LOW-MILEAGE RUNNING

A Short Guide to
Running Faster, Injury Free

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Introduction

Why I Wrote This Book

I wrote this book because I wanted to share with other runners how they could avoid injury and achieve their goals with a low-mileage approach. Before adopting a low-mileage approach, I was constantly injured and burnt out from my running. Since using a low-mileage strategy in my running, I have been able to stay injury free and run faster than I did when I followed a higher-mileage approach.

How I Got Started

> "Since the first running boom of the 1970s, an increasing number of runners have begun to believe that the more they train, the more successful they will be. In fact, there is a limit to the amount of training the body can benefit from." — Tim Noakes, *Lore of Running* (p. 291)

When I started running, I scoffed at the idea that I could actually hurt myself by running too much. The phrase "running injury" seemed like an oxymoron. How could a person hurt themselves by running too much?

As a young runner, I went about training as I pleased, sometimes running up to 60 miles per week. Everything seemed fine until I felt a stabbing pain beneath my kneecap. A doctor told me that the condition was called runner's knee and prescribed physical therapy. I followed the therapy, and the pain disappeared. Unfortunately, I had no idea that this would be the first in a long list of running injuries. I have experienced two stress fractures, Iliotibial band syndrome, Achilles tendonitis, Morton's neuroma, and a host of other nagging injuries.

Sure, I was able to run some of my faster times, such as a 1:18 half-marathon and a 35:17 10k race, but at what cost? I was constantly getting injured and burnt out. The pattern was clear; I'd start running more miles, begin to get faster, and then be sidelined with another injury. After recovering from the injury, I'd promptly repeat the process. In hindsight, it seems ridiculous that I let this cycle recur over and over, expecting different results. I began to wonder if there was another approach to gaining speed that didn't involve sustaining an injury.

A New Approach

> "Only when top runners stop trying, lose interest, and train less do they again start performing to their potential. Only then, when it is too late, do they begin to understand the training threshold concept, and only then do they learn

> that too much training was more detrimental to their performance than too little training." — Tim Noakes, *Lore of Running* (p. 293)

After 14 years of dealing with running injuries, I had had enough and decided to take a new approach to my training. Rather than following a structured training plan, I just ran based on what I felt like doing. I simply ran for the sheer joy of it. Although I was running fewer miles, I was getting faster.

I allowed myself to run quality workouts just one to two days a week; everything else was easy running. After each quality workout, I'd take it easy for two to three days or not run at all. Using this new strategy, I was having fun, running injury free, and gaining speed. I started to wonder, "Is it possible to get faster while reducing the number of miles I run?"

I knew I was on to something when, in October of 2011, I was able to run a six-minute-per-mile pace for 10 miles, clocking 59:59 in the Twin Cities' 10-mile road race. I ran the last mile in 5 minutes, 30 seconds and felt like I was running on all cylinders.

Three weeks later, I finished another 10-mile race, this time maintaining a pace of 5:45 per mile for a total of 57:29, taking second place overall. Four weeks after that, I achieved my personal best in a local 5k turkey-trot, running 16:37 — winning the race outright and setting the course record.

I was ecstatic with my results! Within the next year, I set or equaled my personal best records at every distance, from the 5k to the half-marathon, ran a marathon in 2:55, and completed a 50k trail ultramarathon in 3:46, all while running about 25 miles per week.

I hadn't planned on setting any personal records (PRs), but as my training progressed, I kept getting faster. I stopped worrying about getting the right mix of long runs, tempo runs, and intervals. My goals were to be able to run a couple of times per week, avoid injury, enjoy the exercise, and compete in some local races. If my times improved, all the better.

Throughout this book, I share how you can maximize your training and reduce injuries while running fewer miles. By listening to your body and focusing on quality workouts tailored to your event, you can improve your performance and avoid injury.

This isn't a magic formula; it's just one runner sharing his experience with others. I can't guarantee success; I can only tell you what I've done and how it might work for you as well. If you value your time and are willing to try an unconventional approach, you have picked the right book.

Quality Workouts

> "It is clear that genetic ability has more to do with why great athletes beat us than their hard training, and there is no earthly way in which training can reverse the physiological realities and thus reduce the chasm that divides us from them. Unfortunately, too many runners believe that they must train hard to run well and end up doing too much to try to compensate for their genetic deficits." — Tim Noakes, *Lore of Running* (p. 291)

The basis of the low-mileage approach is to structure your training around one to two quality workouts per week. Quality workouts give you the biggest bang for your buck. They provide the necessary stimulus required to force your body to adapt to running faster. I have found that one to two quality workouts weekly is more than enough to improve your running. Many running programs call for three quality workouts per week, but I have found that this can be draining on both body and mind. My aim with a low-mileage program is to keep your motivation high and your legs fresh. If you are like me, your body can handle only so much running before you end up with an injury. By focusing on quality workouts, you can push your body to the edge; then allow it to recover and get stronger.

Stress + Rest = Adaptation

The human body is an organism that adapts to specific stress. If you want to run faster, you need to stress your body in specific ways by adding more stimuli to your workouts. Many training plans focus on hitting high weekly mileage rather than specific quality workouts. But in running, you aren't preparing to see who can run the most miles; you're trying to find out how fast you can run a given distance.

To get the most from your running, your training should be specific to your race. Let's say you're preparing for an upcoming 10-mile race. Which training strategy do you think is better: (a) running one mile a day for ten days or (b) running ten miles and resting for the remaining nine days? Both ways of training will give you the same number of miles, but the latter is more specific to the race. The point of low-mileage running is to use your limited miles in a way that will give you the best results.

For example, when training for a marathon, your most important quality workout is your 10–20 mile long run. For the half-marathon, it is an 8–10 mile time trial. For the 10k, it is 3–6-mile time trials and interval work. The 5k requires short-time trials and fast intervals.

Creating Quality Workouts

Anyone can create a workout that drives one to exhaustion. But the goal of a low-mileage approach is not to wear yourself out, but rather to force your body to adapt to running faster. Effective training involves making trade-offs and adjusting the direction of stress through specific quality workouts.

Time Trials

> "Recall that when running a 10,000-meter or a marathon, you are operating a whole machine of an almost incalculable number of parts that are integrated, with no one part taking precedence over any of the others. You can't just increase one function and expect improved performance. You have to improve all the systems at once to affect the whole." — Bernd Heinrich, *Why We Run* (p. 73)

My favorite quality workout is a time trial—a fantastic, simple, quality workout to help improve speed. It is great for taking all the guesswork out of training. You don't have to worry about setting up intervals on your watch, recovery periods, or anything else. You just run as fast as possible for a given distance.

Time trials can be highly motivating and informative because they let you know your current status in your training. They allow you to go through the same type of mental and physical fatigue that you will experience in a race. No other type of training will help force your body to adapt to the specific demands of a race like a time trial.

To run a time trial, simply run a measured course or use a GPS watch, and run as fast as possible! Your body will scream for you to slow down, which makes great practice for racing. I use frequent time trials because I find it a fun way to test my body and see how my training is going. I record my times on different courses; some time trials are run on hilly courses, several on trails, and others on flat courses. It's important to keep track of the terrain because it will have a major impact on your time trial. Don't expect to clock the same time on a hilly trail that you did on the road.

For more information on using time trials, see the chapter on Sample Training Plans.

Tip

Using frequent time trials in your training lets you take advantage of online calculators that can estimate your performance at other distances. This means that you could run a 10-mile time trial to get an idea of how fast you might be able to run a half-marathon or a marathon.

Setting PRs by using Time Trials

Before running my best 10-mile of 57:29, I ran the same 10-mile loop once a week in training for four weeks in a row. I enjoyed testing my body and gradually improved my time with each run. Running 10-mile time trials in training helped my body adapt to the specific demands of a 10-mile race and eventually achieve my best time.

My wife used time trials to set a PR of 21:25 in the 5k. She doesn't particularly like running time trials, but I suggested it would be a good way to instill self-confidence in her training. Nine days before the actual race, I paced her in a 5k time trial to a time of 22:25. Running the time trial gave her confidence that in a race situation, she'd be able to run even faster. On race day, she felt great and set a new PR of 21:25 for the 5k.

Limitation of Time Trials

Time trials are great, but they have limitations. They can be mentally and physically exhausting. When they become longer, as when training for a marathon, they can take a toll on your body and mind. I recommend including time trials

only if you find them fun and motivating. If a continuous run to sheer exhaustion isn't your idea of a good time, don't worry; you can use another quality workout called *intervals* to help you run faster.

Intervals

> "Why should I practice running slow? I already know how to run slow. I want to learn to run fast." — Emil Zatopek

Interval sessions are a way to break up your run into discrete segments, with rest periods between the segments of running. Taking rest breaks allows you to run faster and farther than you otherwise could.

A classic interval workout for the 5k race is to run 3 x 1 mile with a 2–3 minute rest break between each mile. Resting after each mile allows you to run faster than just doing an all-out 5k. This teaches your brain and body how it feels to actually run faster.

When using intervals, there are several ways to manipulate your workouts to help you run faster. You can (a) decrease your recovery time between intervals, (b) keep the recovery time the same and increase the speed of each interval, or (c) add more intervals to the overall session. Increasing the speed of each interval will help you work on speed; adding more intervals or decreasing the recovery time will help you work on endurance.

For more information on specific interval sessions designed for your race, see the chapter on Sample Training Plans.

Tip

For longer training runs, experiment with walk breaks during your runs. Many runners, even some faster ones, have attained success with taking walk breaks during their marathons. I used walk breaks during my marathon PR of 2:55. I stopped to walk for 20–30 seconds at most of the water stations past 10 miles.

Tracking Quality Workouts

Track quality workouts closely, so you can do an apples-to-apples comparison over time. I recommend using a GPS watch or an app on your phone, such as Strava, to track your workouts. By tracking your training, you can make the necessary adjustments as your training progresses.

Quality workouts serve as benchmarks by which you can judge how your training is going. If your quality workouts are getting slower, you need to change something in your training. If you find yourself needing more work on your endurance, start including longer sustained workouts. If your speed is starting to suffer, try shorter interval sessions or shorter time trials.

Tip

The direction of your progress in quality workouts is more important than any single workout. Everyone has a bad workout now and then. If you don't run as fast as you were expecting, don't stress about it. Examine your training as a whole before making any decisions about changing your future running schedule.

Intensity

> "Your body will argue that there is no justifiable reason to continue. Your only recourse is to call on your spirit, which fortunately functions independently of logic." — Tim Noakes, *Lore of Running*

The mind-body relationship is infinitely more complex than we give it credit for. Think of your training as a way of building a mental callous against pain. Just as a callus gets thicker and stronger with use, your body adapts to higher levels of pain. You need to push the envelope to force your brain and body to accept higher levels of discomfort.

To force your body to adapt to running faster, obviously, you should run faster. Instead of following a complex set of pace zones or heart rate zones, I recommend running each

quality workout as fast as possible. This does not mean that you should start out sprinting. Instead, set the pace so that you can run as fast as your body will allow for a given distance. Remember, you'll be taking time for adequate recovery after each quality workout.

The distance you run in your quality workout will determine the pace for that run. For example, when training for a half-marathon, you might prepare by running regular 8–10 mile time trials. Your subconscious brain will help select the proper pace for this run. The scientific word for this is ***teloanticipation***. Your brain wants you to finish the run safely and will try to limit your pace to ensure that you do.

Training the Central Governor

A widely held and almost universally accepted model of fatigue, called the ***"central governor model,"*** says that fatigue is the result of your brain slowing your body down. Your brain decides when you have run hard enough and begins recruiting fewer muscle fibers, causing you to slow down. Previous models of fatigue have argued that muscles were being poisoned by lactic acid. But if the lactic acid theory of fatigue were true, it would be impossible to sprint at the end of a race when lactic acid concentrations are at the highest. Yet runners regularly sprint at the end of a race, showing a fatal flaw in the lactic acid theory of fatigue.

According to the ***central governor model***, your brain is always saving something in the tank in case you need to

switch into survival mode and run for your life. Your brain is hardwired for prehistoric days when you could be chased by a wild beast at any time. The problem is that our central governor is overly cautious and starts producing feelings of fatigue long before we are in any physical danger of harming ourselves.

To train yourself to overcome fatigue, regularly push the pace toward the end of your quality workouts. Practice training your brain to accept more fatigue and push beyond what you thought possible. Consciously tell your brain and body to run faster during your quality workouts. Remember, you are teaching your brain to accept higher levels of fatigue.

Tip

Structure your quality workouts on days when your motivation is high. We all have certain days of the week or times of the day when we have more energy. Optimize your quality workouts by doing them when you are feeling great.

Recovery

You need to train hard, but won't benefit from it if you do not allow your body to recover. Stress your body

appropriately through hard training, then give it time to recharge, and you'll get faster. Too many runners focus only on the hard training. They make the mistake of not allowing for adequate recovery between workouts.

With low-mileage running, you will be exploiting your body's recovery and adaptation mechanisms by running a specific quality workout and then allowing your body to rejuvenate. When recovering from a quality workout, take the opportunity to truly let your muscles re-energize and absorb your hard training. It's healthy to exercise every day, but if you decide to go for a run, don't push it! Run slowly, take walk breaks, and just enjoy yourself. Realize that more is not better; 20–60 minutes is enough to produce the health advantages you are looking for. Engage in easy runs because you enjoy running, but do not fool yourself into thinking that doing more slow, easy running will make you faster.

By running quality workouts just one to two times per week, you capture the benefits that come with hard training while minimizing your risk of injury. Space your quality workouts so that you have at least 48 hours between them, preferably 72 hours. On your recovery days, you can run easily for 20–60 minutes, take the day off, cross-train, or go for a walk. Do whatever makes you feel rejuvenated and ready for more intense training.

Tip

If you feel like you are overdoing it or an injury is coming on, back off on your training immediately. Skipping a day of training won't make much of a difference in your fitness level. But if you end up sustaining an injury or getting burnt-out from overtraining, it can set you back weeks or months in your fitness.

Training Guidelines

Economics of Running

In running, there is a simple, economic tradeoff between speed and endurance. You cannot have the best of both worlds. This is why sprinters train differently than distance runners. There is no way to train to optimize both speed and endurance. Direct your efforts toward one or the other, but accept that you cannot do both at the same time. If you are training for a marathon, focus on endurance; if you are preparing for a 5k race, concentrate on speed.

To get the most out of limited miles, you need to make your training as specific as possible. Include workouts that mimic race conditions, and push your body to higher levels of adaptation. Like a weight lifter adding more weight to his bench press, you must push your pace in quality workouts to new levels.

Many runners believe that additional miles that are run at a slow speed will help them run faster. But if you only practice slow running, it reinforces adaptations for running at a slow pace. The goal is to get better at running faster. To get faster, you need to practice running fast!

Listen to Your Body

> "No rigid protocol. Only guidelines. Too much protocol can be suffocating and become an end in itself. Each day is special. Each day is different." — Bernd Heinrich, *Why We Run* (p. 225)

Question

Ask yourself, "Am I excited about this workout?" If the answer is "no," take an easy day, or skip running altogether.

Instead of following an arbitrary training schedule, let your body tell you when it is ready for your next quality workout. Sometimes you will be ready after a few days; at other times, you will need a week to ten days to fully recover. This is especially true if your quality workouts are getting longer, such as when training for a marathon. The goal is not to follow a particular program or schedule but to optimize performance by maximizing adaptations to specific stress.

Use intuition to guide your training, and listen to the signals that your body sends you. This approach involves listening to your motivation as well. If you are feeling blasé about your training, take it easy for a few days. Taking cues from your internal motivation levels helps you maximize

your workouts. If your brain is telling you that it isn't up for a quality workout, listen, and take it easy.

Warning

If you are feeling tired or sore before your next quality workout, then you haven't given yourself enough time to recover from the previous one. Rest and relax for a few days, then try again.

Adjusting on the Fly

Workouts do not always go as planned. Sometimes you will feel terrible and want to cut your workout short. Other times you will be feeling great and want to keep going. It is important to listen to your body. If your workout is going terribly, you should stop and save it for another day. If you are feeling great, feel free to push the pace or add more miles.

Take a Holistic Approach

If you run a quality workout slower than usual, don't worry. Not every quality workout can be a breakthrough session. If you notice that you are running considerably

slower on certain days, use that data to take a holistic look at your training. Perhaps you had a lot of other stresses in your life before that workout. On the other hand, if you had a great workout, find out what helped you achieve your success. Use your training as feedback to organize your lifestyle so that more quality workouts can lead to faster race times.

If you are not enjoying your training, take a holistic approach to your running and investigate other stressors in your life, and determine if there is a way to adjust your lifestyle to support excellent recovery and high energy levels for your quality workouts. Examine your life commitments as a whole, and ask yourself if your goals are realistic.

Follow the 80:20 Rule

> "Whoever records that exceptional runners like Walter George and Alf Shrubb achieved quite remarkable performances on very low mileage? George ran a mile in 4:10 and 10 miles in 49:49 on little more than 3 km of training per day. Even Paavo Nurmi, the most medaled Olympic runner of all time, trained pathetically little but performed exceptionally, even by today's standards." — Tim Noakes *Lore of Running* (p. 292)

Eighty percent of the benefits you gain from training come from just twenty percent of your training. By paring your training down to the bare essentials, you can get most of the benefits of higher-mileage running with just a fraction of the running. Through my experience with a low-mileage approach, I have come to believe that many runners spend too much time slogging away endless slow miles that have limited value.

Find the Minimum Effective Dose

If you want to stay injury free while improving your speed, it is essential to find the minimum effective dose of training to obtain your desired results. If your goal is to run a sub-5-minute mile, and you can achieve this by running 20 miles per week—why run more? Running more miles than necessary will only increase your risk of injury and burnout. Find the minimum amount of running necessary to attain your goals. Only add more training later if you fail to accomplish your objectives.

How Low Can You Go?

In an experiment to find out how little training I could get away with for an upcoming 5k race, I ran only 10 miles per week and did 1–2 quality workouts per

week for 8 weeks, leading up to the 5k. I ran 16:46, just 9 seconds shy of my 5k PR of 16:37. This experiment taught me just how little training I could do as long as I continued my quality workouts.

Race Your Way Into Shape

> "I have been astounded at times by how little training I need once I reach a peak. On occasion, I have limited my entire running program to one race a week. I have gone as long as a month on such a schedule and noticed no change in my racing times." — George Sheehan, Training: More or Less

One option to consider when using a low-mileage approach is to simply race your way into shape. Every weekend, run a race; during the week, run easily. Racing has a lot of advantages over training alone. You get the chance to run with other people, which can be a psychological boon. Whenever people are watching you run, you tend to run faster.

Another benefit of racing is that it takes the guesswork out of creating workouts. It could not be simpler. Go to the starting line and run the race as fast as possible. Racing

trains your body for the specific stress of running faster over a given distance. Racing also helps you flex your mental muscles by forcing yourself to run fast when you don't feel like it.

If you are training for a marathon, racing your way into shape is great because the racecourse will have aid stations along the way, with water and sports drinks. There is no need to carry anything with you or plant water bottles along your route; let the race director take care of that for you. When training for a marathon, include progressively longer races and plug your times into an online marathon race predictor to give you an idea of your current level in training.

Similar Workouts

Conventional wisdom's advice is to keep changing your workouts. It says that if you repeat the same workout week after week, your body will adapt and stop improving. In contrast, I believe that performing similar workouts allows you to accurately compare them from one week to the next and from one year to the next. It gives you a way to check to see how you are improving. You don't have to run the same workout every week, but by frequently repeating the same workout, you can find out how your training is progressing and make the necessary adjustments.

Train Performance, Not Physiology

> "We overemphasize the importance of what we can measure and what we already know while ignoring that which we cannot measure and know little about." — Steve Magness, *Science of Running*

Most training programs focus on improving some physiological aspects of running. They talk about physiological factors such as lactate threshold, maximum oxygen consumption (VO2 max), and running economy, but they concentrate too much on the physiology of running. Trying to improve physiological metrics, rather than speed, is shortsighted and misses the point of training. Instead of training physiology, train to run faster! It seems so obvious, but speed often gets overlooked when you complicate the issue. Don't get hung up on complex physiological measurements; focus instead on speed—the only measurement that matters.

Cross-Training

> "I might have done not only stretching, speed training, and weight lifting, but also warm-ups and cool-downs. I had, of course, heard

> rationalizations for all of these procedures, but I didn't know if I was hearing facts or folklore. I suspected that the most highly motivated and the best runners would try almost anything no matter how bizarre, if it was recommended for improvement on the basis of some rationale." — Bernd Heinrich, *Why We Run* (p. 235)

Cross-training is a fine way to get some exercise, but don't get confused; any activity other than running will only marginally help you run faster. For example, strength training has been shown to slightly improve running performance. But this does not mean that you should make strength training a substitute for your quality workouts. Strength training may help you shave a few seconds off your marathon time, but the most significant factor affecting your performance will be how well you are doing in your quality workouts.

Tip

Focus on running. If you enjoy cross-training, by all means, incorporate it into your program, but don't prioritize it over running.

Stretching

Stretching has never been shown to help prevent injuries; on the contrary, it has been noted to *increase* injury and reduce performance in both strength and speed tests. In fact, there is a negative correlation between the fastest runners and flexibility. This means that the fastest runners are the least flexible.

Why does this correlation exist? It is because muscles and tendons work similar to springs, giving back elastic energy with each step you take. The stiffer the spring, the more energy returns. Rather than working on flexibility, focus any extra time you have on exercises that increase muscle strength and stiffness. Explosive exercises such as plyometric jumping, skipping, and hopping are best. Many of the top runners use these as warm-up exercises instead of static stretching.

Sample Training Plans

Training plans call for one to two quality workouts per week. Plans include primary and secondary quality workouts. Primary workouts are your main focus for each plan; secondary workouts are to be completed if you feel recovered and up to the challenge. Primary workouts are geared toward preparing you for your race. Secondary workouts aim at improving speed and help set you up for your next primary workout.

For longer races such as the half-marathon and marathon, endurance-based workouts are more important. For the 10k, you get a mix of speed and endurance workouts, and the 5k workouts are geared toward speed.

Guidelines

- Begin quality workouts with a ½-1 mile warm-up
- Space quality workouts 48–72 hours apart
- Run the secondary workout only if you're feeling recovered from the primary workout
- On the other days, rest, walk, cross-train, or run easily for 20-60 minutes
- You can substitute a race for a quality workout

- Run quality workouts at maximum intensity, but start at a pace that allows you to finish faster than you started

Tip

During your easy runs, incorporate occasional 10–20-second sprints. Include 1–2 sprints per mile.

5k

Primary Quality Workouts

- 2–4 mile time trials (TT)
- 3 x 1 mile with a 2-minute rest
- 6 x ½ mile with a 1-minute rest

Secondary Quality Workouts

- 1–2 mile time trials (TT)
- 12 x ¼ mile with a 45-second rest

Week	Primary Workout	Secondary Workout
1	5k TT	6 x ½ mile
2	3 x 1 mile	1-2 mile TT
3	2-4 mile TT	12 x ¼ mile
4	6 x ½ mile	1-2 mile TT
5	3 x 1 mile	12 x ¼ mile
6	2-4 mile TT	1-2 mile TT
7	6 x ½ mile	1 mile at 5k pace
8	5k Race	

10k

Primary Quality Workouts

- 4–8 mile time trials (TT)
- 6 x 1 mile with a 2-minute rest
- 3 x 2 miles with a 3-minute rest

Secondary Quality Workouts

- 6 x ½ mile with a 1-minute rest
- 3 x 1 mile with a 3-minute rest
- 2–4 mile time trials (TT)

Week	Primary Workout	Secondary Workout
1	10k TT	6 x ½ mile
2	6 x 1 mile	2-4 mile TT
3	3 x 2 miles	6 x ½ mile
4	6 x 1 mile	2-4 mile TT
5	3 x 2 miles	6 x ½ mile
6	4-8 mile TT	2-4 mile TT
7	6 x 1 mile	2 miles at 10k goal pace
8	10k Race	

Half-Marathon

Primary Quality Workouts

- 8–10 mile time trials (TT)
- 7–10 x 1 mile with a 1-minute rest
- 3–5 x 2 miles with a 2-minute rest

Secondary Quality Workouts

- 6 x ½ mile with a 1-minute rest
- 3 x 1 mile with a 3-minute rest
- 3–4 mile time trials (TT)

Week	Primary Workout	Secondary Workout
1	10k TT	6 x ½ mile
2	7 x 1 mile	3 x 1 mile
3	3 x 2 mile	3-4 mile TT
4	8 x 1 mile	6 x ½ mile
5	4 x 2 mile	3 x 1 mile
6	9-10 x 1 mile	3-4 mile TT
7	4 x 2 mile	6 x ½ mile
8	10 x 1 mile	3 x 1 mile
9	4-5 x 2 mile	3-4 mile TT
10	8-10 mile TT	6 x ½ mile
11	4-5 x 2 mile	4 miles at half-marathon pace
12	Half-Marathon Race	

Marathon

The marathon training plan includes long runs up to 18-20 miles. For longer runs, experiment with using walk breaks. Every 1–2 miles, take a 30 second to 1-minute walk break. Many runners have found that taking short walk breaks allows their muscles to rejuvenate, and they end up running faster overall.

If you are an experienced marathoner, you may be able to get away with running shorter long runs than those prescribed below. I've spoken with a runner named Jeff Ford, who only runs 13 miles in training, yet he can run

a 2:51 marathon. You can listen to my interview with Jeff on YouTube[1].

If you are running the marathon for the first time, I suggest running at least 18 miles so that you can get a feel for what it is like to be out on the road for that long. You would be surprised by the issues that arise during longer runs that you may not be used to. Challenges such as blisters, chafing, gastrointestinal issues, and overall fatigue starts to play a greater role than you might expect.

Tip

I have used long runs of up to 26 miles when training for a marathon, but as many marathoners have found, going that far in training isn't necessary. Running 18–20 miles seems to bring the same benefits as actually running 26 miles. For the marathon, make your longest run 18–20 miles at marathon pace or faster.

Primary Quality Workouts

- 10–20 mile time trials (TT)
- 8–14 x 1 mile with a 1-minute rest
- 4–8 x 2 miles with a 2-minute rest

[1] https://youtu.be/FG4dJmqPOQA

Secondary Quality Workouts

- 4–6 mile time trials (TT)
- 6 x ½ mile with a 1-minute rest
- 3 x 1 mile with a 2–3 minute rest

Week	Primary Workout	Secondary Workout
1	10k TT	6 x ½ mile
2	7 x 1 mile	3 x 1 mile
3	4 x 2 mile	4-6 mile TT
4	8 x 1 mile	6 x ½ mile
5	4 x 2 mile	3 x 1 mile
6	8-10 x 1 mile	4-6 mile TT
7	5 x 2 mile	6 x ½ mile
8	10-12 x 1 mile	3 x 1 mile
9	5-6 x 2 mile	4-6 mile TT
10	10-13 mile TT	6 x ½ mile
11	12-14 x 1 mile	3 x 1 mile
12	14 - 16 mile TT	4-6 mile TT
13	6-8 x 2 mile	6 x ½ mile
14	18-20 mile TT	3 x 1 mile
15	10 miles at marathon pace	6 miles at marathon pace
16	Marathon!	

Conclusion

While using a low-mileage approach to training, I have been able to remain injury free, set PRs, and have more fun in the process. I realize that this way of training isn't for everyone, but it may work for you.

If you have been struggling with injuries or are just looking for a way to gain speed with less time spent running, experiment with your training, and determine the least amount of running you can get away with. Focus on the quality of your runs rather than the weekly volume. Allow yourself more recovery between workouts so that your legs feel fresh each time you go out for another quality workout.

Low-mileage running is a conservative approach to training that starts small and adds more as needed. Run as little as possible to meet your goals. You can always increase the mileage later. By holding back, you'll reduce injuries, have more time, and enjoy your running more!

About the Author

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[2] https://aaronolson.blog