workout. High glycemic foods include: Corn Flakes, Rice Chex, Raisins, Pineapple, Muesli, Oatmeal, Yams, Orange Juice, Rice Cakes, Carrots, White Rice, Parsnips, Tapioca, French Bread, Molasses, and more. The body is primed and ready to replenish muscle fuel (glycogen) after each workout. A carbohydrate that is high on the glycemic index becomes glycogen most quickly. After the window - say, 30 to 60 minutes after the workout - it's nice to eat a lower glycemic food such as beans, pasta, tomato soup, lentils, and barley along with a complete protein like egg whites, nonfat cottage cheese, or a chicken breast. Vegetarians can complete a vegetable protein by supplementing with an essential amino acid.

Stretching and massage can speed recovery. If massage therapy is not available after every workout (and let's be honest, that's a dream), then you can help speed recovery by simply massaging muscles with skin lotion or even in the shower with soap. You can rub the tissue back and forth and with long strokes toward the heart. There is really no "wrong" way to do it. Studies show that tissue repair is maximized during the REM cycle of sleep and that an oxygen rich environment (an oxygen/hyperbaric chamber) can dramatically increase the speed of recovery.

All elements of this regimen (plus rehydration) will get the body built back up and ready for the next effort.





## Swim

Basic Logic: Swim the Australian Crawl (AKA “Crawl”, or “Freestyle”.) Maximize efficiency by swimming for technique first and foremost and swimming for speed second.

Of all the disciplines in triathlon, the swim requires the most technique. A strong person swimming will lose to a technically proficient swimmer every time.

The reduction of drag or overcoming resistance is the most important element in becoming a good swimmer. There are two key techniques you must apply to reduce the amount of drag on your body. You must master the ability to keep your heel, hip and shoulder level near the surface of the water at all times. This is primarily achieved with head position. While swimming, keep your head in the water so that only a small circle at the back of the head is exposed to air. As you are swimming, the water line should hit the crown of your head and not your hairline. The secondary element to being level is placing pressure upon on torso. The torso of the human body is filled with air. Play with the feeling that as you press the front of your chest down further into the water, the hips and heels will raise closer to the surface. This level body position and the feeling of being a little deeper in the water, needs to be maintained while you “roll” on your *side* – the position in which you will spend most of your time while swimming.

After body position, the propulsion and timing of your swim stroke is the icing on the cake. As mentioned above, “the roll” is likely the next most important piece of the swim puzzle. Swimming flat on one’s stomach is slow and inefficient. Let the body roll from side to side while swimming. After the arm has finished its recovery and is ready to enter the water, let that entry trigger the roll. As the arm falls forward into and through the water, power can be gained from the hips as they tip, or spin, onto the new side. As the leading arm extends completely in front of the head, the body finishes its roll and the hand stretches way out to the body’s maximum length. That position, where the arm is fully extended and body is on its side and at its longest, should be held for a moment. This gives the swimmer time to glide and will increase your DPS - distance per stroke.

When that long arm finally gets to go into propulsive action, it does so in 3 distinctive phases. The **catch** (the arm bends at the elbow and the forearm and hand begin to point towards the bottom), the **arm sweep** (with the elbow high, the hand and forearm pull through the water - not straight, but through a very slight elliptical pattern that moves under the belly button. This is complimented by the progressive roll of the body), and **the finish** (as the hand nears the hip area, it pushes straight back toward the feet and doesn’t stop pushing until the arm is fully extended). The only job for that arm now is a nice relaxed “recovery” where the elbow is high out of the water and the hand and forearm are as limp as a wet noodle.

### Additional Notes:

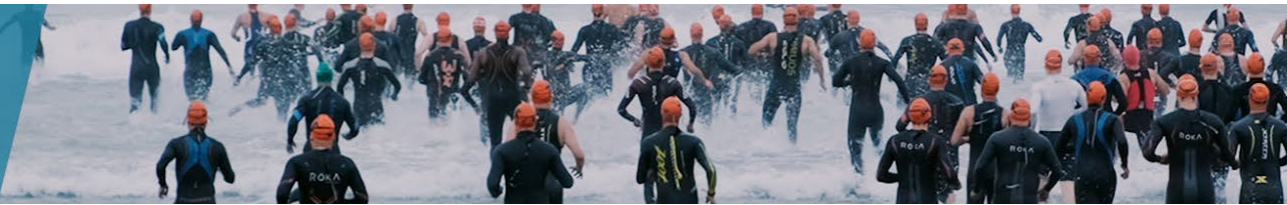
Kicking: keep it to a minimum. Find your power in the arms’ pull and the hips’ pivot.

Breathing: do it often – on both sides and one side, but maintain a level body during the breath.

Fins, paddles, etc: don’t become dependent on these, as you can’t use them on race day.

Backstroke: it complements the crawl nicely and will give a good stretch.

Goggles: a pair that will hold briefly with suction alone (no strap) are ones that fit. If you have a small face, be sure to try on Jr. goggles too.



## Bike

“When I see an adult on a bicycle, I do not despair for the future of the human race.”  
H.G. Wells

Basic Logic: A bike that is fit properly will be comfortable, and comfort is priority one.

Seat height is important to your bike’s fit. Raise the seat to a point where your leg is straight when your heel is on the pedal in its lowest position. When your toe is on the pedal, there will be a slight bend in the leg and that is generally the proper height. Once this is done, check to make sure that you have not overextended the seat tube. The seat tube should have limit markings on it denoting maximum elevation allowed. Do not pull the post out of the frame beyond this point. If need be, acquire a longer seat post.

The “reach” and “drop” are the terms that denote how far away the handlebars are from the seat and how far down they are. There is no correct distance. These measurements are determined by the length of your torso, the length of your arms, and your flexibility. A good reach allows the rider to grab the bars easily and maintain a slight bend at the elbows. A good drop allows the rider to grasp the bars without too much craning of the neck in order to look ahead. The stem (short bar that attaches the handlebars to the bike) is a relatively small piece of equipment that can yield huge changes in the bike’s comfort. If you lack comfort in the reach or drop, see a bike fit specialist about stem changes before you set your mind into “I need a new bike” mode.

### Where to Ride:

Try to ride near to home or work, to maximize your riding time. Look for a route with little traffic, few stops signs or lights, and smooth clean surfaces. ALWAYS WEAR A HELMET.

### Quick bike Technique Tips:

Shift frequently – A good pedal cadence is around 90 rpms (in 15 seconds, one foot should rise to the top 23 times). Shift the bike into a gear that matches this cadence for whatever slight hills you encounter.

Shift smoothly – if you wait until mid-climb to shift, you will have too much pressure on the pedals and the chain to change gears smoothly. Shift early and let the legs spin easily for that moment when you are changing gears.

Brake cautiously – The rear brake is a great source for slowing, but doesn’t offer much braking power alone. The front brake can and should be used in moderation. When it’s wet or slippery, stay off the front brake and go light on the rear.

If you’re using a “clipless” pedal system, put power into the system in every moment of the pedal’s circle: pushing down is easy, scrape your foot back along the bottom of the stroke, pull the foot upwards through the back, and then slide the foot forward across the top of the stroke to get the most out of that shoe/pedal technology. Keep your mind focused on all portions of the stroke and your legs will respond with faster bike speed.



## Run

Basic Logic: running well requires good technique. Running can and should be an enjoyable experience.

The best shoes are the ones that fit you properly and do not have too many “Gimmicks” or excessive support features. Contrary to popular belief, there are many studies that have found the more expensive the shoe the more injuries they may cause. Go to a reputable running shoe store and have an educated professional guide you to appropriate options.

The shoes that you choose for race day need to be broken-in without being broken down. If you stumble on the perfect pair during training, then it might be a good idea to set them aside and keep those for race day while you train in another pair. Triathletes are always trying to shave time off their race so you will rarely see a dedicated triathlete tying his or her shoes in transition. Lace locks or elastic laces make for faster transitions, and never stopping to re-tie during a race.

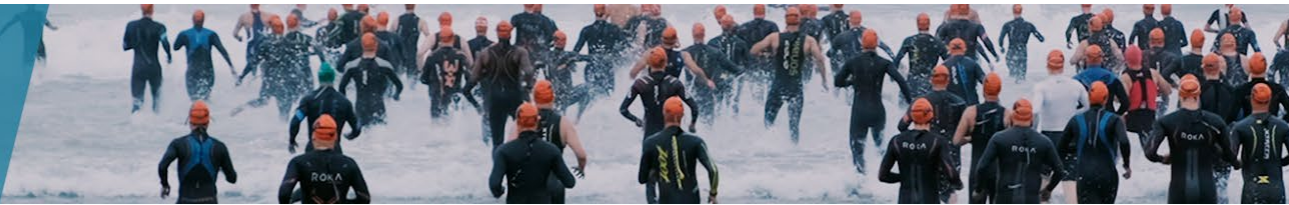
Every runner is interested in two key things: running faster and avoiding injury. It's a rare and wonderful thing when the two biggest concerns are solved in one simple action: run at 180 steps per minute. A faster cadence can feel odd at first, but (caution, pun ahead) in the long run, it's a benefit. To make it easier to check, note your watch during a run. Count every footfall for 10 seconds – 180 steps per minute equals out to be 30 steps for every 10 seconds. Any less than a 180 cadence, and the heel of the foot lands too far in front of the body's mass. This causes a braking action in the runner's stride, and that slows the runner. Shorten the stride and let the foot meet the ground almost directly under the hip. You may find that you are now landing more on the forefoot and a bit less on the heel. This reduces injuries because the foot is now dealing with less impact and is carrying the body's weight for a shorter period of time. Your joints and connective tissue will thank you.

Other key elements to good running are:

- Run in a proud posture. Run in a fairly erect stance with only a slight forward tilt at the waist and ankles.
- Run with an arm swing that moves the hand straight forward and back, not across the body.
- When it gets hilly, exaggerate the arm swing slightly, look up the hill and keep steps small.

The run in triathlon comes at the end of the event. By the time the run comes around many of us are pretty tired. And when you're tired technique is the first to go. During every training run keep focused on running technique and “program” your body so that it can fall into the perfect running grooves - a groove that you can easily find at the end of the race.

The bottom line: you must gradually and progressively condition your lower body to have the structural integrity to support your body while running. Your foot arch needs to be strong so as not to rely on an orthopedic support. One time-tested way to supplement your running and improve your foot arch strength, and stride efficiency, is to run barefoot. Yes, barefoot! Most of the best runners in the world spent their youth running barefoot and still continue to include weekly runs on soft surfaces. Of course, after years of wearing shoes, you should consider this as only a drill. Consider adding very short and infrequent runs on soft and clear surfaces to start out.



## Transitions

Basic Logic: Keep it simple. Bring only what you will use and nothing more. This is the place where someone on a specific time goal can really make up some ground.

The transition is a great place to remember your goal. If your goal is to finish in comfort, then take a few extra minutes to find that comfort. If your goal is time or result based, then here is a great place to gain an edge.

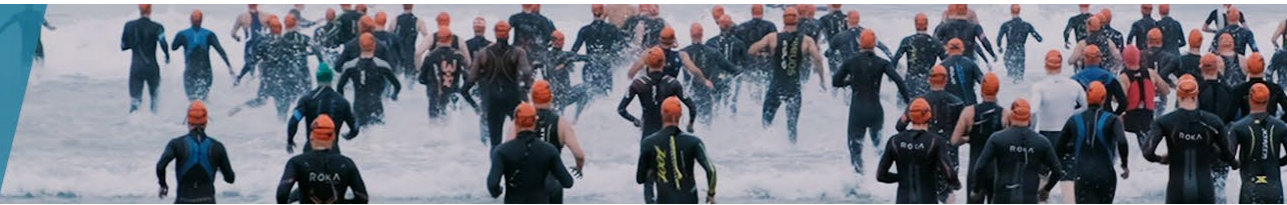
There are two transitions in triathlon: T1 (swim to bike) and T2 (bike to run). The absolute necessities for T1 are: get wetsuit off, get helmet on and buckled, get to the line where you can mount your bike. For a T1 with a comfort focus, you may wish to consider a small towel to buff sand/dirt from your feet before donning socks and bike shoes. A plush T1 may also include a change out of wet garments and into dry bike shorts and jersey (if so, change under a towel wrap – nudity can mean disqualification at some races). Gloves, application of sunscreen or a lubricant to reduce chaffing may also be considered. The personal choices are limitless. For a speedy T1, give some thoughts to these short cuts: no socks, no gloves, and continue the race in garment worn under wet suit.

No matter the intended speed of your transition, do this:

- If you will eat on the bike, then have all fuel attached (safely & firmly) to the bike
- Nothing new on race day – test all techniques and items to be used on race day
- Determine what you will use for both T1 & T2, and bring only that into the transition area. This is a small space and there is no room for clutter. Making choices when you come in to change will not work – lay out only what you need and take it all. **KEEP IT SIMPLE.**

Tricks: the leg of your wetsuit should end mid calf. Consider cutting two inches off the legs of your wet suit if it's too long – it'll come off over your feet faster. Apply a bit of wetsuit specific lubricant to your neck so that the skin doesn't chafe from turning to breathe. Tape only the tear-off tabs of gels/gus to the bike frame – you can pull them off with just one hand. Open, warm and cut energy bars into thirds – then bend them over bike frame for easy access during race. Hang the bike on the rack so that it's "backed in" and ready to roll off and go.





## Open Water Swim

Basic Logic: Stay calm, seed yourself properly at the start and sight often to confirm swimming straight.

Pool swimming is the absolute best place to work on stroke technique. Moving from pool to open water can result in some surprises. The primary issue is swimming in a straight line.

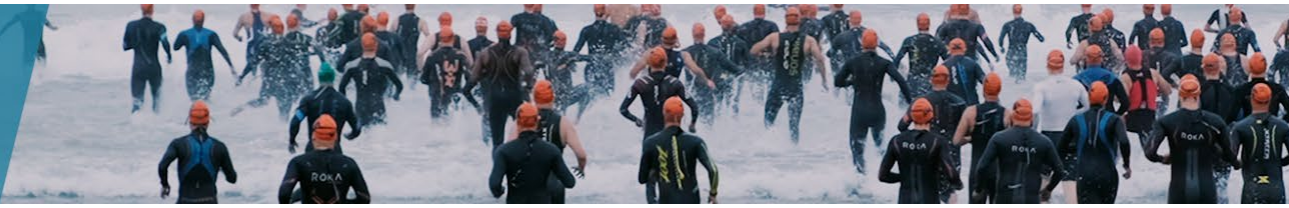
The best way to swim straight is to “sight” often. “Sighting” is the act of lifting your head out of the water slightly and seeing the buoy, or mark, to which you are headed. Lifting your head to sight destroys the body position of an efficient swimmer, so it must be done quickly and precisely. Only raise your head enough to bring your eyes up to the surface. An extra strong stroke will help raise you up, and a few hard kicks will help keep the hips from sinking too deep.

A few tips to remember are: look often, never trust that the swimmer you are following is going the right way. In the ocean, wait to rise up on a swell before you look. And the number one biggest trick to sighting: find a large landmark that is in line with the buoy and look for that. In your warm up, as you swim out to the first buoy, find a tree, building, mountain peak, saddle - anything enormous that you can quickly spot that is exactly beyond that buoy and in line with it. When you get to that first buoy, stop and tread water and find another large item beyond the next buoy.

Ocean swims require a bit of practice with getting “in and out” of the surf. Surf can be scary for some, but it can be mastered with the “Dolphin” technique. During warm-up, walk the line that you will enter into the surf. Be on the lookout for rocks, shells, holes, sand bars and other odd hazards that can exist on the edges of the shoreline. Wade out to waist-deep water and wait for the next wave or mass of white water to come. When the surge is 6 feet in front of you, dive with your arms extended in front of your head, on an angle towards the wave (not straight down), and get all the way to the bottom. Once there, claw your fingers into the sand. As the wave rolls over and above your back, pull yourself forward and then up to the surface, out the backside of the wave. The water is probably chest-deep now, so swim easy towards the next wave. When the next wave is 6-8 feet from you, dive again (a bit steeper this time) towards the wave and towards the bottom. Again, get your fingers into the sand and pull yourself under and out the back of the wave. If done effectively, you will probably only need to “Dolphin” under three or four waves before you are beyond them. Coming back to shore is easy and fun: look back during breaths as you enter the area where the waves are breaking. When a steep wave is behind you, swim hard before the face of the wave. It can pick you up and give you a free ride towards the shore.

If swimming in crowds unnerves you, choose a line on race day either inside or outside of the straight line to the first mark. Swim in the margins of the madness until things settle down, and then swim the shortest, straightest line possible.





## Mental Prep/Race Prep

Basic Logic: Go in confident. You possess the powers to make the race as successful as you want. By visualizing your perfect event for several days or weeks prior to the race, you can create it.

Quick bullet points on this topic:

- Look back over your months of training and see how far you have come. Take a moment for that to sink in and elevate your confidence.
- Lay out and organize gear in order of events. Make sure you have everything you need for your warm up, the swim, the bike, and the run.
- Find a quiet, focused, relaxed time to visualize a great race. Watch yourself move calmly and comfortably through the swim, bike and run. Do this several times.
- Choose some soothing words to help yourself during the race. Terms like “smooth”, “glide” or “easy” can help settle the mind.
- Choose some aggressive words for challenging moments during the race, to get through a tough time: over a hill or in the finish shoot. Terms like “attack”, “now” and “drive” can help inspire a boost.
- Think about tactics that you may use to get you to your goal. If there is trouble in the swim, think of pulling over and slowing or taking a few strokes in backstroke rather than a complete stop. Maximize your strengths on the bike - i.e. if you climb poorly, then make the most of the descents and flat sections. Be steady on the bike and learn to do everything while moving – everything. If trouble arises on the run don't be afraid to walk a moment to try to get beyond it.

On the morning of the race wake early. This is not the time for rushing. This is the time for calm. Get warm, right out of bed, and stay warm. This may mean overdressing in layers; maybe even a wool cap. Get to the race start/transition area early. Set up transition and walk the exact route from where you will exit the water to how you will find your bike. Know where your bike rack is from all points. Take a few minutes to jog (still fully dressed) in order to warm the body up completely. Then time your warm up swim so that you can walk the line to enter the water from the starting line, swim for 10 minutes and look for additional sighting marks – all before the first wave of the race begins.