

## Preparing for a Half-Marathon (or Full Marathon) – An Overview

Drew Pasteur    Wooster Grace Brethren Church    dpasteur@gmail.com    (330) 601-1010

### Goals and general principle

- Primary Goal: Prepare your body to finish the race, while enjoying race day.
- Secondary Goal: Run this race to the best of your ability (for individual time goals).
- Principle: Train sufficiently to be well-prepared, but avoid overuse injuries.

### Five Phases of Race Training

- Building a base level of fitness (3-6 months before race, or maintained long-term)
- Increasing endurance (1½-3 months before the race)
- Peak training volume & intensity - the “monster month” (3-7 weeks before race)
- Tapering – reducing training volume to get “fresh” legs (the final 2-3 weeks before race)
- Post-race recovery – letting the body heal (the first 2-4 weeks after the race)

### Reasons to Consider (Only) Three Workouts Each Week

- Physiological – the body needs at least 36-48 hours recovery time after a moderate or intense workout, to allow muscles and joints to heal from microtraumas.
- Psychological – doing fewer workouts helps with motivation, making burnout less likely
- Practical – we’re all busy, and training fewer days helps keep your life in balance

### Four Rest Days Each Week?! Maybe, Maybe Not...

- Three good runs weekly can give enough cardiovascular & muscular preparation.
- For max fat-burning/weight loss, doing something active 5-6 days a week is better.
- Walking, swimming, biking (30-45 min.) are low-impact cross-training options.
- If you want to run 4, 5, or 6 days each week, you can add “recovery runs” of 2-3 miles (2-4 miles for full marathon) at a very easy pace, the day after one or more workouts.

### Getting the Most Out of Three Weekly Workouts

- Never do workouts on consecutive days. (Allow your body time to recover.)
- Don’t combine volume and intensity, except when racing. (Far + Fast = Injury)
- Each week, do one long, slow weekend run plus two shorter midweek runs.
- Gradually build the long run to at least 75% of the race distance, preferably more.
- As long run distance increases, you may have a long run only every other weekend.
- Midweek workouts should be only 30-60 minutes, unless training for a full marathon.
- For first-timers, midweek workouts can all be done at an easy, conversational pace.
- To improve race times, add some speed work in the first midweek workout.
  - Tempo run example: 1-2 miles easy, 2-3 miles at race pace, 1 mile easy
  - Interval ex: 1-2 mi easy, 4 × ½ mi at 5k pace (¼ mi walk after each), 1 mi easy

### Injury Prevention

- Listen to your body! Don’t be afraid to cut back, or take an extra day off, when needed.
- After every workout, walk for 5-10 minutes to cool off, then spend time stretching, and replenish fluids (with water or Gatorade) and food (lots of carbohydrates) soon after.
- Ice is your friend, and ibuprofen can help your rest better after a tough workout.
- Good shoes that fit well are very important, and they wear out after 400-500 miles.

### Tapering to Prepare for Race Day

- On race day, you will run best on fresh legs, so cut your mileage for the last 2-3 weeks.
- Your longest run/walk should be 2-3 weeks before the race. On the weekend before the race, your long run should be substantially shorter. Cut your midweek distance, too.
- On race week, shorten Tuesday & Thursday runs, and then stay off your feet!

## Choosing Your Race and Training Plan

Most healthy adults are capable of completing a half-marathon (13.1 miles), with a few months of preparation. This distance presents a worthy challenge, but is far less grueling than a full marathon (26.2 miles). For those who are less fit, or just have less time available for training, a 10-kilometer (6.2 mile) or 5-kilometer (3.1 mile) race may offer a better chance of success.

Training to run a full marathon is a major undertaking, requiring several months of complete commitment. Many runners who sign up for a marathon never even get to the starting line, because their training gets cut short by illness, injury, burnout, or responsibilities at work or home. A prospective first-time marathoner ideally should meet all of the following criteria:

- Running at least 15-20 miles a week for most of the last two years
- Completed at least two half-marathons in the last two years
- Able to easily complete a ten-mile long run, three months before the race
- Excellent overall health/wellness (discuss your plans with your physician)
- Ideal weight (preferably on the low end of normal, as the repeated pounding can take a toll on the joints of a muscular 6'3", 200 lb. man or an athletic 5'7", 155 lb. woman)
- No nagging injuries, and no history of meniscus (knee cartilage) damage or ACL tears.
- Sufficient time to train adequately (up to a half-day on some Saturdays, plus 1½-2 hours for each of 2-3 other workouts during the week)
- The complete support of family and friends, as the training can be psychologically tough.

I have two marathon training plans, one for first-timers and the other for those trying run faster.

To prepare to run a half-marathon (or complete it with a mix of jogging and walking), the checklist is a bit more manageable:

- Generally good health (talk to your physician if you're unsure)
- Healthy weight, or at most 20-30 pounds overweight (but someone significantly overweight can still walk a half-marathon if their physician approves this.)
- The time to train (1½-3 hours on Saturdays, plus 1-1½ hours twice during the week)
- The support of your spouse (or someone else close to you, if you are not married)

I have several training plans for a half marathon:

- If you can cover 2 miles, that's enough to start the **Just-to-Finish Plan** or **Walking Plan**.
- The **Intermediate Plan** is for those who expect to mostly jog/run, but might walk a little bit. It's a good option for those with some running experience (5k, etc.), as well as for those who don't run much, but have good fitness (from biking, swimming, soccer, etc.).
- The **Low-Mileage Intermediate Plan** is intended for participants who, because of a history of injury (meniscus damage, ACL tear, IT band syndrome, etc.) or age (over 45), are more likely to stay healthy by doing shorter midweek runs and fewer fast runs.
- The **Advanced Plan** is intended for the experienced half-marathoner seeking to improve their time. A very fit first-timer (such as a triathlete) might also use this plan, but the volume and intensity of training would likely lead to injury for the average person.

Training for a 5K or 10K race is similar to preparing for a half-marathon, except that the weekend runs are much shorter. The criteria for attempting this are much the same as for the half-marathon; talking with your physician is a good idea if you're not already in a workout routine. Four plans are offered for each distance, corresponding to all of the half-marathon plans, with the exception of the low-mileage intermediate plan.

## Walking 5K Training Plan

If you can walk for 10 minutes now, this plan will get you ready to walk 5 kilometers (3.1 miles). For the average person, it takes about 18 minutes to walk a mile, but you may be faster or slower.

<b>Week</b>	<b>Tuesday</b>	<b>Thursday</b>	<b>Saturday</b>	<b>Total</b>
9	10 min	10 min	15 min	35 min
8	15 min	10 min	20 min	45 min
7	15 min	10 min	25 min	50 min
6	15 min	15 min	30 min	60 min
5	15 min	15 min	35 min	65 min
4	20 min	15 min	40 min	75 min
3	20 min	15 min	45 min	80 min
2	20 min	20 min	50 min	90 min
1	20 min	20 min	50 min	90 min
<b>Race</b>	20 min	10 min	<b>3.1 miles</b>	

## Just-to-Finish 5K Training Plan

This plan includes just enough training to be well-prepared to finish the 5K (3.1 mile) race. Most people on this plan will mix jogging with walking (at a pace of 11-15 minutes per mile.)

<b>Week</b>	<b>Tuesday</b>	<b>Thursday</b>	<b>Saturday</b>	<b>Total</b>
9	1	1	1½	3½
8	1	1	1½	3½
7	1½	1	1½	4
6	1½	1	1½	6½-8½
5	1½	1½	1½	6-7½
4	1½	1½	2	8-10
3	1½	1½	2	7-8
2	1½	1½	2½	9-11
1	1½	1½	2½	5½
<b>Race</b>	1½	1	<b>Race 3.1</b>	5.6

Optionally, you can do other fitness activities (walking, swimming, biking, strength training) for 20-30 minutes on one or more of your non-running days. This is encouraged if weight loss is one of your goals. The best days to do this would be Sunday or Monday (ideally not both) and Wednesday. However, Friday should be a rest day before your long run on Saturday.

## Intermediate 5K Training Plan

This plan is designed for those who expect to run or jog the race at a pace of 8-11 minutes per mile (roughly 25-34 minutes for the whole race). You need to be able to run (or combine jogging and walking to complete) three miles, three times a week, as you start this program.

Week	Tuesday	Thursday	Saturday	Total
9	3	3	3	9
8	3	3	4	10
7	4	3	4	11
6	4	3	5	12
5	4 P	3	6	13
4	4 I (4 x ½ mi)	3	5	12
3	4 P	3	7	14
2	4 I (4 x ½ mi)	3	8	15
1	4 P	3	6	13
Race	3 P	2	<b>Race 3.1</b>	8

Interval runs (on Tuesdays marked with an “I”) involve one-mile jogs to warm up and cool down, with four half-mile runs in between (at your 5K racing pace). After each of these faster intervals, walk ¼ mile before the next one. For pace runs (marked with a “P”), do the first mile and last mile at an easy jog, with the middle 1-2 miles a bit faster (30-45 seconds per mile slower than your 5K racing pace.) These Tuesday runs should be the only time that you run fast enough to be breathing hard, except for the race.

Three runs a week is sufficient for most runners, but if you want to do a 4<sup>th</sup> run, it should short (1-2 miles) very slow, and on Sunday or Monday. A better option for a 4<sup>th</sup> (or even 5<sup>th</sup>) day is 20-30 minutes of cross-training (walking, swimming, biking, or strength training).

## Advanced 5K Training Plan

This plan is designed for experienced runners seeking to improve their 5K times, likely running a pace of 6-9 minutes per mile (roughly 19-28 minutes for the race). The core of this plan includes two speed-oriented midweek workouts and a long weekend run to build endurance.

Week	Sun or Mon	Tues	Wed	Thurs	Sat	Total
9		4	0-2 R	4 P	5-6	13-16
8	2-3 R	4 I (4 x ½ mi)	0-2 R	5 P	6-7	17-21
7	2-3 R	4 I (4 x ½ mi)	0-2 R	4 P	6	16-19
6	2-3 R	5 I (6 x ½ mi)	0-2 R	5 P	7-8	19-23
5	2-3 R	4 I (4 x ½ mi)	0-2 R	4 P	6	16-19
4	2-3 R	5 I (6 x ½ mi)	0-2 R	5 P	7-9	19-22
3	2-3 R	5 I (6 x ½ mi)	0-2 R	5 P	6-7	18-22
2	2-3 R	5 I (4 x ½ mi)	0-2 R	4 P	8-10	19-24
1	2 R	4 I (4 x ½ mi)		4 P	6	16
<b>Race</b>		3 P		2	<b>Race 3.1</b>	8

Interval runs (on Tuesdays marked with an “I”) involve one-mile jogs to warm up and cool down, with four half-mile runs in between (at your 5K racing pace). After each of these faster intervals, walk ¼ mile before the next one. For pace runs (marked with a “P”), do the first mile and last mile at an easy jog, with the middle 1-2 miles a bit faster (30-45 seconds per mile slower than your 5K racing pace.) These Tuesday runs should be the only time that you run fast enough to be breathing hard, except for the race.

Four runs a week are included, with an optional 5<sup>th</sup> day on Wednesday. The runs marked with an “R” are short, very slow “recovery runs.” Another option for a 5<sup>th</sup> or even 6<sup>th</sup> day is to do 20-30 minutes of cross-training (swimming, biking, walking, or strength training).

## Walking 10K Training Plan

If you can walk a mile now, this plan will help you get ready to walk 10 kilometers (6.2 miles).

<b>Week</b>	<b>Tuesday</b>	<b>Thursday</b>	<b>Saturday</b>	<b>Total</b>
12	1	1	1½-2	3½-4
11	1-1½	1	1½-2½	3½-5
10	1-1½	1-1½	2-3	4-6
9	1½-2	1-1½	2	4½-5½
8	1½-2	1½-2	2½-3½	5½-7½
7	1½-2	1½-2	2-2½	5-6½
6	2-2½	1½-2	3-4	6½-8½
5	2-2½	1½-2	2½-3	6-7½
4	2-2½	2-2½	4-5	8-10
3	2-2½	2-2½	3	7-8
2	2-2½	2-2½	5-6	9-11
1	1½-2	1½-2	3	6-7
<b>Race</b>	1½	1	<b>6.2</b>	9

Optionally, you can walk a mile slowly on a 4<sup>th</sup> or 5<sup>th</sup> day, or do other activities (swimming, biking, strength training) for 20-30 minutes, particularly if weight loss is a goal. Either Sunday or Monday (but not both) and Wednesday are good days for this, but Friday should be a rest day.

## Just-to-Finish 10K Training Plan

This plan includes just enough training to be well-prepared to finish the 10K (6.2 mile) race. Most people on this plan will mix jogging with walking (at a pace of 11-15 minutes per mile.)

<b>Week</b>	<b>Tuesday</b>	<b>Thursday</b>	<b>Saturday</b>	<b>Total</b>
12	1	1	1½-2	3½-4
11	1-1½	1	1½-2½	3½-5
10	1-1½	1-1½	2-3	4-6
9	1½-2	1-1½	2	4½-5½
8	1½-2	1½-2	2½-3½	5½-7½
7	1½-2	1½-2	2-2½	5-6½
6	2-2½	1½-2	3-4	6½-8½
5	2-2½	1½-2	2½-3	6-7½
4	2-2½	2-2½	4-5	8-10
3	2-2½	2-2½	3	7-8
2	2-2½	2-2½	5-6	9-11
1	1½-2	1½-2	3	6-7
<b>Race</b>	1½	1	<b>Race 6.2</b>	9

Optionally, you can do other fitness activities (walking, swimming, biking, strength training) for 20-30 minutes on one or more of your non-running days. This is encouraged if weight loss is one of your goals. The best days to do this would be Sunday or Monday (ideally not both) and Wednesday. However, Friday should be a rest day before your long run on Saturday.



## Intermediate 10K Training Plan

This plan is designed for those who expect to run or jog the race at a pace of 8-11 minutes per mile (roughly 50-68 minutes for the whole race). You need to be able to run (or combine jogging and walking to complete) 3-4 miles, three times a week, as you start this program.

Week	Sun or Mon	Tuesday	Thursday	Saturday	Total
12	0-2 R	3-4	3	4-5	10-14
11	0-2 R	3-4	3-4	4-5	10-15
10	0-2 R	3-4	3-4	5-6	11-16
9	0-2 R	3-4	3-4	4-5	10-15
8	0-2 R	4	3-4	5-7	12-17
7	0-2 R	4 P	3-4	4-5	11-15
6	0-2 R	4 I (4 x ½ mi)	3-4	6-8	13-17
5	0-2 R	4 P	3-4	4-6	11-16
4	0-3 R	4 I (4 x ½ mi)	3-4	7-9	14-19
3	0-3 R	4 P	3-4	5-7	12-17
2	0-3 R	4 I (4 x ½ mi)	3-4	8-10	15-21
1	0-2 R	4 P	2-3	5	11-14
<b>Race</b>		3 P	2	<b>Race 6.2</b>	11

Interval runs (on Tuesdays marked with an “I”) involve one-mile jogs to warm up and cool down, with four half-mile runs in between (at a pace 15-30 seconds per mile faster than your 10K racing pace). After each of these faster intervals, walk ¼ mile before the next one. For pace runs (marked with a “P”), do the first mile and last mile at an easy jog, with the middle 1-2 miles a bit faster (15-30 seconds per mile slower than your 10K racing pace.) These Tuesday runs should be the only time that you run fast enough to be breathing hard, except for the race.

Three runs a week is sufficient for most runners, but if you want to do a 4<sup>th</sup> run, it should be on Sunday or Monday; this optional “recovery run” (marked with an “R”) should be both short and very slow. A better option for a 4<sup>th</sup> (or even 5<sup>th</sup>) day is 20-30 minutes of cross-training (walking, swimming, biking, or strength training).

## Advanced 10K Training Plan

This plan is designed for experienced runners seeking to improve their 10K times, likely running a pace of 6½-9 minutes per mile (roughly 40-55 minutes for the race). The core of this plan includes two speed-oriented midweek workouts and a long weekend run to build endurance.

Week	Sun or Mon	Tues	Wed	Thurs	Sat	Total
12	0-2 R	4 I (4 x ½ mi)		4	5-6	13-16
11	2 R	4 P	0-2 R	4	5-6	15-18
10	2-3 R	4 I (4 x ½ mi)	0-2 R	4	6-7	16-20
9	2-3 R	4 I (4 x ½ mi)	0-2 R	4 P	6-7	16-20
8	2-3 R	4 I (4 x ½ mi)	0-2 R	5 P	7-8	18-22
7	2-3 R	5 I (6 x ½ mi)	0-2 R	4 P	7-8	18-22
6	2-3 R	5 I (6 x ½ mi)	0-2 R	5 P	8-9	20-24
5	2-3 R	4 I (4 x ½ mi)	0-2 R	4 P	6-7	18-22
4	2-3 R	5 I (6 x ½ mi)	0-2 R	5 P	8-9	20-24
3	2-3 R	5 I (6 x ½ mi)	0-2 R	5 P	9-10	22-26
2	2-3 R	4 I (4 x ½ mi)	0-2 R	4 P	6-7	16-20
1	2 R	4 I (4 x ½ mi)		3 P	4-5	13-14
<b>Race</b>		3 P		2	<b>Race 6.2</b>	17

Interval runs (marked with an “I”) involve one-mile jogs to warm up and cool down, with several half-mile runs in between (at a pace about 15 seconds per mile faster than your 10K racing pace). After each of these faster intervals, walk ¼ mile before the next one. For pace runs (marked with a “P”), do the first mile and last mile at an easy speed, with the middle miles a bit faster (15-30 seconds per mile slower than your 10K racing pace.) Other runs should be at an easy jog.

Four runs a week are included, with an optional 5<sup>th</sup> day on Wednesday. The runs marked with an “R” are short, very slow “recovery runs.” Another option for a 5<sup>th</sup> or even 6<sup>th</sup> day is to do 20-30 minutes of cross-training (swimming, biking, walking, or strength training).

## Walking Half-Marathon Training Plan

This plan is designed to take someone with a minimal level of fitness (walking 2 miles in 40 minutes or less) and get them ready to walk a half-marathon. Be aware that some races require keeping a certain minimum pace, to be allowed to stay on the course to complete the race.

Week	Sun or Mon	Tue	Wed	Thurs	Sat	Total
12	0-1	2	0-1	2	3-4	7-10
11	0-1	2	0-1	2	3-4	8-11
10	0-1	3	0-1	2	4-5	9-12
9	0-1½	3	0-1½	2-3	4-5	9-14
8	0-1½	3	0-1½	2-3	5-6	10-15
7	0-1½	3	0-1½	3	5-6	11-15
6	0-1½	3	0-1½	3	6-7	12-16
5	0-1½	3	0-1½	3	7-8	13-17
4	0-1½	3	0-1½	3	8-9	14-18
3	0-1½	3	0-1½	3	6	12-15
2	0-1½	3	0-1½	2	10-12	15-20
1	0-1	2	0-1	2	6	10-12
<b>Race</b>	0-1	2		2	<b>13.1</b>	17

Optionally, you can do a 4<sup>th</sup> (and even a 5<sup>th</sup>) day of walking or other fitness activities (swimming, biking, strength training) for 20-30 minutes, particularly if weight loss is a goal. Either Sunday or Monday (but not both) and Wednesday are good days for this, but Friday should be a rest day.

## Just-to-Finish Half-Marathon Training Plan

This plan includes just enough training to be well-prepared to finish the 13.1 mile race. Most people on this plan will mix jogging with walking (at a pace of 11-15 minutes per mile.)

<b>Week</b>	<b>Tuesday</b>	<b>Thursday</b>	<b>Saturday</b>	<b>Total</b>
12	2	2	3	7
11	2-3	2	3-4	7-9
10	3	2	4-5	9-10
9	3	3	4-5	10-11
8	3	3	5-6	11-12
7	3-4	3	5-6	11-13
6	3-4	3	6-7	12-14
5	3-4	3	7-8	13-15
4	3-4	3	8-9	14-16
3	3-4	3	6	12-13
2	3-4	3	10-12	16-19
1	2-3	2-3	6	10-12
<b>Race</b>	2-3	2	<b>Race 13.1</b>	17-18

Optionally, you can do other fitness activities (walking, swimming, biking, strength training) for 20-30 minutes on one or more of your non-running days. This is encouraged if weight loss is one of your goals. The best days to do this would be Sunday or Monday (ideally not both) and Wednesday. However, Friday should be a rest day before your long run on Saturday.

## Intermediate Half-Marathon Training Plan

This plan is designed for participants who expect to run or jog the bulk of the race (but may walk short distances periodically). It is appropriate for those expecting to keep a pace of 8½-12 minutes per mile (roughly a finish time of 1:50-2:40). You need to be able to run (or combine jogging and walking to complete) four miles as you start this program. There is also a low-mileage version of this plan, recommended for runners over age 45, as well as for those who have a history of relevant injuries (or become injured during training).

Week	Sun or Mon	Tues	Wed	Thurs	Saturday	Total
12	0-2 R	3	0-2 R	3	4-5	10-15
11	0-2 R	3-4	0-2 R	3	5-6	11-17
10	0-2 R	3-4	0-2 R	3	6-7	12-18
9	0-2 R	4	0-2 R	3-4	7-8	14-20
8	0-2 R	4-5	0-2 R	3-4	6-7	13-20
7	0-2 R	5	0-2 R	4	7-9	16-22
6	0-2 R	5 P	0-2 R	4	5-7	14-20
5	0-2 R	5 P	0-2 R	4-5	8-10	17-24
4	0-3 R	5 P	0-2 R	4-5	10-12	19-27
3	0-3 R	5 P	0-2 R	4-5	7-9	16-24
2	0-3 R	5 P	0-2 R	4-5	11-13	20-28
1	0-2 R	4 P		4	6	14-16
<b>Race</b>		4 P		3	<b>Race 13.1</b>	20

For pace runs (on Tuesdays, marked with a “P”), do the first mile and last mile at an easy speed, with the middle 2-3 miles at your planned half-marathon pace. These pace runs should be the only time that you will run fast enough to be breathing hard, except in a race.

Three runs a week is sufficient for many half-marathoners, but if you want to do more, the extra runs should be on Sunday or Monday (but not both) and/or Wednesday. These “recovery runs” (marked with an “R”) should be both short and very slow. A better option for those 4<sup>th</sup> and 5<sup>th</sup> days is to do 20-30 minutes of cross-training (swimming, biking, walking, or strength training).

## Low-Mileage Intermediate Half-Marathon Training Plan

Like the other intermediate plan, this plan is designed for participants who expect to run or jog the bulk of the race (but may walk short distances periodically). For those who are at risk of an overtraining injury (runners over age 45, and those with past injuries), this plan may be a better option. It involves less mileage, and less frequent pace runs. It is appropriate for those expecting to keep a pace of 9-12 minutes per mile (roughly a finish time of 1:55-2:40), who can complete four miles at the start of the program.

<b>Week</b>	<b>Tuesday</b>	<b>Thursday</b>	<b>Saturday</b>	<b>Total</b>
12	3	3	4-5	10-11
11	3 P	3	4-5	10-11
10	3	3	5-6	11-12
9	3 P	3	5-7	11-13
8	4	3	4-6	11-13
7	4	3	6-8	13-15
6	3 P	3	5-6	11-12
5	4 P	3	7-9	14-16
4	3-4	3	6-7	12-14
3	4 P	3	8-10	15-17
2	4 P	3	10-13	17-20
1	4 P	3	6	14
<b>Race</b>	3 P	3	<b>Race 13.1</b>	19

For pace runs (on alternate Tuesdays, marked with a “P”), do the first mile and last mile at an easy speed, with the middle 1-2 miles at your planned half-marathon pace. These pace runs should be the only time that you will run fast enough to be breathing hard, except in a race.

In trying to keep the total mileage down while building the endurance needed for the race, running more than three days a week is discouraged. A better option, if you want to be active for a 4<sup>th</sup> or even 5<sup>th</sup> day is to do 20-30 minutes of cross-training (swimming, biking, walking, or strength training). However, every Friday needs to be a rest day, before the Saturday long run.

## Advanced Half-Marathon Training Plan

This plan is designed for experienced runners seeking to improve their times, having recently run a half-marathon in under 2:00 (men) or 2:15 (women). Because of the increased volume and intensity of training, this plan is recommended only for those already running 15+ miles a week.

Week	Sun or Mon	Tues	Wed	Thurs	Saturday	Total
12	2 R	5	0-2 R	4	6-8	17-21
11	2 R	4 P	0-2 R	4-5	8-10	18-23
10	2 R	5	0-2 R	4-5	7-8	18-22
9	2 R	4 P	0-2 R	4-5	9-11	19-23
8	2 R	6	0-2 R	4-5	7-9	19-24
7	2 R	5 I (4 x ½ mi)	0-2 R	5-6	11-13	23-28
6	2 R	6 P	0-2 R	5-6	9-10	22-26
5	2 R	5 I (4 x ½ mi)	0-2 R	5-6	12-14	24-29
4	3 R	6 P	0-2 R	5-6	10-11	24-28
3	3 R	5 I (4 x ½ mi)	0-2 R	6	13-15	27-31
2	3 R	5 P	0-2 R	5	10	23-25
1	2 R	4 I (2 x ½ mi)		4	7	17
<b>Race</b>		4 P		3	<b>Race 13.1</b>	20

For pace runs (marked with a “P”), do the first mile and last mile at an easy jog, with the middle 2-3 miles at your planned half-marathon pace. Interval runs (marked with an “I”) include a two-mile warm-up and one-mile cool-down, with several half-mile segments in between (at a pace 30-45 seconds per mile faster than your half-marathon racing pace); after each of these intervals, walk ¼ mile before the next one. Other runs (including Saturdays) should be at an easy jog.

Four runs a week are included, with an optional 5<sup>th</sup> day on Wednesday. The runs marked with an “R” are short, very slow “recovery runs.” Another option for a 5<sup>th</sup> or even 6<sup>th</sup> day is to do 20-40 minutes of cross-training (swimming, biking, walking, or strength training).

## Intermediate Full Marathon Training Plan

This plan is intended for the serious runner who is attempting their first or second full marathon. Finishing should be the primary goal, as opposed to particular time, but there are some pace runs included in this plan, to help prepare your body to sustain a faster pace for 26 miles on race day. If training doesn't go well, there is no shame in moving to one of the half-marathon plans.

Week	Sun or Mon	Tues	Wed	Thurs	Saturday	Total
12	3 R	6-7	0-3 R	4-5	11-13	24-31
11	3 R	6-7	0-3 R	5-6	8-10	22-29
10	3 R	6 P	0-3 R	5-6	13-15	27-33
9	3 R	6-7	0-3 R	5-6	10-12	24-31
8	3 R	6 P	0-3 R	6	13-15	28-33
7	3 R	6-7	0-3 R	6	15-17	30-36
6	3 R	6 P	0-3 R	6	11-13	26-31
5	3 R	7 P	0-3 R	6-7	18-20	34-40
4	3 R	6 P	0-3 R	6-7	13-15	28-34
3	3 R	8 P	0-3 R	6-7	20-22	37-43
2	3 R	7 P		5-6	13	28-29
1	0-3 R	6 P		4-5	8	18-22
Race		5 P		3	<b>Race 26.2</b>	34

Pace runs (on Tuesdays marked with a "P") include a 2-mile warm-up and 1-mile cool-down, with several miles at your half-marathon pace (faster than your planned marathon pace) in the middle. Sundays (or Mondays) are short, very slow "recovery" jogs (marked with an "R"). Wednesday is another recovery jog, an optional 5<sup>th</sup> day. Another option for a 5<sup>th</sup> (or even 6<sup>th</sup>) days is to do 30-45 minutes of cross-training (swimming, biking, walking, or strength training).



## Advanced Full Marathon Training Plan

This five-day plan is intended for the experienced marathoner trying to qualify for Boston, or break 3:30 or 4:00, etc. It has similar long runs to the intermediate plan, but more speed work. Running 25+ miles a week, with routine double-digit long runs, is a must for starting this plan.

Week	Sun or Mon	Tues	Wed	Thurs	Saturday	Total
12	3 R	6 P	3 R	5-6	12-14	29-32
11	3-4 R	5 I (4 x ½ mi)	3 R	5-6	9-11	25-30
10	3-4 R	7 P	3 R	5-7	14-16	32-27
9	3-4 R	5 I (4 x ½ mi)	3-4 R	6-8	10-12	27-33
8	3-4 R	7 P	3-4 R	6-8	16-18	35-41
7	3-4 R	6-7	3-4 R	6 I (6 x ½ mi)	11-13	29-34
6	3-4 R	8 P	3-4 R	6-8	18-20	38-44
5	3-4 R	6 P	3-4 R	6 I (6 x ½ mi)	12-14	30-34
4	3-4 R	7 P	3-4 R	6 I (6 x ½ mi)	15-18	34-39
3	3-4 R	8 P	3-4 R	6-8	20-22	40-46
2	3 R	5 I (4 x ½ mi)		5-6	13	26-27
1	3 R	7 P		4-5	8	22-23
Race		6 P		3	<b>Race 26.2 (Sunday)</b>	35-36

Pace runs (on Tuesdays marked with a “P”) include a 2-mile warm-up and 1-mile cool-down, with several miles at your half-marathon pace (faster than your planned marathon pace) in the middle. Sundays (or Mondays) are short, very slow “recovery” jogs (marked with an “R”). Wednesday is another recovery jog, an optional 5<sup>th</sup> day. Another option for a 5<sup>th</sup> (or even 6<sup>th</sup>) days is to do 30-45 minutes of cross-training (swimming, biking, walking, or strength training).

## What Kinds of Runs Should I Do, and Why?

There are six types of runs described below, but some are included only in advanced plans.

- **Long runs** – These Saturday runs are your longest run of the week. They are the key component to building the endurance needed to finish a long-distance race. Use the first 1-3 miles as a warm-up, slowly building to a gentle speed that you can comfortably maintain the rest of the way. If you find yourself breathing hard or slowing down at the end, then you went too fast. These runs are difficult enough because of their length, even when done slowly; combining distance and speed is very stressful on the body. Except in a long race (after which you should take off 1-4 weeks from serious training so that your body can recover) you should never combine “far” and “fast” in the same workout.
- **Easy runs** – Because it takes three workouts a week to build fitness, you will use two easy runs a week to supplement your weekend workouts. As with the long runs, the pace is relatively slow.
- **Tempo runs** – These runs include an easy warm-up and cool-down, with 2-5 miles at roughly half-marathon pace in between. These help your body adjust to running at a faster pace for a longer period of time. They are “comfortably hard”, a little faster than your easy or long runs. Training plans for beginners do not include tempo runs.
- **Speed work (intervals)** – Like tempo runs, these include easy warm-up and cool-down phases. In between are several half-mile runs at a relatively fast pace (roughly your 5K racing pace); after each interval run is a ¼-mile walk to let your body recover. The result is that you get the physiological benefits of running fast, but with less recuperation time. These runs are helpful in improving their race times, and are mostly in advanced plans.
- **Recovery runs** – For those who choose to run more than three days a week, particularly more advanced runners, these short, very slow jogs are the “extra” runs. They help the body to overcome soreness caused by a harder workout the day before. For less serious runners, consider cross-training (walking, biking, swimming, strength training) instead.
- **Races** – In training for a race at a distance of 10K or longer, some runners like to use a shorter race (or two) as part of their preparation. If you do this, the shorter race(s) should be at least four weeks before your longer race, and no more than half the distance of your “big” race. Any race takes the place of your long run for that week, and you may need to reduce the intensity of your workouts around it (for example, doing an easy run instead of a tempo run on the Tuesday after the race).

**Most of your mileage (and all of it, for beginners) should be at a gentle pace.**

- If you can't carry talk with a running partner, then you are running too fast, unless you are doing a tempo run or speed work. Running shouldn't be an exercise in suffering!
- People who consistently run fast enough that they are out of breath will make quicker gains in fitness, but they are also far more likely to end up with overtraining injuries. Slow, steady improvement in fitness is better than a quick start, followed by weeks (or even months) of not being able to run at all, due to injury.

## How Fast Should I Run?

There are three ways of computing the pace you should do on various training runs...

- **By perceived effort** (Listen to your body.)
  - Recovery – slower than you think you should
  - Easy – At a comfortable pace where you could talk with a running partner.
  - Long – The same as an easy run, or maybe a little slower. If you're out of breath in the last mile or two, then should have started at a slower pace.
  - Tempo – Working a little harder, but not uncomfortably so. At the end, you should feel like you could have done one more mile.
  - Speed – Working hard, but not at an all-out effort. At the end, you should feel like you could have done one more half-mile interval.
- **By heart rate** (See instructions below for finding your heart rate zones)
  - Recovery – 60%-70% of your Karhonen HR reserve
  - Long – 65%-80% of reserve HR
  - Easy – 70%-80% of reserve HR
  - Tempo – 75%-85% of reserve HR
  - Speed – 80%-90% of reserve HR
- **By pace tables or formulas**, like those on the next page. These require that you have some information about your level of fitness (such as your time in a recent race).

### Determining your Heart Rate Zones

(using the Karhonen reserve heart rate formula)

- First, find your resting heart rate. Check your pulse (for a full minute) before getting out of bed, several mornings in a row. The lowest number is your resting heart rate. This number will drop over time, as you become more fit and your heart pumps more blood with each contraction. For the average non-athlete, it is likely in the range of 65-80, while for elite endurance athletes, it can be under 40.
- Finding your maximum heart rate is a bit more difficult.
  - You can estimate it using the formula  $Max\ HR = 207 - 0.7 \times age$ .
  - To get a better estimate, you can do an interval workout after you've spent a few weeks getting into shape. (Do this in place of your Monday/Tuesday workout.) Warm up, then run a half-mile at your 5k pace. Walk for two minutes, then do another half-mile at the same pace. Walk for two minutes again, then run a third and final half-mile interval, running as hard as you can at the end. Immediately after you finish, take your pulse for 15 seconds and multiply by 4; this is a good estimate of your maximum heart rate. If you ever get a heart rate during or after a workout (or from a heart rate monitor), then use the higher number instead.
  - Maximum heart rate drops with age (about 7 beats each decade) but is otherwise largely genetic, and has nothing to do with your level of fitness.
- Heart Rate Reserve = Maximum HR – Resting HR
- To get a Heart Rate zone, take your Resting HR plus the percentage times your reserve.
- Example: If your resting HR is 65 and your maximum is 185, then your reserve would be  $185 - 65 = 120$ . To find your heart rate range for easy runs (70%-80% of reserve), we compute  $65 + 0.7 \times 120 = 149$  and  $65 + 0.8 \times 120 = 161$ , so your heart rate should be between 149 and 161 on easy runs.
- If you're not mathematically inclined, then please don't be embarrassed to ask for help.

## Race and Training Pace Calculator

In the “5 km” column, find the number closest to your best recent 5k road race time, if you have one. The left columns give predicted times for races of other distances, with your current level of fitness, provided that you have appropriate long runs for the race distance. The right side gives suggested paces for the types of runs included in the training plans.

Equivalent performance finish times					Training paces (per mile, except * per 1/2 mi)				
2 mi	5 km	10 km	13.1 mi	26.2 mi	Recov.	Long	Easy	Tempo	Speed *
11:15	<b>18:00</b>	37:10	1:22	2:51	8:45	7:30-8:30	7:45	6:15	2:55
11:55	<b>19:00</b>	39:20	1:26	3:01	9:05	7:50-8:50	8:05	6:35	3:05
12:30	<b>20:00</b>	41:20	1:31	3:10	9:25	8:10-9:10	8:25	6:55	3:15
13:10	<b>21:00</b>	43:30	1:35	3:20	9:45	8:30-9:30	8:45	7:15	3:20
13:45	<b>22:00</b>	45:30	1:40	3:30	10:10	8:55-9:55	9:10	7:40	3:35
14:25	<b>23:00</b>	47:30	1:44	3:39	10:30	9:15-10:15	9:30	8:00	3:45
14:40	<b>23:30</b>	48:35	1:46	3:43	10:40	9:25-10:25	9:40	8:10	3:50
15:00	<b>24:00</b>	49:40	1:49	3:48	10:50	9:35-10:35	9:50	8:20	3:50
15:20	<b>24:30</b>	50:40	1:51	3:53	11:00	9:45-10:45	10:00	8:30	3:55
15:40	<b>25:00</b>	51:40	1:54	3:58	11:10	9:55-10:55	10:10	8:40	4:00
15:55	<b>25:30</b>	52:45	1:56	4:02	11:20	10:05-11:05	10:20	8:50	4:05
16:15	<b>26:00</b>	53:50	1:58	4:07	11:30	10:15-11:15	10:30	9:00	4:10
16:35	<b>26:30</b>	54:50	2:00	4:11	11:40	10:25-11:25	10:40	9:10	4:15
16:55	<b>27:00</b>	55:50	2:03	4:16	11:50	10:35-11:35	10:50	9:20	4:20
17:10	<b>27:30</b>	56:55	2:05	4:21	12:00	10:45-11:45	11:00	9:30	4:25
17:30	<b>28:00</b>	58:00	2:07	4:26	12:10	10:55-11:55	11:10	9:40	4:30
17:50	<b>28:30</b>	59:00	2:09	4:30	12:20	11:05-12:05	11:20	9:50	4:35
18:10	<b>29:00</b>	1:00	2:12	4:35	12:30	11:15-12:15	11:30	10:00	4:40
18:30	<b>29:30</b>	1:01	2:14	4:40	12:45	11:30-12:30	11:45	10:15	4:45
18:50	<b>30:00</b>	1:02	2:16	4:45	13:00	11:45-12:45	12:00	10:25	4:50
19:25	<b>31:00</b>	1:04	2:21	4:54	13:15	12:00-13:00	12:15	10:45	5:00
20:00	<b>32:00</b>	1:06	2:25	5:03	13:30	12:15-13:15	12:30	11:05	5:10
20:40	<b>33:00</b>	1:08	2:30	5:12	13:50	12:35-13:35	12:50	11:25	N/A
21:20	<b>34:00</b>	1:11	2:34	5:22	14:15	13:00-14:00	13:15	11:45	N/A
22:35	<b>36:00</b>	1:15	2:43	5:41	15:00	13:45-14:45	14:00	12:20	N/A
23:50	<b>38:00</b>	1:19	2:53	5:59	Walk	14:30-15:30	14:45	N/A	N/A
25:05	<b>40:00</b>	1:23	3:02	6:18	Walk	15:15-16:15	15:30	N/A	N/A
26:20	<b>42:00</b>	1:27	3:10	6:36	Walk	15:45-16:45	16:00	N/A	N/A

On summer long runs (or long races), heat starts to have an effect at temperatures over 60°F. To compensate for this, you need to drink more water (or Gatorade) and slow down. During the warm part of the year, try to do long runs early in the morning. If the weather is unusually hot when you’re doing a long run, then consider running on an indoor track or a treadmill that day.

### How much should I slow down for long runs on warmer days?

Temperature (°F)	65	70	75	80	85
Added time (per mile)	0:30	1:00	1:30	2:00	2:30