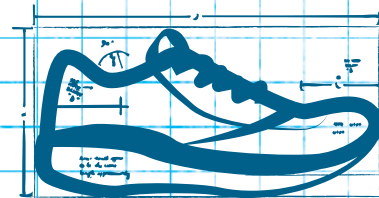
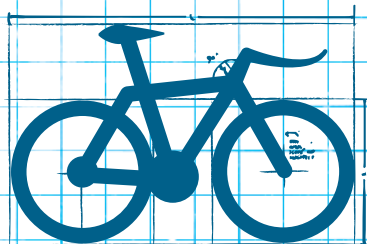
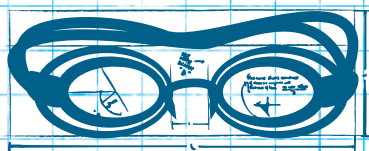


2014 TRAINING PLAN SPECIAL

THE BLUEPRINT TO YOUR SEASON



Four game plans for four common goals: Boost your Olympic-distance swim speed; bike your fastest 56 miles; train for an Ironman in 18 hours or less per week; and fuel your body for optimal athletic performance.

BOOST YOUR SWIM IN 6 WEEKS

This swim-focused training plan is designed for beginner to intermediate triathletes. It will prepare a novice triathlete for his or her first international distance race or help an experienced athlete be more confident in the swim. **By Sara McLarty**

This plan requires about 8–12 hours of training per week, so even the busiest athletes can complete the entire program.

Based on your swim endurance and available time in the pool, complete the main set once or twice. Cycling and run training can be adjusted or moved around to fit your life schedule. Try to be diligent with the “little things” like stretching, yoga, icing and hydration.

SWIM NOTES

Choose one of these warm-up and cool-down sets or use a similar version of your own. The main set can be completed twice based on the level of the individual swimmer.

Warm-up options:

- 400 swim
- 6x50 w/ :15 rest (kick/drill by 25)
- 6x50 swim w/ :15 rest (descend 1-3)
- 200 swim/200 pull/200 kick/200 swim
- 8x25 w/ :15 rest (3 FAST!, 1 easy)
- 400 swim/300 pull/200 kick/100 Tarzan Drill
- 600 (100 free/50 non-free, repeat)
- 6x75 w/ :15 rest (25 FAST kick, 50 swim)

Cool-down options:

- 200 easy swim
- 300 (50 kick/100 swim, repeat)
- 4x50 w/ :10 rest (25 non-free/25 free)

- 200 w/ board (50 kick/50 Sailboat Drill)

DRILLS

Tarzan Drill: Swim freestyle with your head out of the water. Look forward as if you were sighting a buoy or landmark in open water. Keep your head out of the water for the entire 25 to strengthen your neck muscles for triathlon swimming!

Sailboat Drill: Hold a kickboard between your thighs. Make sure half of the board is sticking below your body when you swim freestyle. Use your core muscles to control your hip rotation (while the board tries to prevent rotation).

RUN/BIKE EFFORT LEVELS:

Easy: comfortable pace; you can enjoy the scenery and chat with training partners

Moderate: On the bike, 40K race pace; on the run, 10K pace; limited communication, heavy breathing is present

Hard: Strong pace, the maximum effort that you can sustain for 5–10 min

STRENGTH AND STRETCHING:

I highly recommend following a structured program written by a personal trainer. Attend yoga class or stretch on your own for 30–60 min once or twice per week.

KEY:

- S** = swim workout
- B** = bike workout
- R** = run workout
- G** = gym & strength
- Y** = yoga & stretching

WEEK 1: Build Week

MON	TUE	WED	THU	FRI	SAT	SUN
S ■ 5x100 swim w/ :15 rest (descend 1-5) ■ 5x100 pull w/ :15 rest (descend 1-5) G 30-45 min	R 30 min easy Y 30-60 min	S ■ 2x50 swim w/ :10 rest (FAST!) ■ 400 pull (breathe every 5 strokes) ■ 5x100 w/ :15 rest (25 non-free/75 free) G 30-45 min	R 30 min as 10 min easy, 15 min moderate, 5 min easy Y 30-60 min	Rest day or optional swim Optional S ■ 12x50 swim w/ :10 rest (3 strong, 1 easy) ■ 2x200 pull w/ :20 rest	B 90 min, easy to moderate effort S *Test Set*: 4x300 w/ :20 rest (Swim strong and try to hit similar times on all four. Record your times for future reference.)	B 60 min, include 5x2 min hill climbs R (OTB): 20 min, easy

WEEK 2: Speed Week

MON	TUE	WED	THU	FRI	SAT	SUN
S ■ 4x100 swim w/ :15 rest (descend 1-4) ■ 4x100 pull w/ :15 rest (descend 1-4) ■ 4x100 swim w/ :15 rest (descend 1-4) G 30-45 min	R 45 min, easy Y 30-60 min	S ■ 4x25 swim w/ :10 rest (FAST!) ■ 4x200 swim w/ :20 rest (strong) ■ 2x150 w/ :20 (50 non-free/50 free/50 kick) G 30-45 min	R 30 min as 10 min easy, 4x2 min hard with 2 min easy between each, 5 min easy Y 30-60 min	Rest day or optional swim Optional S ■ 10x75 pull w/ :15 rest (descend 1-5, 6-10) ■ 400 swim (25 Tarzan Drill/75 swim, repeat)	B 2 hrs as 45 min easy warm-up, 4x4 min hard effort with 4 min easy between each, 45 min easy cool-down Optional S Make up any swim workout you have missed	B 75 min as 30 min warm-up, 2x10 min moderate with 5 min easy between, 20 min cool-down R (OTB): 20 min as 5 min hard, 15 min cool-down

WEEK 3: Recovery Week

MON	TUE	WED	THU	FRI	SAT	SUN
S ■ 3x200 swim w/ :30 rest (descend 1-3) ■ 3x200 pull w/ :30 rest (descend 1-3) G 30-45 min	R 40 min easy Y 30-60 min	S ■ 4x75 swim w/ :15 rest (25 FAST!/50 smooth) ■ 4x150 swim w/ :20 rest (strong) ■ 300 (25 FAST kick/50 swim, repeat) G 30-45 min	R 30 min as 10 min easy warm-up, 10 min moderate, 10 min easy Y 30-60 min	Rest day or optional swim Optional S ■ 6x100 swim w/ :15 rest (No walls) ■ 4x150 pull w/ :20 rest (descend by 50)	B 90 min as 30 min easy warm-up, 30 min moderate, 30 min easy cool-down S *Test Set*: 4x300 w/ :20 rest (Swim strong and try to hold similar times on all four. Record your times for future reference.)	B 60 min as 30 min easy warm-up, 20 min moderate, 10 min hard R (OTB): 30 min easy

WEEK 4: Build Week

MON	TUE	WED	THU	FRI	SAT	SUN
S ■ 4x100 swim w/ :15 rest (descend 1-4) ■ 6x100 pull w/ :15 rest (descend 1-3, 4-6) ■ 4x100 swim w/ :15 rest (descend 1-4) G 30-45 min	R 60 min easy Y 30-60 min	S 2x through: ■ 4x50 swim w/ :15 rest (25 FAST/25 easy) ■ 300 pull (breathe every 5 strokes) ■ 200 swim (50 non-free/50 free, repeat) G 30-45 min	R 30 min as 10 min easy warm-up, 2x7 min moderate with 2 min easy between each, 4 min easy cool-down Y 30-60 min	Rest day or optional swim Optional S ■ 8x50 swim w/ :15 kick on wall between each ■ 1000 swim (nonstop)	B 2 hours as 40 min easy warm-up, 2x20 min moderate with 10 min easy between each, 30 min easy cool-down Optional S Make up any swim workout you have missed	B 60 min, include 8x2 min hill climbs R (OTB): 30 min: 5 min hard, 5 min easy, 5 min hard, 15 min cool-down

WEEK 5: Speed Week

MON	TUE	WED	THU	FRI	SAT	SUN
S ■ 5x100 swim w/ :15 rest (descend 1-5) ■ 5x100 pull w/ :15 rest (descend 1-5) ■ 5x100 swim w/ :15 rest (descend 1-5) G 30-45 min	R 45 min easy Y 30-60 min	S ■ 12x25 w/ :10 rest (2 FAST!/1 non-free, repeat) ■ 4x150 pull w/ :20 rest (breathe every 5) ■ 3x200 w/ :20 rest (25 kick/75 swim, repeat) G 30-45 min	R 30 min as 10 min easy warm-up, 3x3 min hard with 2 min easy between each, 7 min cool-down Y 30-60 min	Rest day or optional swim Optional S ■ 12x25 w/ :10 rest (2 FAST!/1 non-free, repeat) ■ 4x150 pull w/ :20 rest (breathe every 5) ■ 3x200 w/ :20 rest (25 kick/75 swim, repeat)	B 2 hours as 45 min easy warm-up, 5x5 min hard effort with 5 min easy between each, 30 min easy cool-down S *Test Set*: 4x300 w/ :20 rest (Swim strong and try to hold similar times on all 4. Record your times for future reference.)	B 60 min as 15 min easy warm-up, 15 min moderate, 15 min easy, 15 min moderate R (OTB): 30 min as 15 moderate, 15 easy cool-down

WEEK 6: Taper Week

MON	TUE	WED	THU	FRI	SAT	SUN
S ■ 4x100 pull w/ :20 rest (descend 1-4) ■ 4x100 swim w/ :20 rest (descend 1-4)	R 20 min easy Y 30 min	S ■ 2x50 swim w/ :20 rest (FAST!) ■ 400 pull w/ :30 rest (smooth/easy) ■ 3x100 w/ :20 rest (25 non-free/75 free)	Rest day Optional Y 30 min	S ■ 6x50 swim w/ :20 rest (3 strong, 1 easy) ■ 3x150 pull w/ :30 rest (easy/smooth)	B 20-30 min easy, bike the run course if possible	RACE DAY Good luck and have fun!

FIVE WEEKS TO YOUR FASTEST 56!

Follow this plan to transform your half-Ironman bike fitness. **By Lance Watson**

Riding your fastest 56 miles is a balancing act between stretching your effort beyond aerobic mode and not going out too fast too soon only to blow up on the run. On race day, pacing and rhythm in a Zone 3 heart rate is the key to your best Ironman 70.3 ride. To improve your race performance, you need to train to cycle with maximum efficiency at goal heart rate ranges, sustain and increase base endurance, and incorporate high-intensity intervals to increase your threshold to up your Zone 3 power output. This plan outlines that strategy in five weeks!

This program is for the ex-

perienced triathlete who has done 2–3 months of regular riding three times per week minimum. These should include several 2–3+ hour rides, and 4–6 weeks of intervals or hard efforts. There are five rides per week in this schedule focusing on strength (low cadence), threshold (Zone 4–5), recovery (Zone 1), half Ironman pace work (Zone 3) and base endurance (Zone 2). The schedule also includes suggestions for running and swimming. Performing the workouts in the order listed is recommended.

Finish this program two weeks prior to your key event to allow ample time to taper for a peak performance.

FIND YOUR THRESHOLD:

Understanding lactate threshold (LT) training is critical to improvement. Your LT determines how long and how hard you can exert near maximum effort. There's a point when the body begins to produce lactate faster than it can be metabolized—this is the LT.

To determine your LT, do a field test on the bike and the run on separate days, when your legs feel rested. After a warm-up of 15 minutes (run) to 30 minutes (bike), do a 30-minute time trial on flat terrain where you can hold your hardest uninterrupted effort for that duration (a bike trainer is ideal for the bike test and the track is a good option for the run).

Pace your time trial as evenly as possible. To determine

your LT heart rate, hit the lap button on your heart rate monitor 10 minutes into the time trial. The average heart rate for the final 20 minutes is your LT heart rate. The average pace for the final 20 minutes is your LT pace (if performed on flat surface in good weather conditions).

Want to know your various heart rate training zones? Check out the chart at Triathlete.com/hrzones.

KEY:

' = minutes
" = seconds
(x") = recovery
RPM = revolutions per minute, or bike cadence
S = swim workout
B = bike workout
R = run workout
P = performance pointer

WEEK 1	
MON	Day off; or optional S 2000-3000, drill and technique emphasis.
TUE	B 2 hours, threshold. After warming up, do 4x20" (40") pickups at 90% of max speed. 5' easy. 20' Zone 4; 10' easy; 5x5' (5') Zone 4 gradually build to Zone 5 through the set. P For a high intensity set, warming up and cooling down properly is extra important for injury prevention, optimal effort in session and recovery for future sessions. R 30-45', aerobic. Include 8-10 x 1' cadence count. Shoot for 90+ RPM.
WED	B 90', strength. After warming up, include 9x3' (3') low RPM hills or trainer intervals. #1-3 at 50 RPM, Zone 2; #4-6 at 60 RPM, Zone 2-3; #7-9 at 70 RPM Zone 3. S 2000-3000 with intervals at goal race pace
THU	B 60-90', aerobic. Zone 1-2, flatter terrain. R 30-45' off the bike, as 15-20' Zone 3-4, the balance in Zone 2
FRI	S 2000-3000, aerobic. Include pulling with paddles.
SAT	B 3-4 hour, pace work. After warming up, do 4x20" (40") pickups at 90% of max speed. 5' easy. 8x15' (5') Zone 3 on a course that simulates your goal 70.3 race. Cool down properly P Use your full range of gears to stay in your target heart rate. If your goal race is a hilly one, focus on slightly underdoing the climbs and maintaining workload on the downhills. S 2500-3500, endurance and speed. Swim with longer sustained efforts, followed by sprints of 25s and 50s.
SUN	B 3-4 hours, hilly aerobic. Zone 1-3, mostly Zone 2. P Keep climbs above 70 RPM, flat terrain at 90-95 RPM and descents at 100+ RPM. Keep pedaling at all times and plan to ride these base rides non-stop. R 60-90', aerobic. Zone 2, flatter terrain.
WEEK 2	
MON	Day off; or optional S 2000-3000, drill and technique emphasis.
TUE	B 2 hours, threshold. After warming up, do 4x20" (40") pickups at 90% of max speed. 5' easy. 20' Zone 4; 10' easy; 3x8' (8') Zone 4 gradually build to Zone 5 through the set. P Biking at threshold takes concentration and consistent focus. Instead of going on autopilot, check in constantly for high effort and smooth relaxed cycling. R 30-45', aerobic. Include 8-10 x 1' cadence count. Shoot for 90+ RPM.

WED	B 90', strength. After warming up, include 5x5' (3') low RPM hills or trainer intervals. #1-2 at 70 RPM, Zone 2; #3-4 at 60 RPM, Zone 2-3; #5 at 50 RPM, Zone 3. P During hill training, check for a relaxed upper body. Hands should be lightly gripping bars and arms should be soft at the elbows and relaxed. S 2000-3000 with intervals at goal race pace
THU	B 60-90', aerobic. Zone 1-2, flatter terrain. R 30-45' off the bike, as 15-20' Zone 3-4, the balance in Zone 2
FRI	S 2000-3000, aerobic. Include pulling with paddles.
SAT	B 3-4 hours, pace work. After warming up, do 4x20" (40") pickups at 90% of max speed. 5' easy. Do 4x30' (10') Zone 3 on goal race course terrain. S 2500-3500, endurance and speed. Swim with longer sustained efforts, followed by sprints of 25s and 50s.
SUN	B 90'-2 hours, aerobic. Zone 1-3, mostly Zone 2. P Allow 30-45' of warm-up for base rides at the end of a big week, and start eating calories early and regularly. The goal is to finish the ride with energy, not fantasizing about shakes and burgers. R 90'-2 hours, aerobic. Mostly Zone 2, flatter terrain.

WEEK 3

RECOVERY WEEK

Reduce volume of all sessions to 50% of regular training volume. Take Monday and Friday completely off. Most riding should be aerobic in Zone 1-2, but midweek include 4x3' (3') Zone 4 at 90-95 RPM, and on the weekend do 20' of sustained Zone 3 riding to stay sharp.

WEEK 4

MON	Day off; or optional S 2000-3000, drill and technique emphasis.
TUE	B 2 hours, threshold. After warming up, do 4x20" (40") pickups at 90% of max speed. 5' easy. 20' Zone 4; 10' easy; 2x12' (12') Zone 4 gradually build to Zone 5 through the set. P When riding fast, keep cadence within your optimal range (90-95). Pedal in smooth circles, distributing the work evenly between the hamstring and gluteal muscles, and tune into how that perfect circle carries the bike forward. R 30-45', aerobic. Include 8-10 x 1' cadence count. Shoot for 90+ RPM.
WED	B 90', strength. After warming up, include 3x10' (5') low RPM hills or trainer intervals. #1 at 50 RPM, Zone 2; #2 at 60 RPM, Zone 2-3; #3 at 70 RPM Zone 3. S 2000-3000 with intervals at goal race pace
THU	B 60-90', aerobic. Zone 2, flatter terrain. R 30-45' off the bike, as 15-20' Zone 3-4, the balance in Zone 2
FRI	S 2000-3000, aerobic. Include pulling and paddles.
SAT	B 3-3.5 hours, pace work. After warming up, do 4x20" (40") pickups at 90% of max speed. 5' easy. 3x45' (15') Zone 3 on goal race course terrain. P Keep within your goal heart rate, focus on riding the course well, and pay attention to cornering, descents and hills. S 2500-3500, endurance and speed. Swim with longer sustained efforts, followed by sprints of 25s and 50s.
SUN	B 3-4 hours, hilly aerobic. Zone 1-3, mostly Zone 2. P If you typically go with a group on aerobic days, be true to your own plan. Keep your base rides mainly in Zone 2 to allow for recovery and to set you up for the next week's challenging efforts. R 60-90', aerobic. Zone 2, flatter terrain.

WEEK 5

MON	Day off or optional S 2000-3000, drill and technique emphasis.
TUE	B 2 hours, threshold. After warming up, do 4x20" (40") pickups at 90% of max speed. 5' easy. 20' Zone 4; 10' easy; 5x3' (3') Zone 5. Go for it! P This is your last week of hard efforts. Challenge yourself to hit your highest wattage or best times. R 30-45', aerobic. Include 8-10 x 1' cadence count. Shoot for 90+ RPM.
WED	B 75', strength. After warming up, include 2x10' (10') low RPM hills trainer intervals. Both at 60 RPM, Zone 2. S 2000-3000 with intervals at goal race pace
THU	B 60-90', aerobic. Zone 1-2, flatter terrain. R 30-45' off the bike, as 15-20' Zone 3-4, the balance in Zone 2
FRI	S 2000-3000, aerobic. Include pulling with paddles.
SAT	B 3-4 hours, pace work. After warming up, do 4x20" (40") pickups at 90% of max speed. 5' easy. Do 2x60' (20') Zone 3 on goal race course terrain. S 2500-3500, endurance and speed. Swim with longer sustained efforts, followed by sprints of 25s and 50s.
SUN	B 2-3 hours, aerobic. Zone 1-3, mostly Zone 2. P On long rides, check in with yourself often. Are you relaxed? How is your cadence? Are you eating well and on a schedule? Training is an excellent time to be your own best coach. R 90'-2 hours, aerobic. Zone 2, flatter terrain.

LifeSport head coach **Lance Watson** has coached a number of Ironman, Olympic and age-group champions. Lifesportcoaching.com

TIME-CRUNCHED IRONMAN PLAN

This kickstart plan will build a solid foundation to get you Ironman-ready without exceeding 18 training hours per week. **By Cliff English**

Sixteen weeks is ample time to prepare solidly for an Ironman. The first phase of this plan is geared towards creating consistency with your training and adapting to the structure and routine. I recommend that athletes starting this program have at least a few weeks of

training under their belt—they should be able to ride for 3 hours and run 75-90 minutes. I also strongly recommend that athletes train lightly the week prior to starting this program. Ideally you should start an Ironman block rested and healthy. Look at your year and figure out if

you are racing 70.3s or other distances prior to the IM block. You should finish your races a week or two prior to starting this plan, and preferably after a little break. I like to make sure all my athletes (pros included) take a break for 5-7 days prior to building up for an Ironman. I also recommend doing a tune-up race around weeks 9-12.

The first 4 weeks slowly ramps up in training volume. There is some sport-specific strength work through hill repeats in the bike and run. I also prescribe a very basic core strength program for the duration of the plan.

To purchase the complete 16-week plan in Training Peaks, go to Triathlete.com/IMPlan and enter code "triathletemag14" for a 50 percent reduced rate (of \$149) for *Triathlete* readers.

KEY:

- ' = minutes
- " = seconds
- (x") = recovery
- RPM = revolutions per minute, or bike cadence
- S = swim workout
- B = bike workout
- R = run workout
- G = gym & strength
- P = performance pointer

WEEK 1	
MON	Day off; Include 5-10' of foam rolling or a light stretch.
TUE	R 55', strength. 20' warm-up. 5x(1' hill repeat on 3-4% grade @ half marathon effort, 1' easy walk or jog recovery). 5' easy. 5x(1' pick ups on flat terrain up to half marathon effort with good cadence, 1' easy). 10' cool-down.
WED	S 50', 2500. 400 choice (15"). 6x50 as 25 drill choice/25 free (15"). 4x400 @ IM effort and can use pull buoy (15"). 200 cool-down. B 75', strength. 30' warm-up. 2x(5' climbs in Zone 3 or 70.3 effort/5' easy). If you do not have hills, you can do this as a big gear session and keep cadence at 75 RPM in a larger gear. 25' cool-down.
THU	R 50', fartlek. 20' warm-up. 8x60" (90"). All at 10K pace, controlled and with good form and cadence around 90 RPM. 10' cool-down.
FRI	S 55', 2500. 4x200 choice of stroke warm-up (15"). 4x50 as 25 drill choice/25 free (10"). Main set: 2x(5x100 @ IM effort (15"), 100 easy (15")). 300 cool-down w/ some kicking w/ board. G 15', basic core strength program. 1 type core, 2 sets of 20 reps. 1 type core on ball, 2 sets of 20 reps. Planks/body bridge holding good horizontal body position 2-4 x 30-45" and build up to 60". Rest is 20-30" between sets.
SAT	B 3.5 hours, long IM pacing. 45' warm-up, 3x30' @ IM effort, 15' easier recovery pace, 45' cool-down.
SUN	R 90', long IM pacing. 10-12 miles. 4 mile warm-up, 4-6 miles @ IM effort, 2 mile cool-down. B 60-90', light active recovery bike after run.

WEEK 2	
MON	Day off; P Include 5-10' of foam rolling or a light stretch. G 15', basic core strength program. 1 type core, 2 sets of 20 reps. 1 type core on ball, 2 sets of 20 reps. Planks/body bridge holding good horizontal body position 2-4 x 30-45" and build up to 60". Rest is 20-30" rest between sets.
TUE	R 60', strength. 20' warm-up. 5x(2' hill repeat on 3-4% grade @ half marathon effort, 1' easy walk or jog recovery). 5' easy. 5x(1' pick ups on flat terrain up to half marathon effort with good cadence, 1' easy). 10' cool-down.
WED	S 50', 2500. 400 choice (15"). 6x50 as 25 drill choice/25 free (15"). 4x400 @ IM effort, pull buoy optional (15"). 200 cool-down. B 75', strength. 30' warm-up. 2x(5' climbs @ Zone 3 or 70.3 effort/5' easy). If you do not have hills you can do this as a BIG gear session and keep cadence at 75 RPM. 25' cool-down.
THU	R 60', fartlek. 20' warm-up. 2x(4/3/2'/1' all w/ 1' easy recovery between each and 2' between sets). All @ 10K effort. Note your splits. 10' cool-down.
FRI	S 65', 3400. 600 choice. 4x50 as 25 drill choice/25 free (10"). 4x50 as build (15"). 200 easy choice swim (15"). Main set: 2x(400 @ IM effort (20"), 4x100 @ Olympic-distance effort (15"), 100 easy (15")). 400 cool-down w/ some kicking w/ board. G 15', basic core strength program. 1 type core, 2 sets of 20 reps. 1 type core on ball, 2 sets of 20 reps. Planks/body bridge holding good horizontal body position 2-4 x 30-45" and build up to 60". Rest is 20-30" between sets.
SAT	B 4 hours, long IM pacing. 60' warm-up. 3x35' @ IM effort, 15' easier recovery pace. 45' cool-down. P Nutrition/fueling. Time to start being aware of how many calories you are taking in per hour and in what form. Gels, liquid fuel, bars? Start nailing down the products you like and use them. You should be drinking at least 16-20 oz per hour and I always recommend a little salt as well—1-2 tabs per hour, even in training. R 15'. 5' easy, 5' @ IM effort, 5' easy
SUN	R 1:45-2 hours, long IM pacing. 14 miles. 4 mile warm-up. 2x(4 miles @ IM effort w/ 1-2' walk or jog recovery). 2 mile cool-down. B 60-90', light active recovery bike after run.

WEEK 3	
MON	Day off; this will be an unload (recovery) week to allow for training adaptation.
TUE	S 30', 2000. 2x300 choice warm-up (15"). 4x100 w/ good stroke (15") moderate. 2x400 pull buoy moderate (15"). 200 cool-down.
WED	B 60-90', easy, active recovery.
THU	R 40-50', light run on trails or road. G 15', basic core strength program. 1 type core, 2 sets of 20 reps. 1 type core on ball, 2 sets of 20 reps. Planks/body bridge holding good horizontal body position 2-4 x 30-45" and build up to 60". Rest is 20-30" between sets.
FRI	S 65', 3000. 600 choice warm-up. 3x100 as 25 drill/75 swim (15"). 3x100 as 50 build/50 easy (15"). 4x300 @ IM effort (15"). 300 cool-down.
SAT	B 3 hours, 50 miles. 10-15 miles warm-up. Main set: 15 miles @ IM effort, 5 miles easier, 10 miles @ half IM effort. 5 miles cool-down. R 15', off the bike. 5' easy, 5' @ IM effort, 5' cool-down.
SUN	R 75', tempo. 25' warm-up. 2x15' (5' easy), 1 @ marathon effort, 1 @ half marathon effort. 10' cool-down.

WEEK 4 Start of a two-week build phase	
MON	S 70', 3700. 6x200 (20") warm-up: 2 as choice, 2 as drill of choice, 2 as choice. 12x50 (10"): 1 w/good stroke, 1 as build, 1 as fast, 1 easy, repeat 4x. 5x300 (20"): odds: IM effort, evens: 70.3 effort. 400 cool-down. G 15', basic core strength program. 1 type core crunches 2 sets of 20reps, 1 type core on ball 2 sets of 20 reps, planks/body bridge holding good horizontal body position 2-4 x 30-45sec and build up to. Rest is 20-30sec rest between sets. P After swim and include a little stretch.
TUE	R 50-65', strength. Moderate effort or rolling terrain.
WED	B 2 hours. 45' warm-up: 3x(10' climbs getting up to Olympic-distance effort, 5' easy). 30' cool-down. (You can adjust duration of climb based on hill length available). P This can be a trainer ride to save time. If so, do 30' warm-up and 5x(6' BIG gear work at 60-75 RPM, 3' easy spin recovery) Alternate 70.3 effort and Olympic-distance effort. 15' cool-down. 90' total. S 40', active recovery. 600 warm-up (15"). 5x200 good stroke and moderate effort (15") . 400 choice cool-down.
THU	R 65', fartlek. 25' warm-up. 6x(3' as 1-3 from 70.3 effort to 10K effort, 2' easy jog recovery). 10' cool-down.
FRI	S 70', 3500. 800 choice (15"): 4x100 as 25 drill choice /75 swim (15"), 4x(4x100, 100 easy). Rounds 1 and 3 @ Olympic-distance effort. Rounds 2 and 4 @ IM effort. 300 cool-down. G 15', basic core strength program. 1 type core, 2 sets of 20 reps. 1 type core on ball, 2 sets of 20 reps. Planks/body bridge holding good horizontal body position 2-4 x 30-45" and build up to 60". Rest is 20-30" between sets.
SAT	B 4.5 hours, long IM pacing. 85-90 miles. 15-20 mile warm-up. Main set: 3x5 miles @ IM effort, 5 miles easy. 10 mile cool-down. P Record your fluid intake and the amount of calories per hour. R 30', off the bike. 5' easy, 10' @ IM effort. 15' cool-down.
SUN	R 1:50, IM pace. 25' warm-up. Take a couple minutes to do some dynamic stretches to get ready for this run. 3x(20' @ IM effort, 5' easy—can be walk-run and be sure to hydrate). 10' cool-down. B 60', Light active recovery.

WEEK 5	
MON	S 70', 3500. 4x300 (20") warm-up: 2 as choice, 1 as drill of choice, 1 as choice. 400 as 50 build/ 50 easy. 500, 400, 300, 200, 100 all w/ (20"). Starting @ IM effort for 500 and 400 and build to Olympic-distance effort by 200 and 100. 400 cool-down. G 15', basic core strength program. 1 type core, 2 sets of 20 reps. 1 type core on ball, 2 sets of 20 reps. Planks/body bridge holding good horizontal body position 2-4 x 30-45" and build up to 60". Rest is 20-30" between sets.
TUE	R 65', strength. 25' warm-up. 6x(3' hill repeats @ 70.3 effort on 3-4% grade, 2' easy jog recovery). Use good form! 10' cool-down.
WED	B 2 hours. 45' warm-up. 6x(5' climbs getting up to Olympic-distance effort, 5' easy). 15' cool-down. (You can adjust duration of climb based on hill length available). P This can be a trainer ride for time efficiency. If so, do 30' warm-up and 5x(6' BIG gear work at 60-75 RPM, 2' easy spin recovery). Alternate 70.3 effort and Olympic-distance effort. 15' cool-down. 90' total. S 45', active recovery. 600 warm-up (15"). 1000 good stroke (15") moderate effort. 400 choice cool-down.
THU	R 75', tempo. 25' warm-up. 4-5 x (1 mile @ 70.3 effort, 2' easy jog recovery). 10' cool-down.
FRI	S 75', 4000. 2x400 choice (15") warm-up. 400 as 25 drill choice/75 swim (15"). 4x(600 @ IM effort 30"). 400 cool-down. G 15', basic core strength program. 1 type core, 2 sets of 20 reps. 1 type core on ball, 2 sets of 20 reps. Planks/body bridge holding good horizontal body position 2-4 x 30-45" and build up to 60". Rest is 20-30" between sets.
SAT	B 5.5 hours, long IM pacing. 100 miles: 20 mile warm-up. Main set: 3x20 miles @ IM effort, 5 miles easy. 10 mile cool-down. R 30', off the bike. 5' easy, 15' @ IM effort. 10' cool-down.
SUN	R 2:05, long IM pacing. 25' warm-up. Take a couple minutes to do some dynamic stretches to get ready for this run! 3x(25' @ IM effort, 5' easy and can be walk-run and be sure to hydrate). 10' cool-down. B 60', light active recovery.

High-performance coach Cliff English has coached athletes to all the major games, world titles and wins in many major triathlon events around the globe. Cliffenglishcoaching.com

FUELING FOR EVERY TYPE OF WORKOUT

The right fuel—taken at the right time—can make all the difference in maximizing your athletic potential and recovery.

By Marni Sumbal, R.D.

Knowing what foods to eat to fuel your training is important, but to reap the benefits of the nutrients, it's the *when* that really matters. Before and during a workout, your goal is to increase the delivery of nutrients to your working muscles to maintain glucose levels, postpone fatigue and improve your hydration status. After you're done training, the focus shifts to replenishing glycogen stores and initiating tissue repair and muscle growth so you can bounce back even stronger for future workouts.

With the following fueling suggestions, not only will you reduce risk for GI distress, but you may find yourself gaining a competitive edge.

HOW TO FUEL BEFORE WORKOUTS

Eating something before a training session is critical, as it will better prepare your gut for race day and help you to become more aware of how your body absorbs and metabolizes fuel in varying intensity levels, durations and weather conditions.

Note: For an individualized approach on fueling your triathlon routine and to meet dietary needs, contact a registered dietitian specializing in sport nutrition. It should be noted that recommendations for fueling around workouts should be “as tolerated” and perfected by each individual over time.



Before a 6 a.m. swim session

Considerations: Early morning wake-up calls leave limited time to eat or digest solid food. But a pre-workout snack may prevent overeating or cravings later in the day and improve mood before an early morning swim, and hydration can help minimize leg

cramps in the pool.

Timing: 15–20 minutes before your workout, eat around 15–30g of high glycemic carbs + 8–12 ounces of water (coffee/tea is fine as well)

Eat this:

- 1 energy gel
- OR
- 1 cup milk
- + ½ cup Cheerios cereal



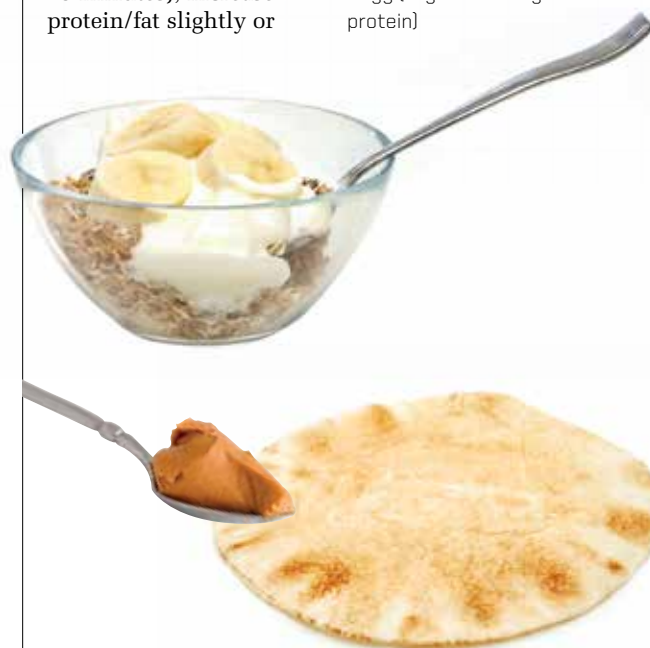
Before a 6 p.m. track session (or high-intensity workout)

Considerations: Minimize high fat and fiber foods in the 90 minutes before a high-intensity evening workout. Avoid feeling “stuffed” before the workout, and stabilize blood sugar levels in the four hours preceding the workout. Opt for an easy and portable snack that can be consumed on the go.

Timing: 60–90 minutes before the workout, eat a snack that has a 3:1 ratio of carbs to protein (ex: 30g carbs and 10g protein).

Eat this:

- 2 lightly salted rice cakes
- + ½ tbsp PB
- + 3 ounce plain nonfat Greek yogurt
- OR
- 1 5.3-ounce flavored nonfat Greek yogurt
- + 1 cup grapes



Before a Saturday long brick (3-5 hours)

Considerations: Eat carbohydrate dense—not volume dense—foods to reduce GI distress to restock liver glycogen. Mimic race-day foods and allow adequate time for digestion before starting your warm-up. Think “tummy happy” foods. If hypoglycemia sets in at the beginning of the workout a bottle of sport drink during the first 20 minutes of the workout doesn't fix the problem (sport drinks should contain 60–90g carbs and a mix of maltodextrin + glucose/dextrose + electrolytes + optional branch chain amino acids per bottle per 75 minutes), increase protein/fat slightly or

allow no more than 90 minutes after eating before working out (adjust foods as tolerated).

Timing: 75 minutes–2 hours before, eat a 4:1 ratio of carbohydrates to protein (ex: 50–70g carbohydrates and 13–18g protein). Drink 12–16 ounces of water with an optional Fizz or Nuun tablet (or electrolyte pills). Eight ounces of coffee or tea is okay.

Eat this:

- ⅓ cup granola
- + ⅓ cup oats
- + 1 cup milk or yogurt
- + ¾ cup sliced bananas (= 70g carbs
- + 13g protein)
- OR
- 1 slice of pita bread
- + 1 tbsp PB (or nut butter)
- + 1 banana
- + 1 egg (61g carbs + 19g protein)

Before a long run (90 min-3 hours)

Considerations: Consume easy-to-digest foods to reduce GI distress, restock liver glycogen and limit muscle damage during the workout. Hydrate. Foods do not have to be the same as long brick/bike pre-workout fueling due to the different stress on the GI system with constantly jostling activity.

Timing: 75–90 minutes before the workout, eat a 4:1 ratio of carbs to protein (30–50g carbohydrates + 8–13g protein). Think low fiber, low volume, carbohydrate dense foods.



Before an easy recovery workout (30-60 minutes)

Considerations: Focus on properly refueling from the past week/days of intense training and preparing the body for upcoming workouts. Depending on the timing of the workout (morning vs. evening), proper fueling could reduce the risk for overeating later in the day.

Timing: 30–60 minutes before the workout, consume 15–30g of carbohydrates + 5–10g

protein. Drink 12–16 ounce fluids with an optional Fizz or Nuun tablet (or electrolyte pills). Eight ounces of coffee or tea is fine.

Eat this:

- 2 light rye WASA crackers
- + 1 tbsp PB (or nut butter)
- + 1 tbsp honey
- + 1 egg white (34g carbohydrates + 10g protein)
- OR
- 8 ounce applesauce
- + ½ cup sliced banana
- + 10g vegan or whey protein powder mixed together (in blender or if palatable, in a bowl/cup) (41g carbs + 10g protein)

protein. Drink 8–12 ounces of water. Eight ounces of coffee/tea is okay. (Tip: To assist with recovery, enjoy 30–60 minutes of extra sleep instead of the early-morning active recovery workout. Wake up without an alarm if you can).

Eat this:

- ½ cup unshelled edamame
- + ½ cup cooked quinoa
- OR
- 4 dates
- + 4 ounce cottage cheese



After a hard workout

Considerations: The intensity and duration of the workout. The goal is to shift your body into a muscle-building state, replenish muscle glycogen stores and set the stage for muscle growth and tissue repair.

Timing: The recovery “window” is open all day, but after 60 minutes, the muscle cells' potential to initiate rebuilding declines. Research shows that a 2:1, 3:1 or 4:1 carbohydrate and protein recovery snack will help absorb glucose into the muscle to encourage glycogen and protein replenishment. Ideally, aim for 20g liquid protein and 60–80g high glycemic carbohydrate in the immediate (as tolerated) post-workout snack, before the recovery meal. Consume 20–24 ounces water for every 1 pound lost during the workout + additional electrolytes as needed.

Eat this:

- Smoothie with...
- + 20g whey or vegan protein
- + 1 cup milk
- + 1 cup mixed fruit
- + veggies (celery, kale/spinach, ginger)
- + ice/water
- + 30–50g of carbohydrate of your choice (pastry, granola, dried fruit, etc.)

Short-Course Fueling Plan

Although it may seem unnecessary (and impractical) to fuel your body before and/or during a 1-3 hour race, to ensure a strong performance, try these fueling suggestions:



Pre-race (2.5-3 hours before the start):

~50-90g of low-fiber, easy-to-digest carbohydrate (or around 1g carbohydrate per kg body weight) with 10-15g of high-quality protein + 12-20 ounces water (optional FIZZ or NUUN tablet OR electrolyte pills). Eight ounce coffee/tea is fine.

Eat this:

- 1 hardboiled egg
- + 1 egg white scrambled in 1 cup white rice
- OR
- 1 banana
- + 1 cup Kefir yogurt

*If tolerated, eat an additional 15–30g of carbohydrates consumed in the 30 minutes prior to the race start + 8–12 ounces water. The additional carbohydrates in the form of a sport drink or gel, after your pre-race warm-up will beneficially raise blood glucose and insulin levels and also provide your body with additional electrolytes and fluids.

On the bike:

■ 1 bottle with 30–60g of carbohydrates every 60 minutes, to meet fluid needs (20–28 ounces per hour) and provide electrolytes. If possible, sip every 10–15 minutes. Your bottle should allow for easy and quick sipping/reaching.

■ Depending on stomach sensitivity, be aware that solid foods may not empty from the stomach quickly and cause GI distress on the run.

Tip: If it's hot weather, you may benefit from a lower calorie, high electrolyte beverage (closer to a 6% carbohydrate solution) to ensure quick emptying from the stomach into the intestines without irritation.

On the run:

■ If the race is less than 90 minutes, water will suffice on the run, so long as you took in at least 30g (120 calories) of carbohydrates on the bike.

■ If running more than 30 minutes off the bike, a high glycemic gel mixed with water (in a gel flask) is an efficient and effective way to quickly deliver glucose to the working muscles every 10 min.