



Flirting with the six-hour half-Ironman mark?
Here's your plan for hitting your target and finishing healthy and strong.

By Lance Watson

successful training program takes you to the edge of your ability without pushing you into injury. To master this delicate balance, it is important to make sure the easy days are easy, and that you adhere to the goal paces. There are some big sets in the plan. Listen to your body and back off if you have any specific pains or soreness. If you overdo it one day, future key sessions will be compromised and unproductive. It's essential to arrive to the start line healthy.

Some prerequisites

Because this plan covers the final five weeks of training prior to a two-week taper, you should already have a reasonable level of fitness before tackling it! Here's what you should already have under your belt:

- Endurance: Two 4- to 4.5-hour base rides, two 2- to 2.5-hour base runs, regular swims of 2000—3000.
- Intensity: Three to four higher intensity run sessions with 3—4 miles total combined intervals, three to four high-intensity bike sessions with 12—15 miles total intervals. Doing a couple of 1- to 3-hour races is also helpful.



Tips for success

- In the weeks leading up to your key race, plan ahead so that you can prioritize training over other obligations and interests. We all need sport-life balance; however, putting a short-term emphasis on your race goal will be necessary.
- On rest days, rest. Avoid busywork and errands.
- Warm up and cool down properly to avoid injury and to facilitate postworkout recovery.
- Choose the right race for a PR: Pick a flat, fast, well-organized course that isn't typically hot or really windy.
- Train on courses and in environments specific to the demands of the race.
 Better yet, train on the course itself if possible. It can knock several minutes off your race time.
- Practice your open-water swimming skills* regularly to transfer pool swim times to race-day results.
- Practice and refine your race-day fueling plan. Nutrition is the fourth discipline* of the half-Ironman and allows you to let your fitness shine through.
 Poor nutrition will derail even the most prepared, well-trained athletes.

About the plan

Since this program is time goal-oriented, all the sessions are based on achieving specific paces. You will need to honestly assess your skills to pick your goal pace times for each sport. These times are your training targets. You will see the following pace-targeted terminology:

Base Endurance Pace: Builds your aerobic base, which is the pace you could maintain for a very long time. A strong aerobic system allows you to recover faster between intervals on speed days, and from day to day in your regular training program.

Recovery Pace: Approximately the same as your endurance pace, but for shorter duration. It encourages blood flow (with oxygen and nutrients) to repairing muscles but is not hard or long enough to further wear you down.

Pace Work: Training done at your goal half-Ironman race pace. Maintaining a pace in training as you fatigue gives you the physical and mental skills that will help you reach your time goal on race day.



POOL SKILLS FOR A FASTER SWIM SPLIT

DEEP-WATER ACCELERATION

Try timed 50s with a deep-water (floating) start, with no push off of the wall. Begin by doing a scissor kick with your body horizontal with your feet near the surface, floating on your stomach. This will help to give you maximum acceleration. Do it with a few partners in your lane and see who gets off the line the fastest!

HEAD-UP FREESTYLE

To work on sighting technique in the pool do some head-up freestyle. This works your catch (the front end of your stroke) and teaches you to relax in a triathlon-specific body position. Try swimming with your nose at the waterline for two to eight strokes, 3–4 times per 50 as you would in

a race. Make sure not to drop your legs by increasing your kick slightly as you sight. Next, lift your head higher, to chin level. Finally, lift to chest level if you can.

CLOSED EYES

A good way to work on "straight swimming" is by doing freestyle the length of the pool with your eyes closed. Any stroke imbalances will become apparent when you bump into a lane line.

DRAFTING

Staying in another person's draft in a race eliminates drag by 20–30 percent. Practice swimming closely behind your lane mate (with their consent, of course, or take turns drafting) to get used to hanging onto someone's pace.



THE FOURTH DISCIPLINE: NUTRITION

PRE-RACE

- 1. Breakfast should be similar to what you eat on training days. Stick primarily with carbohydrates, a little protein and minimal fats. Toast and jam or a banana and oatmeal plus an electrolyte sports drink are popular choices. If you have a coffee on training days, have a coffee on race day.
- 2. Finish breakfast two to three hours before race start to give your stomach time to digest.
- 3. In the two hours before the race, sip water and/or an electrolyte sports
- **4.**Some athletes eat a gel just before the race start.

BIKE

- For the first 10 minutes of the bike, drink water and take in minimal calories, mainly in the form of sports drink. Start eating when your heart rate has dropped and you've settled into a good rhythm.
- 2. From 10 minutes after the bike start to 10 minutes prior to the bike finish, eat 200–350 carbohydrate calories per hour. Larger or muscular athletes tend to require the higher end of this range.
- 3. Drink 1 to 1.5 quarts (33–50 ounces) of fluid per hour (water and sports drink combined). This is approximately two small bottles to two large bottles per

- hour, depending on climate and your individual perspiration rate.
- **4.** Set your watch alarm to sound every 15 minutes, to remind you to fuel.
- 5. A simple plan is to consume a gel every 30 min (-200 cal per hour) and a bottle of sports drink per hour (100 cal per hour). Drink up to 10 ounces of water per gel.
- **6.**To avoid cramping, follow the recommended sodium intake of 500–750mg/liter (33 ounces).
- 7. Ten minutes prior to the bike finish you should reduce your calorie intake and only take in fluids. This allows your stomach to empty while still allowing your gut to absorb the food ingested.

RUN

- 1. Wait five to 10 minutes into the run until your heart rate levels off before starting your nutrition/hydration regime.
- 2. Often athletes' heart rates are higher on the run than the bike. If this is the case, calorie consumption should be 15–30 percent less per hour than on the bike.
- 3. Many athletes find liquid calories easier to digest on the run, in the form of sports drink or cola.
- 4.If you are running 9:30/mile, you will hit approximately six aid stations per hour, if they are spaced at one per mile. Aim to drink two small paper cups of liquid per aid station.



Lactate Threshold: Faster than half-Ironman pace, this effort is performed at your best average 30-minute bike or run pace. Pushing here will make it easier to sustain your race pace, which will feel slower than lactate threshold pace.

Speedwork: Your faster interval pace. You should feel the burn here. This builds speed and dynamic strength, which allows you to deal with shifting paces on race day (starting strong in the swim, passing athletes on the bike or cresting a hill on the run—and of course sprinting for glory toward the finish line!).

Don't supersede the pace times in training. A common mistake among athletes is to go harder and longer on a day that they "feel good," which doesn't provide the body with the opportunity to adjust to the progressive training necessary for higher performance.

Your skill/pace assessment

On separate days, prior to diving into this training plan, do an 800-meter swim time trial, a 25-mile bike time trial and a 6-mile run time trial. Match your average 100-meter or mile pace to the lactic threshold paces indicated below. Decide if you are at the strong end, the mid-range point or the slower end of these ranges. (Note: For athletes using a yard pool, remember that yards are 10 percent shorter. 2:00/100m = 1:48/100y,)

Goal Paces for a Sub-6-hour Race: Your goal splits must average the midpoint of the race goal paces below, i.e. 40:00 swim, 3:05 bike, 2:00 run + 10 minutes transitions = 5 hours, 55 min. If you are stronger in one discipline, you have wiggle room in the others! If you are below one of the ranges, start at the low-end training paces and try to train yourself up to the pace for race day. The worst-case scenario is you will still get faster than you were before!

Swim Race Goal Pace: 35–45 minutes Training pace ranges:

- Base endurance and recovery: 2:00— 2:25/100m
- Pace work: 1:50-2:10/100m
- Lactate threshold: 1:45—1:55/100m
- Speedwork: 1:30-1:45/100m

Bike Race Goal Pace (on flat terrain): 2:55–3:15

Training pace ranges:

- Base endurance and recovery: 14.5mph—17mph
- Half-iron pace work: 17.25mph-19mph
- Lactate threshold: 19mph-21mph
- Speedwork: 22mph-25mph

Run Race Goal Pace (on flat terrain): 1:50–2:10

Training pace ranges:

- Base endurance and recovery: 9:15— 10:30/mile
- Half-iron pace work: 8:24-9:10/mile
- Lactate threshold: 7:50-8:30/mile
- Speedwork: 6:50-7:30/mile

SHARE YOUR TRAINING WITH ME

Cut out this plan, tack it to the fridge, and check off your sessions as you complete them. Share your experience by e-mailing me at watsonsworkouts@competitorgroup.com. If it's epic, inspirational or amusing I might share your story with other readers of *Triathlete*!

HOW TO DETERMINE YOUR LACTATE 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 at rates that are too fast for it to metabolize—this is the LT.

To determine your LT, do field tests

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 the 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.

This chart will help you understand the various zones.

ZONE	% OF LACTATE THRESHOLD	BREATHING AND PERCEPTION
1	<80% of LT	Gentle rhythmic breathing. Pace is easy and relaxed. The intensity is a jog or very easy run or very easy bike spin.
2	80-87% of LT	Breathing rate and pace increase slightly. Slightly deeper breathing, although still comfortable. Running and cycling pace remains comfortable and conversation is possible.
3	88-93% of LT	Breathing a little harder, pace is moderate. A stronger cycling or running rhythm, this is "feel good" fast. It is slightly more difficult to hold conversation.
4	94-100% of LT	Starting to breathe very hard, pace is fast and beginning to get uncomfortable, approaching all-out 30-minute bike or run pace. This pace should be challenging to maintain.
5	>100% of LT	Breathing is deep and forceful. Pace is all-out sustainable for one to five minutes. Mental focus required, moderately uncomfortable and conversation undesirable.

WATSON'S WORKOUTS

The Program

Coaching Abbreviations / Terminology

WU = warm-up | **MS** = main set | **CD** = cool-down | **X'** = X minutes, i.e. 3' | **X"** = X seconds, i.e. 30" | **Zn** = zone (heart rate or perceived effort), i.e. Zn1 = Zone | **(brackets)** = time indication for rest in between intervals or tasks, i.e. 4 x 3' (2') | **RPM** = cadence (repetitions per minute) | **HR** = heart rate | **P-ups** = pick-ups. Short accelerations at 75-85% of your maximum sprint speed | **Alt** = alternate | **PE** = perceived exertion

WEEK 1	
MON	Day Off: Walk and stretch
TUE	SWIM: Pace work, 1:15. WU: 400-800 including freestyle, drills and kick. MS: 20x100 (20-25"). CD: 200-300 freestyle and backstroke. BIKE: Threshold (LT) and speedwork, 2:00. WU: 20-30' mostly easy spin, but include 4-5 x 30" P-ups to "speedwork" pace. MS: LT - 4-5 x 3 miles (5' easy). Speedwork - 3-4 x 1/2 mile (2'). CD: 20-30' easy spin.
WED	RUN: Threshold (LT) and speedwork, 1:30. WU: 15-20' easy jog. 4-5 strides. MS: LT - 4-5 x 1 mile (3' easy jog). Speedwork - 3-4 x 1/2 mile (2' walk). CD: 10-15' easy jog.
THU	BIKE: Recovery ride, 1:00. RUN: Off the bike, 20 mins.
	Performance Pointer: It is good practice to pay attention to form and posture on recovery days.
FRI	SWIM: Threshold (LT) and speedwork, 1:15. WU: 400-800 including freestyle, drills and kick. MS: LT - 8x100 (30-40"). Speedwork - 10x50 (20-25"). CD: 200-300 freestyle and backstroke.
SAT	Pace work, 3:00. WU: 20-30' easy, aerobic riding. MS: Pace work - 4 x 10-12 miles (10-15' easy). RUN: Off the bike, 1:30. MS: Pace work - 5x1.5 miles (1-2' walk). CD: 5' walk, 10' easy jog.
	Performance Pointer: Start your first run interval within 3 minutes of finishing the ride to simulate realistic running off the bike.
SUN	SWIM: Base endurance and open-water skills, 1:15. WU: 400-800 including freestyle, drills and kick. MS: Base endurance - 10 to 15' nonstop freestyle at an easy aerobic pace. Open water - 10 to 15' practicing open-water skills in the pool (sighting, head-up freestye, drafting, etc.). CD: 200-300 freestyle and backstroke. BIKE: Base endurance pace, 3:00
	Performance Pointer: Early hydration and fueling are key during these late-week sessions. The goal is to finish with some energy left.

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FRI

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MON	Day Off: Walk and stretch.	

TUE

SWIM: Pace work, 1:15. WU: 400-800 including freestyle, drills and kick. MS: Pace work - 10x200 (25-30"). CD: 200-300 freestyle and backstroke. BIKE: Threshold (LT) and speedwork, 2:00. WU: 20-30' mostly easy spin, but include 4-5 x 30" P-ups to "speedwork" pace. MS: LT - 3-4 x 5 miles (5' easy). Speedwork - 3-4 x 1/2 mile (2'). CD: 20-30' easy spin.

RUN: Threshold (LT) and speedwork, 1:30. WU: 15-20' easy jog. 4-5 strides. MS: LT - 8-10 x 1/2 mile (1.5' easy jog). Speed- 4-6 x 1/4 mile (1.5' walk). CD: 10-15' easy jog.

Performance Pointer: Speedwork requires both power and the ability to be relaxed. Don't "force" it; find your natural fast movement.

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THU BIKE: Recovery ride, 1:00. RUN: Off the bike, 20 mins.

SWIM: Threshold (LT) and speedwork, 1:15. WU: 400-800 including freestyle, drills and kick. MS: LT - 16x50 (15-20"). Speedwork - 12x50 as 25 sprint, 25 easy (20-25"). CD: 200-300 freestyle and backstroke.

BIKE: Base endurance pace, 3:30. RUN: Off the bike, 1:15. MS: Pace work - 6x1 mile (1-2' walk). CD: 5' walk, 10' easy jog.

Performance Pointer: Pace work off the bike is an excellent opportunity to adapt to the feeling of triathlon running. Be smart about the first interval, getting into pace and mentally adjusting to the feeling of running.

SWIM: Base endurance and open-water skills, 1:15. WU: 400-800 including freestyle, drills and kick. MS: Base endurance - 15 to 20' non-stop freestyle at an easy aerobic pace. Open water - 10 to 15' practicing open-water skills in the pool. CD: 200-300 freestyle and backstroke. RUN: Base endurance pace, 2:00.

WEEK 3-RECOVERY WEEK

MON	Day Off: Walk and stretch.
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TUE SWIM: Pace work, 45 mins. WU: 400-800 including freestyle, drills and kick. MS: Pace work - 5x200 (25-30"). CD: 200-300 freestyle and backstroke.

WED BIKE: Recovery ride, 1:00. RUN: Off the bike, 20 mins.

Performance Pointer: Spin smoothly with a high cadence to promote recovery.

THU Day Off: Walk and stretch.

SWIM: 45 mins. WU: 400-800 including freestyle, drills and kick. MS: LT - 10x100 (20-25"). CD: 200-300 freestyle and backstroke.

 $\textbf{Performance Pointer:} \ \ \textbf{Between each interval, relax and regroup:} \ \ \textbf{Head into the next 100 with determination and positive attitude.}$

SAT BIKE: Base endurance pace, 2:30.

RUN: Base endurance pace, 1:30.

Performance Pointer: It's common to feel sluggish on recovery weeks. Wait for next week when you'll be ready to train to a new level.

FRI

SUN



The Program (continued)

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TUE

FRI

MON Day Off: Walk and stretch.

SWIM: Pace work, 1:15. WU: 400-800 including freestyle, drills and kick. MS: 7x300 (20-25"). CD: 200-300 freestyle and backstroke. BIKE: Threshold (LT) and speedwork, 2:00. WU: 20-30' mostly easy spin, but include 4-5 x 30" P-ups to "speedwork" pace. MS: LT - 3-4 x 3 miles (5' easy). Speedwork - 4-5 x 1/2 mile (2'). CD: 20-30' easy spin.

Performance Pointer: Test yourself in the speed sets. Can you push a higher gear, go faster and maintain an efficient cadence?

WED RUN: Threshold (LT) and speedwork, 1:30. **WU:** 15-20' easy jog. 4-5 strides. **MS:** LT - 3-4 x 1 mile (3' easy jog). Speedwork - 4-5 x 1/2 mile (2' walk). **CD:** 10-15' easy jog.

THU BIKE: Recovery ride, 1:00. RUN: Off the bike, 20 mins.

SWIM: Threshold (LT) and speedwork, 1:15. WU: 400-800 including freestyle, drills and kick. MS: LT - 8x100 (30-40"). Speedwork - 10x50 (20-25"). CD: 200-300 freestyle and backstroke.

Performance Pointer: Be patient and do drills slowly and deliberately, aiming for "water feel," not speed.

SAT EIKE Pace work, 3:30. WU: 20-30' easy, aerobic riding. MS: Pace work - 4 x 12-15 miles (10-15' easy). Run immediately following the last interval. RUN: Off the bike, 2:00. MS: Pace work - 5x2 miles (1-2' walk). CD: 5' walk, 10' easy jog.

SWIM: Base endurance and open-water skills, 1:15. **WU:** 400-800 including freestyle, drills and kick. **MS:** Base endurance - 25 to 30' nonstop freestyle at an easy aerobic pace. Open water - 10 to 15' practicing open-water skills in the pool. **CD:** 200-300 freestyle and backstroke. **BIKE:** Base endurance pace, 3:30.

WEEK 5

WED

FRI

SAT

SUN

SUN

MON Day Off: Walk and stretch.

TUE

SWIM: Pace work, 1:15. WU: 400-800 including freestyle, drills and kick. MS: 10x200 (25-30"). CD: 200-300 freestyle and backstroke.

BIKE: Threshold (LT) and speedwork, 2:00. WU: 20-30' mostly easy spin, but include 4-5 x 30" P-ups to "speedwork" pace. MS: LT - 2-3 x 5 miles (5' easy). Speedwork - 4-6 x 1/2 mile (2'). CD: 20-30' easy spin.

Threshold (LT) and speedwork, 1:30. **WU:** 15-20' easy jog. 4-5 strides. **MS:** LT - 6-8 x 1/2 mile (1.5' easy jog). Speedwork - 6-8 x 1/4 mile (1.5' walk). **CD:** 10-15' easy jog.

Performance Pointer: This workout is a final chance to lay down excellent run strength and speed. Prepare well mentally for this workout, and decide to make it a success!

THU BIKE: Recovery ride, 1:00. RUN: Off the bike, 20 mins.

SWIM: Threshold (LT) and speedwork, 1:15. WU: 400-800 including freestyle, drills and kick. MS: LT - 16x50 (15-20"). Speedwork - 12x50 as 25 sprint, 25 easy (20-25"). CD: 200-300 freestyle and backstroke.

BIKE: Base endurance pace, 3:00. RUN: Off the bike, 1:45. MS: Pace work - 9-10 miles nonstop. CD: 5' walk, 10' easy jog.

Performance Pointer: This transition workout is a pre-race opportunity to be mentally "on task" and positive. Make it your final ideal psychological run-through—after this you are in taper mode!

SWIM: Base endurance and open-water skills, 1:15. WU: 400-800 including freestyle, drills and kick. MS: Base endurance - 30 to 35' nonstop freestyle at an easy aerobic pace. Open water - 10 to 15' practicing open-water skills in the pool. CD: 200-300 freestyle and backstroke. RUN: Base endurance pace, 1:30.

WEEKS 6-7 (2-WEEK TAPER)

Taper Notes

After completing this five-week program, start your race taper. For an A-race, a two-week taper is appropriate. The taper program starts with three to four days of aerobic recovery sessions and/or days completely off. Follow this with a couple of days of final training sessions at threshold, but do 50 percent of the volume of intervals that you do in regular training sessions. Do shorter aerobic base endurance workouts the weekend before your race, approximately 50–60 percent of your regular base training duration.

The week of the half-Ironman follows a similar pattern, but you should reduce volume by another 50 percent. For a Sunday race day: Take the day off on Monday, make Tuesday an easy aerobic day, and do some very short threshold sessions on Wednesday and Thursday to activate your race pace energy systems. Rest up on Friday and do a 10 min swim, 20 min bike and optional 10 min run on Saturday to loosen the body up. Good luck!

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