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.
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

**RUN/BIKE EFFORT LEVELS:**

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

**Moderate:** On the bike, 4-8K 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:**

Thrigly 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.

**WEEK 1: Build Week**

**MON**

- 6x100 swim w/15 rest (descent 1-5)
- 5x100 pull w/15 rest (descent 1-5)
- 30-45 min

**TUE**

- 1x2400 swim (30:FSTI) 1x100 pull (breathe every 5 strokes)
- 30-45 min

**WED**

- 2x450 swim w/15 rest (FSTI) 2x100 pull (breathe every 5 strokes)
- 30-45 min

**THU**

- Rest day or optional swim

**FRI**

- Rest day or optional swim

**SAT**

- 60 min, include 2x7 min hill climbs

**SUN**

- Off The Bike: 20 min, easy

**WEEK 2: Speed Week**

**MON**

- 4x100 swim w/15 rest (descent 1-5)
- 4x100 pull w/15 rest (descent 1-5)
- 30-45 min

**TUE**

- 4x50 swim w/10 rest (FAST)
- 4x50 pull w/10 rest (FAST)
- 30-45 min

**WED**

- 1x2400 swim w/15 rest (30:FSTI)
- 1x100 pull w/15 rest (25:FSTI)
- 50 kick/50 swim, repeat
- 30-45 min

**THU**

- Rest day or optional swim

**FRI**

- Rest day or optional swim

**SAT**

- 60 min, include 2x7 min hill climbs

**SUN**

- Optional swim

**WEEK 3: Recovery Week**

**MON**

- 1x100 swim w/30 rest (descent 1-5)
- 1x100 pull w/30 rest (descent 1-5)
- 30-45 min

**TUE**

- 1x75 swim w/15 rest (30:FSTI/50 smooth)
- 1x100 pull w/15 rest (25:FSTI)
- 30-45 min

**WED**

- 10 min easy warm-up, 10 min moderate, 10 min easy

**THU**

- 60-60 min

**FRI**

- Rest day or optional swim

**SAT**

- 30 min as 30 min easy warm-up, 30 min moderate, 30 min easy cool-down

**SUN**

- 40 min easy, 30 min easy warm-up, 30 min moderate, 30 min easy cool-down

**WEEK 4: Build Week**

**MON**

- 4x100 swim w/15 rest (descent 1-4)
- 4x100 pull w/15 rest (descent 1-4)
- 30-45 min

**TUE**

- 4x300 w/10 rest (FAST/10 non-free, repeat)
- 30-45 min

**WED**

- 1x100 swim w/15 rest (30:FSTI/10 easy)
- 1x100 pull w/15 rest (25:FSTI)
- 30 min as 30 min easy warm-up, 7x7 min moderate with 2 min easy between each, 4 min easy cool-down

**THU**

- 60-60 min

**FRI**

- Rest day or optional swim

**SAT**

- 30 min as 30 min easy warm-up, 30 min moderate, 30 min easy cool-down

**SUN**

- 40 min easy, 30 min easy warm-up, 30 min moderate, 30 min easy cool-down

**WEEK 5: Speed Week**

**MON**

- 6x100 swim w/15 rest (descent 1-5)
- 6x100 pull w/15 rest (descent 1-5)
- 30-60 min

**TUE**

- 3x100 swim w/10 rest (30:FSTI/50 non-free, repeat)
- 30-60 min

**WED**

- 4x300 w/10 rest (FAST/10 non-free, repeat)
- 30-60 min

**THU**

- 4x100 swim w/15 rest (30:FSTI/50 non-free, repeat)
- 30-60 min

**FRI**

- Rest day or optional swim

**SAT**

- 60 min, include 2x7 min hill climbs

**SUN**

- Optional swim

**WEEK 6: Taper Week**

**MON**

- 1x100 pull w/20 rest (FAST)
- 1x100 swim w/20 rest (30:FSTI/20 easy)
- 30-45 min

**TUE**

- 1x75 swim w/15 rest (30:FSTI/50 smooth)
- 1x100 pull w/15 rest (25:FSTI)
- 30-45 min

**WED**

- Rest day or optional swim

**THU**

- Rest day or optional swim

**FRI**

- Record your times for future reference.

**SAT**

- 30 min as 30 min easy warm-up, 30 min moderate, 30 min easy cool-down

**SUN**

- 40 min as 30 min easy warm-up, 30 min moderate, 30 min easy cool-down

**KEY:**

- Swim workout
- Bike workout
- Run workout
- Gym Strength
- Yoga & stretching

**BOOST YOUR SWIM IN 6 WEEKS**
FIVE WEEKS TO YOUR FASTEST 56!

Follow this plan to transform your half-Ironman bike fitness.

BY LANCE WATSON

The experienced triathlete who has done 2-3 months of regular riding three times per week may find that riding 90-120km is too easy for the week and prefers to slow it down to 60-90km. The key is to target between 60-90rpm zone 3, and not to exceed 85rpm for the majority of time. This will allow for higher cadence and more efficient pedaling.

riding your fastest 56 miles is a balancing act between stretching your effort beyond aerobic mode and not going out too fast to only see you blow up on the run. On race day, pacing and your effort beyond aerobic is the goal to finish the run with energy, not fatiguing about stitches and bruises.

Week 1

**MON**
- Day off or optional [2000-3000], drill and technique emphasis.

**TUE**
- 3 hours. Threshold. After warming up, do 6x10’ (10’) Zone 3 hills at 80% of max speed. 5:1 easy. 10’ Zone 4; 10’ easy; 6x10’ (10’) Zone 4 gradually build to Zone 5 through the set. 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.

**WED**
- 2000-3000 with intervals at goal race pace.

**THU**
- 2-3 hours, East. 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.

**FRI**
- 2000-3000, aerobic. Include pulling with paddles.

**SAT**
- 3-4 hours, pace work. After warming up, do 4x20’ (10’) pickups at 90% of max speed. 5:1 easy. Do 4x10’ (10’) Zone 3 or goal race pace trainer intervals. Pulling with paddles.

**SUN**
- 2-3 hours, aerobic. Mostly Zone 2. (Note: 30–45’ of warming up at a lower intensity can be used to warm up the body.) After warming up, do 2x60’ (20’) Zone 3 on goal race pace trainer intervals. Pulling with paddles.

Week 2

**MON**
- Day off or optional [2000-3000], drill and technique emphasis.

**TUE**
- 2 hours. Threshold. After warming up, do 6x10’ (10’) Zone 3 hills at 80% of max speed. 5:1 easy. 10’ Zone 4; 10’ easy; 6x10’ (10’) Zone 4 gradually build to Zone 5 through the set. 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.

**WED**
- 2000-3000 with intervals at goal race pace.

**THU**
- 2-3 hours, East. 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.

**FRI**
- 2000-3000, aerobic. Include pulling with paddles.

**SAT**
- 3-3.5 hours, pace work. After warming up, do 4x20’ (10’) pickups at 90% of max speed. 5:1 easy. Do 4x10’ (10’) Zone 3 or goal race pace trainer intervals. Pulling and paddles.

**SUN**
- 2-3 hours, hilly aerobic. Zone 1-3, mostly Zone 2. If you typically go with a group on aerobic days, be true to your own plan. Keep your heart rate as low as possible in Zone 2 to allow for recovery and to get you up for the next week’s challenging efforts.

Week 3

**MON**
- Day off or optional [2000-3000], drill and technique emphasis.

**TUE**
- 2 hours. Threshold. After warming up, do 6x10’ (10’) Zone 3 hills at 80% of max speed. 5:1 easy. 10’ Zone 4; 10’ easy; 6x10’ (10’) Zone 4 gradually build to Zone 5 through the set. 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.

**WED**
- 2000-3000 with intervals at goal race pace.

**THU**
- 2-3 hours, East. After warming up, include 2x10’ (10’) 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.

**FRI**
- 2000-3000, aerobic. Include pulling with paddles.

**SAT**
- 3-3.5 hours, pace work. After warming up, do 4x20’ (10’) pickups at 90% of max speed. 5:1 easy. Do 4x10’ (10’) Zone 3 or goal race pace trainer intervals. Pulling and paddles.

**SUN**
- 2-3 hours, hilly aerobic. Zone 1-3, mostly Zone 2. If you typically go with a group on aerobic days, be true to your own plan. Keep your heart rate as low as possible in Zone 2 to allow for recovery and to get you up for the next week’s challenging efforts.

Week 4

**MON**
- Day off or optional [2000-3000], drill and technique emphasis.

**TUE**
- 2 hours. Threshold. After warming up, do 6x10’ (10’) Zone 3 hills at 80% of max speed. 5:1 easy. 10’ Zone 4; 10’ easy; 6x10’ (10’) Zone 4 gradually build to Zone 5 through the set. 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.

**WED**
- 2000-3000 with intervals at goal race pace.

**THU**
- 2-3 hours, East. After warming up, include 2x10’ (10’) 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.

**FRI**
- 2000-3000, aerobic. Include pulling with paddles.

**SAT**
- 3-3.5 hours, pace work. After warming up, do 4x20’ (10’) pickups at 90% of max speed. 5:1 easy. Do 4x10’ (10’) Zone 3 or goal race pace trainer intervals. Pulling and paddles.

**SUN**
- 2-3 hours, hilly aerobic. Zone 1-3, mostly Zone 2. If you typically go with a group on aerobic days, be true to your own plan. Keep your heart rate as low as possible in Zone 2 to allow for recovery and to get you up for the next week’s challenging efforts.

Week 5

**MON**
- Day off or optional [2000-3000], drill and technique emphasis.

**TUE**
- 2 hours. Threshold. After warming up, do 6x10’ (10’) Zone 3 hills at 80% of max speed. 5:1 easy. 10’ Zone 4; 10’ easy; 6x10’ (10’) Zone 4 gradually build to Zone 5 through the set. 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.

**WED**
- 2000-3000, endurance and speed. Swim with longer sustained efforts, followed by sprints of 25s and 50s.

**THU**
- 2-3 hours, East. After warming up, include 2x10’ (10’) 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.

**FRI**
- 2000-3000, aerobic. Include pulling with paddles.

**SAT**
- 3-3.5 hours, pace work. After warming up, do 4x20’ (10’) pickups at 90% of max speed. 5:1 easy. Do 4x10’ (10’) Zone 3 or goal race pace trainer intervals. Pulling and paddles.

**SUN**
- 2-3 hours, hilly aerobic. Zone 1-3, mostly Zone 2. If you typically go with a group on aerobic days, be true to your own plan. Keep your heart rate as low as possible in Zone 2 to allow for recovery and to get you up for the next week’s challenging efforts.

Week 6

**MON**
- Day off or optional [2000-3000], drill and technique emphasis.

**TUE**
- 2 hours. Threshold. After warming up, do 6x10’ (10’) Zone 3 hills at 80% of max speed. 5:1 easy. 10’ Zone 4; 10’ easy; 6x10’ (10’) Zone 4 gradually build to Zone 5 through the set. 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.

**WED**
- 2000-3000, endurance and speed. Swim with longer sustained efforts, followed by sprints of 25s and 50s.

**THU**
- 2-3 hours, East. After warming up, include 2x10’ (10’) 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.

**FRI**
- 2000-3000, aerobic. Include pulling with paddles.

**SAT**
- 3-3.5 hours, pace work. After warming up, do 4x20’ (10’) pickups at 90% of max speed. 5:1 easy. Do 4x10’ (10’) Zone 3 or goal race pace trainer intervals. Pulling and paddles.

**SUN**
- 2-3 hours, hilly aerobic. Zone 1-3, mostly Zone 2. If you typically go with a group on aerobic days, be true to your own plan. Keep your heart rate as low as possible in Zone 2 to allow for recovery and to get you up for the next week’s challenging efforts.

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

This kickoff 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 for an Ironman. The first phase of this plan is geared towards creating consistency with your training, while the second phase gradually increases training volume. 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 rooted 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 within 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 strongly recommend a basic core strength program for the duration of the plan.

To purchase the complete 18-week plan in TrainingPeaks, go to [Triathlon.com](https://www.triathlon.com). Use performance pointer: "TriathlonMag14" for a 50 percent reduced rate (of $149) for Triathlon readers.

---

### KEY:
- **x minutes** seconds
- **r** recovery RPM
- **r** revolutions per minute, or bike cadence
- **w** warm-up
- **r** run workout
- **b** bike workout
- **y** ym strength
- **p** performance pointer

---

**WEEK 1**

<table>
<thead>
<tr>
<th>Day</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDN</td>
<td>Day off; Include 5–10% of foam rolling or a light stretch.</td>
</tr>
<tr>
<td>TUE</td>
<td>60’, strength; 20’ warm-up, 5×10’ interval on 3–4:48 grade @ half marathon effort, 1 easy walk or jog recovery. 5’ easy. Bike up to 90% of IM effort. 1 easy walk or jog recovery. 10’ easy.</td>
</tr>
<tr>
<td>WED</td>
<td>35’, strength; 40’ choice (15’); 15’ x 25 drill choice/25’ free (15’); 40’x5’ @ IM effort and can pull buoy 15’; 200 cool-down.</td>
</tr>
<tr>
<td>THU</td>
<td>70’, strength; 30’ warm-up, 2x vertical climbs @ Zone 3 or 70.3 effort (9 min). If you do not have hills, you can do this as a big gear session and maintain form.</td>
</tr>
<tr>
<td>FRI</td>
<td>90’, strength; 40’x5’ @ IM effort. 15’ x 25 drill choice/25’ free (10’); 4x300 cool-down.</td>
</tr>
<tr>
<td>SAT</td>
<td>3.5 hours, long IM pacing. 15’ warm-up. 3x10’ @ IM effort, 15’ easier recovery pace. 40’ cool-down.</td>
</tr>
<tr>
<td>SUN</td>
<td>80’, long IM pacing. 10-12 miles. 4 mile warm-up. 4-6 miles @ IM effort. 2 miles cool-down. 60-90’, light active recovery bike after run.</td>
</tr>
</tbody>
</table>

---

### WEEK 2

<table>
<thead>
<tr>
<th>Day</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDN</td>
<td>Day off; Include 5-10% of foam rolling or a light stretch.</td>
</tr>
<tr>
<td>TUE</td>
<td>60’, basic core strength program. 1 type core, 2 sets of 20 reps. 1 type core on bar, 2 sets of 20 reps. Planks/body bridge holding good horizontal body position 2×4–5×30–60’ and build up to 60’. Rest 20–25’ between sets.</td>
</tr>
<tr>
<td>WED</td>
<td>35’, strength; 20’ warm-up, 5×10’ interval on 3–4:48 grade @ half marathon effort, 1 easy walk or jog recovery. 5’ easy. Bike up to 90% of IM effort. 1 easy walk or jog recovery. 10’ easy.</td>
</tr>
<tr>
<td>THU</td>
<td>70’, strength; 40’ choice (15’); 15’ x 25 drill choice/25’ free (15’); 40’x5’ @ IM effort, pull buoy optional 15’; 200 cool-down.</td>
</tr>
<tr>
<td>FRI</td>
<td>70’, strength; 30’ warm-up, 2x vertical climbs @ Zone 3 or 70.3 effort (9 min). If you do not have hills, you can do this as a big gear session and maintain form.</td>
</tr>
<tr>
<td>SAT</td>
<td>3x8, long IM pacing. 15’ warm-up. 8x3’ @ IM effort, 15’ easier recovery pace. 40’ cool-down.</td>
</tr>
<tr>
<td>SUN</td>
<td>100’, long IM pacing. 10-12 miles. 4 mile warm-up. 4-6 miles @ IM effort. 2 miles cool-down. 60-90’, light active recovery bike after run.</td>
</tr>
</tbody>
</table>

---

### WEEK 3

<table>
<thead>
<tr>
<th>Day</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDN</td>
<td>Day off; this will be an unloaded (recovery) week to allow for training adaptation.</td>
</tr>
<tr>
<td>TUE</td>
<td>90’, 2000. 20’x15’ choice warm-up @ 15’; 4x15’ easy good stroke @ 15’; moderate IM, 200 cool-down.</td>
</tr>
<tr>
<td>WED</td>
<td>60–90’, easy. active recovery.</td>
</tr>
<tr>
<td>THU</td>
<td>60–90’, light run on trails or road.</td>
</tr>
<tr>
<td>FRI</td>
<td>40–50’, basic core strength program. 1 type core, 2 sets of 20 reps. 1 type core on bar, 2 sets of 20 reps. Planks/body bridge holding good horizontal body position 2×4–5×30–60’ and build up to 60’. Rest 20–25’ between sets.</td>
</tr>
<tr>
<td>SAT</td>
<td>3 hours, 50 miles. 15-15 miles warm-up. Main set: 15 miles @ IM effort, 5 miles easier. 10 miles @ half IM effort. 5 miles cool-down. 15’ off, the bike. 60–90’, easy. IM, 5 cool-down.</td>
</tr>
<tr>
<td>SUN</td>
<td>75’, tampa. 35’ warm-up. 2x15’ @ IM effort. 10 marathon effort. 10 cool-down.</td>
</tr>
</tbody>
</table>

---

### WEEK 4

#### Start of a two-week build phase

| MDN       | Day off; 100’, choice warm-up, 2x choice. 2, 3 as choice. 10×15’ @ 1’; 1 easy walk; 1, 2 as fast as possible, 1 easy. 5×30-2’; 70.3 effort. 15’; 20 cool-down. 4000. |
| FRI       | 90’, 3000. 10×15’ choice warm-up, 2x10×15’ on 3–4:48 grade, 55’ easy. 15’; 20 hold; Build to @ easy 15’; 300 cool-down. |
| SAT       | 3 hours, 50 miles. 15-15 miles warm-up. Main set: 15 miles @ IM effort, 5 miles easier. 10 miles @ half IM effort. 5 miles cool-down. 15’ off, the bike. 60–90’, easy. IM, 5 cool-down. |
| SUN       | 150’, 100 mile pacing. Take a couple minutes to do some dynamic stretches to get ready for this run. 3x15’ @ IM effort, 5’ easy—can be walk/run and be sure to hydrate. 15’ cool-down. |

---

#### Light Active Recovery

By 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. Clifffenglishcoaching.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.

K
nowing 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, postprandial fat, 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, so you can better prepare your gut for race day and help you to become more aware of how your body absorbs and utilizes nutrients in long-intensity levels, durations and weather conditions.

Note: For an individualized approach on fueling your training sessions, it’s important to contact a registered dietitian specializing in sport nutrition. It should be noted that recommendations for fueling around workouts should be “as tolerated” nutrition. It should be noted that recommendations

Before a 6 a.m. swim session Considerations: Early morning wake-up calls leave limited time to eat or digest food. 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 carbohydrates + 8–12 ounces of water (coffee/tea is fine as well).

Eat this:

• energy gel
• 1 cup milk
• 1/4 cup Cheerios or cereal

Eat this:

• lightly salted rice cakes
• 1/2 tsp PB
• 2 ounce plain nonfat Greek yogurt
OR
• 1 small slice of pizza/bread
• 1 tbsp PB (or nut butter)
• 1 banana
• 1 egg (10g carbs + 13g protein)

Before a Saturday long brick (2:5–3:0 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 carbohydrates and a mix of maltodextrin + glucose/dextrose + electrolytes + optional branch 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 the workout, 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:

• 1/2 cup granola
• 1/2 cup oats
• 1 cup milk or yogurt
• 1/2 cup sliced bananas (10g carbs)
• 13g protein
OR
• 1 slice of pizza/bread
• 1 tsp PB (or nut butter)
• 1 banana
• 1 egg (10g carbs + 13g 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 shifting activity. Timing: 75–90 minutes before the workout, eat a 3:1 ratio of carbs to protein (30–50g carbohydrates + 8–13g 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:

• 2 light Wheat Thins crackers
• 1 tbsp PB (or nut butter)
• 1 tbsp honey
• 1 egg white (30g carbohydrates + 10g protein)
OR
• 8 ounce apricot sauce
• 1/4 cup sliced banana
• 1/2 tsp honey or agave
• 1 tbsp peanut butter
• 1/2 cup sliced banana (or electrolyte pillars)

Before an easy recovery workout (30–60 minutes) Considerations: Focus on properly refueling 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 after the workout, consume 15–30g of carbohydrates + 5–10g 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:

• 1/4 cup unshelled edamame
• 1/2 cup chili quinoa
OR
• 4 dates
• 4 ounce cottage cheese

Short-Course Fueling Plan

Although it may seem unnecessary (and impractical) to fuel your body before and/or during a 3–4 hour race, to ensure a strong performance, try these fueling suggestions:

Pre-race (2:5–3:0 hours before the start):

• 120g, low-fiber, easy-to-digest carbohydrate (or equal parts carbohydrate per kg body weight) with 3:15g of high-quality protein (1:20 ounces water (optional Fizz or Nuun tablet OR electrolyte pills). Eight ounces coffee/tea is fine.

Eat this:

• 1/2 cup oatmeal
• 1 egg white scrambled in 1 cup white rice
OR
• 1 banana
• 1 cup Kefir’s yogurt

*If tolerated, eat an additional (15-30g) of carbohydrates consumed in the 30 minutes prior to the race start (~15–20 ounces water. The additional carbohydrates in the form of a sport drink or gel, after your pre-race warm-up will help rapidly raise blood glucose and insulin levels and also provide your body with additional electrolytes and fluids.

On the bike:

• If the race is more than 30–40g of carbohydrates every 60 minutes, to meet fluid needs (90–120 ounces per hour and provide electrolyte loss. If possible, every 10–15 minutes. Your bottle should allow for easy and quick sipping/mooring.

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

• 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 60 minutes, water will suffice on the run, as long as you took in at least 30g (1 1/3levelanded white potatoes) of carbohydrates in the bike.

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

Eat this:

• 20g whey or vegan protein
• 1 cup milk
• 1 cup mixed fruit
• 1/2 banana
• 1 tsp honey
• 1/2 cup dates
• 1/2 cup sliced banana
• 1/2 tsp PB (or nut butter)
• 1 cup Greek yogurt

• 1/2 cup cooked quinoa
OR
• 1 egg white (34g protein)
• 1 tbsp PB
• 1 cup sliced banana
• 1 tsp honey

• 1/4 cup sliced banana (or electrolyte pillars)

• 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 pound lost during the post-exercise recovery with additional electrolytes as needed.

Eat this:

• Sweet potato, 200g
• 1 hard boiled egg
• 1 scoop whey or plant protein
• 1/2 cup PB
• 1/2 cup cooked quinoa
OR
• 1/2 cup cooked quinoa
• 1/2 cup sliced banana
• 1/2 tsp honey

• 1/2 cup dates
• 1/2 tbsp PB (or nut butter)
• 1 cup Greek yogurt

• 1/4 cup sliced banana (or electrolyte pillars)