THE OFFICIAL ROCK‘N’ROLL GUIDE TO MARATHON & HALF-MARATHON TRAINING

TIPS, TOOLS, AND TRAINING TO GET YOU FROM SIGN-UP TO FINISH LINE

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Contents

Foreword ix
by Kara Goucher
Acknowledgments xi

1 Getting Started 1
2 Run Training 25
3 Nutrition & Hydration 101 49
4 Racing 63
5 Recovery 83
6 Supplementary Training 99
7 Injuries 121
8 Training Plans 143

Appendix A: 163
Rock ’n’ Roll Courses at a Glance
Appendix B 167
Race Pace Chart
Appendix C 171
Race Equivalency Chart
Appendix D 175
Perceived Effort Chart
Appendix E 179
Sweat Loss Calculator
Credits 183
Index 185
About the Author 191
Two years ago, an offer I couldn’t refuse came my way. Mario Fraioli from *Competitor* magazine challenged me to a race within a race at the Rock ‘n’ Roll Arizona half-marathon. I rarely meet a challenge I don’t like, so I decided to take him up on it. On paper I had him crushed, but in real life I had a newborn and was still shedding baby weight and trying to regain fitness. Mario humored me for a few miles, then pulled easily away. I believe my PR is significantly better than his—but, unfortunately for me, our record currently stands at Mario 1, Kara 0.

Although I lost my challenge with Mario that day, the joy of taking a dare, of testing myself, was exciting and a lot of fun. For me, this is exactly what running and racing are all about. They are about trying new things and seeing what you can pull out of yourself, where your limits are, how far you can go. Yes, sometimes pushing those boundaries is scary. I’ll never forget the fear I had before I ran my first half-marathon, but that race ended up being one of the most fulfilling experiences of my career.

After I recovered from that first half, I kept wondering: Was I capable of running a full? I had to know. Training for my first marathon was so exciting and new. Although I’m grateful for and proud of many amazing moments in my running career, I think my proudest moment as an athlete was completing that first marathon. I gained a new respect for myself and my body that day. The rest is history—I have been in love with racing the half- and full marathon ever since.
I discovered half-marathoning and marathoning around the same time that I discovered the Rock 'n' Roll series, whose fun-filled races have become a permanent part of my racing schedule. The energy of Rock 'n' Roll is unlike the atmosphere of any other event: exciting, encouraging, and totally electric. The support of the spectators and bands along the way gives these races a special energy. Whether you are training for your first half or are well on your way to completing all the Rock 'n' Rolls in the series, these races give you the ultimate runner's high.

Good luck with your training. Enjoy the journey as much as the race. And remember, the thing about running distance races is that they are addictive. Maybe it's because no matter how many races you run, each time you queue up to the start line, you are in for something new. It may be the same distance, but it's never the same race twice. You can always strive for new goals, new personal bests, or you can set yourself new challenges to face. I know that for me, there is definitely some unfinished business out there with a certain author and coach. Mario, I’ll see you at the start line!

—Kara Goucher
I’ll let you in on a little secret right off the bat: Running the race is the easy part. The training for it, daunting as it may seem, isn’t so bad either. The hardest part of this entire process is committing yourself to it.

The specific goals may vary, but the dedication required to reach them is the same. For one runner, just finishing a half-marathon or marathon may seem an impossible goal at the outset. For another runner, upping a personal best might be the challenge. But for any athlete, putting a race on the calendar and being dedicated to the training necessary to achieve the goal for that race are easier dreamed about than done.

The fact that you’re reading this book tells me that you’re at least thinking about running a distance race. It might be your first half-marathon or marathon, the first one you’ve run in years, or a goal race you’ve been targeting as an assault on your existing personal best. Whatever the reason, the great news is, you’ve already taken the first steps toward reaching the finish line!
Regardless of your running speed, getting to the finish line really is as simple as putting one foot in front of the other. But even before you take that first step, you need to set up the conditions for success. In this chapter, we'll address everything required to help kick-start the training process so that you are working toward your goal right from the start.

**Picking an Event**

Every year, more and more people are signing up for marathons and half-marathons. Whether you're a new runner looking for a fun, supportive atmosphere to make your first distance race a memorable one or a seasoned racer in search of a fast course or competitive environment to push past your current personal best, there are a lot of choices out there. Deciding which race to run can be a bit overwhelming.

Many factors can contribute to race-day success or failure, from climate to race goal to training location. For example, if you live in the flatlands, choosing a half-marathon at altitude might not be the best place to attempt to set a personal record (PR). Likewise, if you're training through a cold winter, a warm-weather destination race probably isn’t the ideal half-marathon or marathon debut.

So how do you figure out where to go?

To help narrow down the possible choices, start by asking yourself some key questions:

- Do I want to run a half-marathon or a marathon?
- During what time of year would I like to race?
- How far am I willing to travel?
- Am I up for the challenge of a hilly course, or do I want to find a flatter route where I can run fast?
- Do I want to experience a big event, or is a smaller field size more to my liking?

After answering these questions, refer to Appendix A on pages 163–165 to see how your responses line up with prospective events. Once you've armed yourself
with a few options, get online and sign yourself up for a race. Congratulations, you’ve committed yourself to the process. The hard part is over!

**Setting Goals**

Now that you’ve got a race (or races) on the schedule, it’s time to start setting goals and planning how you’ll go after them.

Goals vary, and depending on your experience level, they might even change as the training process unfolds. Newer runners may want simply to complete the distance for the first time, while more experienced runners may be focused on running a personal best or hitting a desired time. Regardless of your intentions for the upcoming race, there are two types of goals: outcome goals and process goals.

Before you take that first step, you need to set up the conditions for success.

**Outcome goals** are what most people think of when they talk about goal setting. These are the intended result of all your hard work and preparation and are specific (e.g., lose weight, finish the race) and measurable (e.g., finish in 2 hours, place top 5 in age group). Thinking about outcome goals induces both excitement and nerves. They’re also largely out of your control. But let’s be honest; if you knew exactly how fast you were going to run on race day, a lot of the fun would be taken out of the whole experience. That’s what makes outcome goals so exciting. And nerve-racking.

Many runners make the mistake of setting only outcome goals. Their success on race day therefore hinges on the achievement of those goals and nothing else. This situation can induce unnecessary pressure and lead to frustration and feelings of failure if the goals aren’t achieved. Yes, outcome goals are an essential part of goal setting, but they’re only half of the equation.

The other half—just as important as outcome goals, or even more important—is **process goals**. They are the little goals you aim to achieve every day.
Admittedly, they’re not as exciting and probably won’t make you nervous when you think about them. But the great news is that process goals, unlike outcome goals, are completely in your control. And the more of them you achieve with regularity, the more confidence you’ll gain.

**Outcome goals:** specific and measurable objectives, usually long term; a hoped-for end result

**Process goals:** small, everyday objectives that are designed to help you achieve your end result

These two kinds of goals are inextricably linked. The more successful you are at accomplishing your process goals, the better you’ll set yourself up for achieving your outcome goals.

What are examples of process goals? In training, they can be habitual actions such as running 5 days a week, getting 8 hours of sleep a night, making healthy food choices at mealtime, doing core-strengthening exercises daily, and running on soft surfaces at least twice a week. Come race day, you’re still working at accomplishing your process goals all the way until you cross the finish line and achieve your outcome goals. Examples of race-day process goals are making sure you eat a good pre-race breakfast, warming up properly before the race, not going out too fast the first few miles, and drinking every 2 miles. As you go through the race, you gain confidence from doing these things and bring yourself closer to your outcome goals one step at a time.

Remember, outcome goals don’t just happen. They are the result of doing the right things day after day and week after week. Focus on accomplishing as many of your process goals as possible while working toward achieving the bigger outcome goals.

**Setting Goals for Yourself**

My college track coach believed in goal sheets. She once told me that what you hope to achieve truly becomes a goal only when you finally put it down on paper. When words are written down, she said, they transform into clear-cut, defined
objectives you’re committed to achieving, rather than just something that you
dream of or talk about with friends. Once those words are down on paper, there’s
no turning back. Think of your goal sheet as an official contract with yourself.

After signing up for your race, grab a notebook and spend some uninter-
rupted time thinking about what you want to accomplish at your chosen race.
You can do this by yourself or with a coach, training partner, family member, or
close friend.

On one sheet of paper outline a list of outcome goals, ones that can be mea-
sured in some way. Keep it close and look at it when you need a reminder of
what you’re setting out to achieve. Need some extra motivation to get out the
doors for that long run tomorrow morning? Review your goal sheet, and bring
things back into focus.

To alleviate some of the pressure associated with the “I must accomplish X
or I’m a failure” feeling that often gets tangled up with a single outcome goal,
give yourself a range of goals to work with on race day, labeled from “Good” (a day you would be satisfied with) to “Perfect” (your ultimate “I got everything I wanted” wish list). Offering yourself this range, rather than restricting yourself to only one outcome, increases the likelihood that you’ll walk away satisfied with your effort.

**Good day.** For a beginner, this might be “just finish.” For a more experienced runner, a good day might mean naming a minimum time to hit. Whatever it is, write down a goal that is realistic and attainable. After the race, you can walk away perhaps wanting more the next time out but still happy with your effort for that day.

**Great day.** This is a goal that you’re confident you’re ready to accomplish, based on your preparation. It might be breaking a time barrier, setting a personal best, placing in the top 5 for your age group, or qualifying for an iconic

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**SETTING PROCESS GOALS**

List 5 to 10 training-related things you can do over which you have complete control. A list might looks as follows:

- Sleep a minimum of 7 hours per night
- Check my running shoes for wear and tear or replacement
- Refuel within 30 minutes of finishing a workout
- Do strides after easy runs twice per week
- Perform core-strengthening exercises three times a week

Grade yourself each week on how well you’ve met these goals: A = excellent, B = above average, C = average, D = needs improvement, F = fail.

Compare grades over a few weeks or a month. Are you improving? What factors affected the achievement (or not) of these daily goals?
GETTING STARTED

Perfect day. Everything went as well as you could possibly have expected on race day, whether it was beating a top rival, setting a huge personal best, winning your age group, or achieving some combination thereof. Days after the race, you're still on cloud nine.

On a second piece of paper, write down your process goals. Treat this like a checklist, and look at it often, even daily. Each day or every week, go down the line of your process goals and check off the ones you've accomplished. Many of them might be recurring. Make it your mission to accomplish as many of your process goals as possible. Remember, the more of these you can check off your list, the better position you'll be in to make your outcome goals a reality.

Choosing Shoes and Gear

One of the best things about running is its simplicity. Compared with many sports, it doesn’t require a lot of fancy equipment. Just a good pair of shoes will take you a long way. That said, technical running apparel, watches, and hydration units, among other things, are also worth considering as you begin the process of training for your event.

For a few hundred dollars or less, you can equip yourself with everything you need to get through the training cycle as well as the race itself. It’s important to find the shoes and gear that work best for you and to practice using them regularly during training so that you’re not dealing with any unpleasant surprises on race day.

RUNNING SHOES

In a former life, I managed a specialty running store. Customers would come in all the time in search of the best pair of running shoes.

“They’re all the best,” I would always tell them. “But the best shoe for me isn’t necessarily the best shoe for you, and vice versa.”
The shoe wall at a specialty running store can be intimidating and confusing. There are dozens of styles of running shoes, ranging from bulky to barely there and everything in between. Fortunately, a well-trained staff member at a dedicated specialty running shop can narrow down the selection and help find the best fit for you. It’s worth your time to get a proper fitting and try on a few different styles of shoes to find the pair that fits, feels, and rides the best for your build, foot type, and running mechanics.

Keep in mind that running shoes are tools—not magic bullets. They will not prevent all injuries, make your plantar fasciitis disappear, stop your knee from hurting, or cure some other existing ailment. Sorry, folks, but no such shoe exists. Running barefoot or training in a minimalist shoe is not a panacea either. Yes, it might be more “natural” and connect you closer to the earth, but it’s no more likely to cure all your woes than a heavily posted motion-control shoe.

Bottom line: Every runner is different and has unique needs and preferences when it comes to running shoes. For some, a cushioned trainer is the best option, while for others a stability or motion-control shoe is the best fit. And in some cases, a performance trainer or a racing flat might do the trick. At the end of the day, no one shoe is better than another. There’s no good or bad, right or wrong. The best type of shoe to run in is the one that works best for you.

Types of Running Shoes
Running shoes fall into several categories: minimalist shoes, neutral cushioning shoes, stability and motion-control shoes, and racing flats. How do you know which type is best for you? I recommend going to your local specialty running store and getting fit by a pro who will look at your feet; evaluate your foot type; ask questions about your training and injury histories along with your running habits; and, finally, watch you run. After this first part of the process, he or she will offer you an array of options based on observations (along with your important feedback), and help you decide on the pair that best matches your individual needs and preferences.

Minimalist shoes. What makes a shoe minimalist? Lightweight, flexible materials, the absence of a thick layer of cushioning, and a lack of built-in support
devices within the shoe are what characterize shoes in this category. Minimalist running shoes weigh in the range of 3 to 6 ounces per shoe for most shoe sizes, regardless of gender. The differential between heel height and forefoot height (referred to as heel-toe drop) is usually 0 to 4 millimeters. Some racing flats, discussed later in this section, may also fall into this category.

The practice of minimalism, or running in lightweight, highly flexible, minimally cushioned shoes, has grown in popularity over the past few years. The theory is that by running in as little of a shoe as possible, a runner will adopt a more “natural” forefoot strike. This allows the body to absorb shock rather than relying on the shoe to do so, thus leading to a more efficient running form and reducing the risk of injuries.

Does the practice work? Like anything else, it will for some runners, but not for all. Just as shoe selection depends on the individual, there’s not a one-size-fits-all approach that works for every runner. For runners who have become accustomed to running in a standard running shoe, transitioning to less of a shoe takes time and comes with an increased risk of injury if the process is rushed.

In sum, using a minimalist shoe a few times a week just to walk around in or for short runs can help strengthen your feet and smooth out your stride, but wearing them for all your training runs, especially longer workouts and races, is risky.

**Neutral cushioning shoes.** Don’t all running shoes have cushioning? Yes, but shoes in this category have it in relative abundance and without much else getting in the way. Unlike thin-soled minimalist shoes, cushioned models have a fairly substantial amount of lightweight foam packed into the midsole to absorb impact and provide protection.
Shoes in this category are designed to help runners who have neutral mechanics move freely through the gait cycle while providing plenty of padding underfoot. Runners with neutral mechanics will strike the ground anywhere from the heel to the forefoot without an excessive amount of inward rolling, or overpronation (see sidebar, page 12), at the inside of the ankle.

The heel-toe drop in cushioned training shoes usually ranges from 8 to 12 millimeters but can be a bit higher or lower depending on the manufacturer. The lower the heel-toe drop, the more the shoe will encourage a midfoot or forefoot strike. The higher the drop, the more protection for runners who tend to strike the ground heel first.

Cushioning shoes will typically weigh in the range of 10 to 12 ounces in a men’s size 9 and 8 to 10 ounces in a women’s size 7.5. Lighter versions of cushioning shoes, called performance trainers, are slightly trimmed-down versions, weighing about 2 ounces less while providing enhanced forefoot flexibility and a slightly more responsive ride.

**Stability and motion-control shoes.** These shoes differ from cushioning shoes not only in their outward appearance but also in their internal construction. Stability and motion-control shoes are built with internal support structures designed to correct overpronation, or the inward rolling that occurs at the ankle when the foot strikes the ground. Most runners pronate a mild to moderate amount, but some pronate severely. Stability shoes are designed for mild to moderate overpronators, and motion-control shoes are made for runners who pronate severely.

Pronation is the body’s way of trying to absorb shock. A mild amount of pronation is usually unproblematic, but severe overpronation is evidence of weak ankles and arches and carries with it a high injury risk. By helping slow down the rate of a runner’s overpronation, stability and motion-control shoes can reduce the total amount of stress on the lower legs.

In addition to layers of cushioning, the midsoles of these types of shoes are built with corrective support structures in the form of a gray-colored denser foam, called a post, or an internal wedge. Both devices provide additional arch
BUYING RUNNING SHOES: What to Know Before You Go

Figuring out which running shoe is best for you involves an analysis of your foot type. This is most accurately done under the eye of a trained pro at your local running store, but you can do it yourself via the wet test.

To perform the wet test, soak the bottoms of your feet in water. Step onto a dry surface such as concrete or on top of a piece of newspaper or a flattened paper grocery bag. You’ll see one of three footprints:

- **Flat arch** (A): This footprint takes up the most surface area because more of your foot is touching the ground. This means you have a lower arch (i.e., flatter foot) and are likely to have a more flexible ankle, which may roll inward (pronate) when you’re running.

- **High arch** (B): The less of a footprint you see (look for a thin line on the lateral side of the print connecting your rear foot and forefoot), the higher your arch is. Runners with a higher arch tend to have more rigid feet and are more likely to supinate or have neutral mechanics, but as with all foot types, there are exceptions.

- **Normal arch** (C): A footprint that is filled in toward the lateral side of your foot, but not so much under the arch area, is a sign that you have average arch height. Many runners with a normal arch have neutral mechanics.

Knowing your arch type helps you understand some of the likely natural shifts of your foot and ankle that take place when you run, which will then enable you to choose shoes that can help correct for these imbalances.
ROLL WITH IT: A Word About Pronation

“Pronation” is a popular buzzword bandied around running shops and in magazine articles, but what does it mean? Pronation is the natural collapsing of the arch and the inward rolling of the ankle that occur when your foot comes into contact with the ground. The entire mechanism is the body’s way of absorbing shock from the forces involved in trying to propel itself forward.

- **Neutral pronation** (A) occurs when the ankle rolls into a neutral position and the arch collapses only slightly before beginning the next stride. Most runners with neutral mechanics will run in a neutral cushioning shoe or a shoe that doesn’t correct for excessive motion.

- **Overpronation** (B) occurs when the ankle rolls past the neutral position and the arch collapses excessively after the foot comes into contact with the ground. Runners who overpronate will typically run in a stability or motion-control shoe with additional support build into the heel and arch areas to help absorb some of the shock that the foot cannot tolerate by itself.

- **Underpronation** (C), or supination, occurs when the foot does not roll inward after coming into contact with the ground. Supinators strike the ground with the lateral side of the foot, putting a lot of stress on the lower legs. Neutral cushioning shoes with a lot of flexibility tend to work best for supinators, whose unique mechanics don’t allow them to absorb shock well.
support and are designed to help slow down the rate of overpronation. The greater the size of the post on the medial side of the shoe, the more support it offers the runner.

Stability and motion-control shoes typically weigh in the range of 10 to 13 ounces in a men’s size 9 and 9 to 11 ounces in a women's size 7.5 and have a heel-toe drop of 4 to 12 millimeters.

Racing flats. Take a look at the feet of the front-runners at any race, and you’ll see a flurry of flashy, slipperlike shoes. You may wonder, “What are they wearing on their feet?” and “Can I have a pair?”

The answers to those questions, respectively, are racing flats and maybe. True to their name, racing flats are lightweight performance shoes in the range of 4 to 9 ounces per shoe, often sized as unisex, with a heel-toe drop that typically falls between 0 and 8 millimeters. These are made for runners trying to shave every possible second off their finishing time.

Faster runners tend to be the most efficient runners, and their support needs in a shoe when running at their race pace aren’t as great as those for runners in the middle or back of the pack. So does that mean racing flats should be limited to runners in the first few corrals? Not necessarily.

If you’ve been running for a while, are mechanically sound, and have a relatively incident-free injury history, then you might want to give racing flats a shot. If you’re a new runner, have been cursed with poor mechanics, or have a history of overuse injuries, however, stick to your trainers until you gain experience and strength.

Like the minimalist shoes discussed earlier, racing flats tend to use lightweight, flexible materials to save weight and promote a faster turnover. However, unlike their uncushioned cousins, racing flats feature a slightly more forgiving midsole and, in some models, even provide a hint of stability to help control mild overpronation.

If you decide to give racing flats a shot for your marathon or half-marathon, moderation, adaptation, and progression are the keys to a successful transition. Be careful not to do too much too soon when trying out a racing flat. Just as with minimalist shoes, start using your racing flats during some easy runs, then try
them in a few faster workouts, and eventually, when you’ve become more comfortable and confident wearing them, use them in a longer workout or race.

**How Often to Replace Running Shoes**

In addition to asking me to identify the “best” running shoe on the wall, customers would want to know how often shoes should be replaced. Unfortunately, there’s no universal answer to this question, since many factors figure into the life span of a shoe, such as the construction of the shoe you’re running in, your build, the way in which you strike the ground, and the surfaces you’re running on.

That said, most standard cushioning, stability, and motion-control shoes will last somewhere between 300 and 500 miles, which is, admittedly, quite a range. Minimalist shoes and racing flats, since they use less material, typically last 200 to 400 miles.

So how do you know if your shoes need to be replaced? Look for the obvious signs of wear and tear, and listen to your body.

Begin by considering the outsole. It is the rubber part of the shoe that comes into contact with the ground. Over time, the tread of the outsole starts to wear away, just as tires on a car eventually become bald, and you begin to lose grip on the ground below. This is the most obvious sign of wear and tear—but the outsole tells only part of the story.

What is harder to see is what happens inside the shoe when you run, in the midsole, where the cushioning and support are housed. Every time your foot comes into contact with the ground, you compress that midsole area. It responds by absorbing the blow and returning energy to you as you begin the next stride. This process is repeated thousands of times during a run.

As you can imagine, the midsole becomes fatigued over the course of a couple of miles and needs time to rebound in between runs to return to its original, bouncy state. After a few hundred miles, however, the midsole breaks down to the point of no return. You can’t see this, but you can sure feel it as a sensation of “flatness” or “deadness.” The shoe doesn’t have the bounce that it once did.
Little aches and pains begin to arise. You’re not injured, but your body is talking to you. It’s telling you that your shoes need changing. You should listen.

Still not sure whether you should swap out your shoes? Head to your local running store, and try on a fresh new pair of your favorite training shoes side by side with the ones you’ve been running in. Feel the difference? Often, it will be pretty clear. You’ll feel higher off the ground in the newer pair if the midsole of your current pair is compressed beyond the point of no return.

Remember, don’t go solely by how the outsole looks to determine whether or not a shoe needs to be replaced. If you do most of your running on a treadmill, a smooth road, or a groomed trail, the outsole of the shoe can look fine for a long time, but the internal damage is still taking place. Note in your training log when you start running in a new pair of shoes, and keep track of how many miles you run on them. Over the course of a 12- to 16-week training cycle, you can expect to go through between two and four pairs of shoes. When you start approaching the end of the shoes’ life, it’s a good idea to start breaking in a fresh pair as you phase out the broken-down model. Your body will thank you for it.

**Running Shoe Sizing**

Finding the correct fit in a running shoe can be a struggle. Many runners, especially those “who have been a [insert size here] their entire life,” can be finicky when it comes to the size of their running shoes. When I worked in the running store, one of my biggest struggles was convincing runners, particularly those preparing for marathons and half-marathons, that they should size their training shoes a half to a full size bigger than they are accustomed to wearing in a street shoe.

Why is this? The reasons are threefold. First, running shoes run small. I wear a size 8½ in street shoes and dress shoes. I wear a 9½ in most of my running shoes. Not all shoe sizing is created equal!

Second, your feet naturally slide forward slightly in the shoe (thanks to forward momentum) when you run, and your toes expand when they come into contact with the ground. Give them the room they need to do these things—and no, a tighter shoe is not the solution! Rather, that is a fast road to blisters and black toenails.
Third, the longer you run, the more your feet swell. Blood circulation in the feet increases as you run, especially on a warm day. Make sure there’s plenty of room in your shoe for your feet to spread out.

From back to front, a running shoe should fit most snugly in the rear, holding your heel securely in place. At the midfoot of the shoe, where the laces come over the top of the foot, the upper should wrap around like a glove while still allowing your foot to flex freely. The toebox is where the fit of the shoe should be most generous, with plenty of room for your forefoot and toes to spread.

Consider the width of your foot when trying on running shoes. Most running shoes are offered in a medium width, which will fit a lot of foot types, but sometimes your foot may be too wide or too narrow for such a shoe. If this is the case, ask the salesperson if the model you tried on is offered in multiple widths. The last thing you want is for your foot to feel suffocated in a shoe.

In terms of length, your toes should never be right up against the front of the shoe. You want to have a half to a full thumb’s width between the end of your

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**TRAINING LOG**

Aside from this book, your training log will serve as your most important reference tool during the training process. A training log lets you total up your miles and record workout times, and perhaps more importantly, it helps keep you accountable, serves as a means of measuring improvement, and can be the starting point for future planning.

A training log doesn’t have to be fancy. It can be as simple as a notebook or a wall calendar, or it can be as structured and detailed as the VeloPress Runner’s Diary, which allows you to log such data as running mileage and workout times as well as the weather, nutrition, injuries, enjoyment levels, and how many miles you have on a given pair of running shoes. Many online options exist as well, on web sites such as runningahead.com, trainingpeaks.com, and athleticore.com. Find the solution that works best for you.
longest toe and the front of the shoe. Why so much? As mentioned earlier, your feet will naturally slide forward as you run. If they’re already right against the end of the shoe, they have nowhere to go. In these cases, bruises and black toenails are likely.

**SOCKS**

After putting a lot of consideration into choosing the best pair of running shoes for your training and racing needs, you shouldn’t make sock selection an afterthought. Socks matter. And just any old pair of cotton athletic socks from the top drawer of your dresser will not do the trick. In fact, you should avoid cotton at all costs.

Think of cotton socks as a towel. When you wrap yourself in a towel after getting wet in the pool, what happens? The towel soaks up and retains all that water. Do you want the same thing to happen inside your shoe when you’re running? Absolutely not! Not only will your shoes get heavy from the water weight, but also unnecessary friction will occur inside your shoes, opening you up to the unpleasant possibility of hot spots and blisters.
When looking for the right pair of running socks, keep an eye out for socks that are made from a blend of nylon, Lycra, and moisture-wicking fabric. When your feet sweat, these socks breathe, keeping your feet comfortable and dry while reducing the risk of blisters.

The thickness of the sock and the height that it comes up on your ankle are personal preferences, so experiment with a few combinations to find what feels best on your foot. Keep in mind that sock thickness and height will affect the fit of the shoe. In fact, purchase your running socks before you buy your running shoes so that you can try them on together in order to find the best combination. Also, pay attention to size when trying on socks and aim to find a pair that fits your foot snugly and doesn’t slide around much on your foot.

Technical running socks cost more than cotton socks, but they’re definitely worth the investment. They’ll last longer than cotton, treat your feet better, and enhance your running experience.

**RUNNING APPAREL**

When you enter a Rock ‘n’ Roll event, part of your registration fee includes a technical T-shirt. Why not a cotton shirt?

Similar to the rationale behind not wearing cotton socks with your running shoes, technical T-shirts made from a moisture-wicking polyester blend will pull sweat away from your skin and speed the evaporation process, helping you stay cooler and more comfortable when running in warm weather conditions. The same goes for long-sleeved shirts, shorts, hats, pants, gloves, jackets, and nearly every other piece of running apparel.

Think about this: When you’re running, you can lose anywhere from a few ounces to a few liters of fluid through sweat, depending on the conditions. Pour a liter of water over your favorite cotton T-shirt to simulate what would happen on a warm day. Now put the shirt on. Not only are you carrying a few extra pounds on your torso; you’re also trapping in heat. It’s definitely not the most comfortable running experience. Avoid cotton. Cotton is rotten!

Tight-fitting running tights, socks, and arm sleeves are other popular apparel choices for runners. This gear, known as “compression wear,” is designed to aid
in your recovery following harder workouts and runs. I will talk more about the benefits of compression wear in Chapter 5.

**WATCHES, SPEED AND DISTANCE DEVICES, AND HEART RATE MONITORS**

If you stand at the mile marker of any half-marathon or marathon, you’ll see dozens of runners looking down at their wrists in unison. And if you listen, you’ll likely hear the beeping of several GPS (global positioning system) units signaling the passing of another mile.

Running watches, speed and distance devices, and heart rate monitors are becoming increasingly popular pieces of equipment among runners, especially as technology continues to advance and all-in-one timing units allow runners to track their speed and distance, monitor their heart rates, keep track of calories burned, record elevation, and even listen to music, all at the same time.

Do you need a fancy watch that can do everything short of run for you? It depends on how much exposure you want to various types of information.

A basic chronograph watch, available for $20 to $50, tells you the time of day and features simple start and stop functions that allow you to time the duration of your training runs. A 25- or 50-lap feature allows you to take splits (your total running time divided into sections) during your run, perfect for doing an interval workout on the track or for recording the marked miles of a half-marathon or marathon race.

As you move on up the technology (and expense) ladder, various types of speed and distance devices will give you real-time feedback on your pace and let you know how many miles you’ve run. This can be particularly useful if you’re unsure how far and how fast you’re running in training, want to keep yourself in check during races, need to compare times over the same courses, travel often, or just crave as much information as possible to monitor your training and progress.

GPS watches utilize satellite-tracking technology to provide you with this information, along with elevation profiles, and come in the form of a
self-contained wrist unit. Other speed and distance devices utilize an accelerometer embedded in a foot pod strapped to the shoe to provide information on pace and distance covered. Both of these types of units sometimes offer features that give you the option to “compete” against your own best time over the same course, allowing you to monitor progress and set new goals. Many speed and distance devices are set up so that you can easily upload your data to a web site after your workout, allowing you the luxury of a virtual training log to keep tabs on your progress. Expect to spend between $150 for a very basic model that provides you with just speed and distance and up to $500 for a device that does those things while also allowing you to track heart rate and program workouts, along with a host of additional features depending on the brand.

Heart rate monitors are another type of running technology that has continued to evolve over the years. Combination units that involve a wristwatch and a chest strap have proven to be an effective way for many runners to target their training and work out at the right intensity levels. By tracking such key markers
as average and max heart rate from workout to workout, runners can keep tabs on their progress and ensure that they’re recovering between sessions. Heart rate monitors, like speed and distance devices, range from very basic to super-complex, depending on how much information you want to track. For as little as $50, you can get your hands on a basic unit that will simply give you your running heart rate. A few hundred dollars more will buy you a unit with all the bells and whistles, often paired with a speed and distance device that will allow you to see which paces correspond with a given heart rate, set training zones as well as alarms that let you know when you’re not working at the right intensity level, compare heart rates within a workout, and track calories burned.
Last but not least, many free and low-priced apps are now available for smart phones that utilize your phone’s GPS technology to do a lot of the same things as a speed and distance device that you wear on your wrist. For example, such apps can map routes and keep track of distance and pace, with the additional benefits of providing coaching for you to follow while running, dictating pace to you at regular intervals during a workout, and automatically uploading your training data to an online profile. This allows you to keep all of your training history in one place and easily share with others through various social-networking web sites.

How much information and feedback you need when you’re training and racing really depends on you and your personal goals. If you’re a new runner who has no sense of pace or effort, for example, a heart rate monitor is a worthwhile investment. The same goes if you are an experienced runner who often falls victim to overtraining. If you’re a performance-driven runner who is focused on locking in to a set pace on race day, wishes to progress the pace during long runs, or is interested in keeping a keen eye on mile splits during a tempo run, a speed-distance device with GPS will help keep your training on track. On the flip side, if things like interval training and running a set pace for your long runs don’t interest you, a basic watch may be all you need. Evaluate your training and racing goals, as well as your strengths and weaknesses as a runner, and find the solution that works best for you.
Index

Note: t. indicates table; italic page number indicates illustration.

A
A Skips, 44, 44
Achilles tendinitis, 128–129, 129
Alcohol, 59
Ankle sprain, 138–139, 138
Apparel. See Running apparel; Running shoes; Shoes and other footwear; Socks

B
Backward Lunge, 42, 42
Basal metabolic rate (BMR), 51, 53
Beginner’s Half-Marathon Training Plan, 145–146, 150–151
Beginner’s Marathon Training Plan, 147–148, 154–155
Bingham, John “The Penguin,” on commitment, 1
Black toenails, 139–140
Blisters, 140
Bounding, 47, 47
Box Jumps, 108, 108
Burpees, 105, 105
Butt Kicks, 46, 46

C
Caffeine, 59
Calf Raises, 107, 107
Calf strain, 138, 138
Calories, 51–52
calculating, 53
quality of, 52–54
Carbohydrates, 54, 55
differing quality of sources, 52–54
recommended sources, 54
Chafing, 140–141
Compression wear, 19–20
and recovery, 86–87
Crosstraining, 109–111
as break from pounding of running, 111
cycling or spinning, 111, 115–116, 115
eLLiptical workouts, 114–115, 114
and healing shin splints, 141
in injury rehabilitation, 109–111
shorter runs in place of long ones, 112
swimming, 111
30- and 45-minute workouts, 110
water running, 111–114, 111
Cycling, 115–116, 115

D
Dedication and commitment, 1–2
Dehydration, 60
INDEX

signs of, 79
Devices. See GPS units; Heart rate monitors; Speed and distance devices; Watches
Dynamic warm-up routine. See under Warm-ups

E
Easy runs, 29–30
Electrolytes, 59–60, 61, 79–81
Elliptical workouts, 114–115, II4
Experienced Half-Marathon Training Plan, 146–147, 152–153
Experienced Marathon Training Plan, 148–149, 156–159

F
Farah, Mo, 94
Fartleks, 32–33, 34–36
Fats, 56–58
   good and bad sources for runners, 58
Fluids. See Hydration
Foam roller (for self-massage), 118–119, 118
Food. See Nutrition
Forward Lunge, 42, 42
Front Leg Swings, 43, 43

G
Getting started. See Preparations
Global positioning systems. See GPS units
Goal setting, 3
   goal sheets (written goals), 4–7
   for good day, 5–6
   for great day, 5–7
   outcome goals, 3, 4
   for perfect day, 5–6, 7
   process goals, 3–4, 6
   race pace, 30, 169
   “Golf-ball effect,” 125
GPS units, 20–21, 23

H
Half-Marathons
   Beginner’s Training Plan, 145–146, 150–151
   Experienced Training Plan, 146–147, 152–153
   training for first, 33
Hamstring Curls, 104, 104, 136
Hamstring injury, 133–134, 133
Heart rate monitors, 20, 21–22
Hill repeats, 32–33, 36–37
Hill workouts, simulating, 30
Hip flexor strain, 134–136, 134
Hydration, 49–50, 58
   and alcohol, 59
   and caffeine, 59
   and dehydration, 60, 79
   during race week, 68
   and electrolytes, 59–60, 61, 79–81
   overhydration, 75
   on race day, 78–81
   recommended fluid intake, 60
   sweat-loss calculator, 60, 181
   water, ubiquity and value of, 58–59

I
Iliotibial (IT) band syndrome (ITBS), 129–130, 130
Injuries, 121
   Achilles tendinitis, 128–129, 129
   ankle sprain, 138–139, 138
   black toenails, 139–140
   blisters, 140
   calf strain, 138, 138
   chafing, 140–141
   common running injuries, 127–139
cross training in rehabilitation of, 109–111
discomfort vs. pain, 127
due to running on same or problematic surfaces daily, 121, 124–126
due to structural/muscular weakness or imbalance, 121, 122
due to training errors, 121, 122–124
general causes of, 121–126
and “golf-ball effect,” 125
hamstring injury, 133–134, 133
hip flexor strain, 134–136, 134
iliotibial (IT) band syndrome (ITBS),
129–130, 130
miscellaneous discomfort complaints,
139–141
plantar fasciitis, 128, 128
RICE protocol for recovery, 123, 136
runner’s knee, 130–131, 130
sciatica, 136, 136
shin splints, 131–133, 131, 141
shorter training runs to minimize,
112
upset stomach, 140
IT/ITBS. See Iliotibial band syndrome

J
Jones, Steve, on injuries, 121

K
Knee injury, 130–131, 130

L
Lateral Bounding, 45, 45
Lateral Leg Swings, 44, 44
Long runs, 30–32
Lunge Matrix, 42, 42

M
Marathons
Beginner’s Training Plan, 147–148,
154–155
Experienced Training Plan, 148–149,
156–159
Massage, 118. See also Self-massage
Massage stick, 118, 118

N
Neutral pronation, 12, 12
Nutrition, 49–50
basal metabolic rate (BMR), 51, 53
caloric needs, 51–52
caloric needs, calculating, 52
carbohydrates, 54, 55
fats, 56–58
Post-Workout Recovery Shake, 90, 91
protein, 54, 55–56
quality of calorie sources, 52–54
quantity control, 50–53
race day breakfast, 66, 72
for recovery, 88–90
vegetarians and protein, 51

O
Outcome goals, 3, 4
Overpronation, 12, 12

P
Perceived Effort Chart, 29, 177
Personal records, 1, 2
Plank Matrix, 103, 103
Plantar fasciitis, 128, 128
Plumer, Pattisue, on racing, 63
Post-Workout Recovery Shake, 90, 91
Preparations
choosing shoes and gear, 7
dedication and commitment, 1–2
devices (watches, heart rate monitors,
etc.), 20–23
goal setting, 3–7
picking an event, 2–3
running apparel considerations and
selection, 19–20
shoe considerations and selection,
7–18
sock considerations and selection,
18–19
training log, 17
Preventive body maintenance, 116
and foam roller, 118–119, I18
and massage stick, 118, I18
as “prehab,” 116
to prevent need for physical therapy, 116
self-massage, 116–119
and tennis, lacrosse, or golf ball, 119
Process goals, 3–4, 6
Pronation, 10–13, 12, I12 [p. 10, para. 1 refers to p. 11; it’s actually p. 12]
Protein, 54, 55–56
PRs. See Personal records
Pull-ups, 101, I10
Push-up matrix, 102, I02

Q
Quick Feet, 47, 47

R
Race-day strategy, 63
breakfast, 66, 72
checklist, 72
in the corral, 73
discardable sweats and jacket, 73
early arrival at starting-line area, 72–73
emphasizing routine, 70
preparations, 70–73
sample routine, 73
Race Equivalency Chart, 74, 173–174
Race pace, 30
chart, 169
Race strategy, 73–75
and dehydration signs, 79
easy nutrition while running, 81
even splits, 76
fueling, 77–81
goal race pace, 76, 169
and hydration, 78–81
negative splits, 76–77
pacing, 75–77
Race Equivalency Chart, 74, 173–174
Race week strategy, 63–65
drinking regularly, 68
and the expo, 69
main goal, 65
making a list, 69
practicing early waking, 68–69
relaxation, 68
Sunday: easy run; rehearse race day, 65–66
Monday: rest or crosstraining; rest
mind and body, 66
Tuesday: dress-rehearsal run; scale
back eating, 66–67
Wednesday: easy run; massage,
training log, salt, 67
Thursday: short fartlek; pack bags,
67–68
Friday: rest or crosstraining; travel,
68–69
Saturday: easy run and strides;
nutrition, hydration
considerations, 70
Recovery, 83–85
blocks, 93–97
blocks, structuring, 97, 97t.
blocks as “detraining,” 94–95
and compression wear, 86–87
easy runs (following time off), 97,
97t.
footwear, 87–88
importance of, 83–84, 96, 97
nutrition, 88–90
post-workout, 85–90
Post-Workout Recovery Shake, 90,
91
quick post-workout snacks, 90
regimen (author), 95–97
regimen (Salazar), 94–95
three weeks up, one week down, 92,
92t.
underrecovery, signs of, 94–95
weeks (during training cycle), 90–92
Reverse Dips, 106, 106
RICE protocol (rest, ice, compression, elevation), 123, 136
Ritzenhein, Dathan, 94
Rock ‘n’ Roll races
  best destination race, 27
  best race off beaten path, 60
  best spectators, 116
  biggest party, 85
  fastest half-marathon course, 67
  locations and details, 164–165
Run training, 25
  building a base, 26–27
  consistency in, 27, 29
  cooling down, 40–41
  dynamic warm-up routine, 41–47
  easy runs, 29–30
  errors that can cause injuries, 121, 122–124
  fartleks, 32–33, 34–36
  gradual approach, 27
  hill repeats, 32–33, 36–37
  injuries due to running on same or problematic surfaces daily, 121, 124–126
  long runs, 30–32
  pacing and effort, 28–29
  and Perceived Effort Chart, 29, 177
  race pace, 30, 169
  shorter runs to maximize fitness and minimize injury, 112
  speed work, 32–34
  strides, 32–33, 34
  tempo runs, 32–33, 37–38
  time commitment, 25–26
  track workouts, 32–33, 37–38
  warming up, 38–40
  workout categories, 29–38
Runner’s knee, 130–131, 130
Running apparel, 19–20
Running shoes, 7
  and arch type, support, and pronation, 10–13, 11, 12, 12
  finding best ones for you, 7–8
  and flat arch, 11, 11
  heel-toe drop, defined, 9
  and high arch, 11, 11
  how often to replace, 14–16
  midsole, condition of, 14
  minimalist, 8–9
  neutral cushioning type, 9–10
  and normal arch, 11, 11
  outsole, condition of, 14–16
  and pronation, 10–13, 12, 12
  racing flats, 13–14
  sizing, 16
  stability and motion-control type, 10–13
  and supination, 12, 12
  types of, 8–14
Rupp, Galen, 94
Ryan, Monique, on hydration, 78
S
Salazar, Alberto (recovery regimen), 94–95
Samuelson, Joan Benoit, on eating, 49
Sciatica, 136, 136
Self-massage, 116–118
  with foam roller, 118–119, 118
  with massage stick, 118, 118
  with tennis, lacrosse, or golf ball, 119
Sheehan, George, on athletes and training, 25
Shin splints, 131–133, 131, 141
Shoes and other footwear for recovery, 87–88
See also Running shoes; Socks
Side Lunge, 42, 42
Single-Leg Deadlifts, 101, 101, 136
Single-Leg Squats, 106, 106
INDEX

Socks, 18–19
Sodium, 67, 75
Speed and distance devices, 20–21
Speed work, 32–34
Spinning, 111, 115–116, 115
Stomach, upset, 140
Straight-Leg Runs, 46, 46
Strategies. See Race week strategy;
Race day strategy;
Race strategy
Strength training, 100
Box Jumps, 108, 108
Burpees, 105, 105
Calf Raises, 107, 107
Hamstring Curls, 104, 104, 136
Plank Matrix, 103, 103
Pull-Ups, 101, 101
Push-Up Matrix, 102, 102
Reverse Dips, 106, 106
Single-Leg Deadlifts, 101, 101, 136
Single-Leg Squats, 106, 106
Strides, 32–33, 34
Supination, 12, 12
Supplementary training, 99–100.
See also Cross-training; Preventive
body maintenance; Strength
training
Swimming, 111

T
Tempo runs, 32–33, 37–38
Toenails, black, 139–140
Track workouts, 32–33, 37–38
Training
broad range of, 99–100
specificity of, 99
See also Cross-training; Preventive
body maintenance; Run training;
Strength training; Warm-ups
Training log, 17
Training plans, 143–145
and interruptions, 22
and missed workouts, 144–145
12-Week Beginner's Half-Marathon
Plan, 145–146, 150–151
12-Week Experienced Half-Marathon
Plan, 146–147, 152–153
16-Week Beginner's Marathon Plan,
147–148, 154–155
16-Week Experienced Marathon Plan,
148–149, 156–159

U
Underpronation, 12, 12
Upset stomach, 140

W
Warm-ups, 38–40
A Skips, 44, 44
Bounding, 47, 47
Butt Kicks, 46, 46
dynamic warm-up routine, 41–47
Front Leg Swings, 43, 43
Lateral Bounding, 45, 45
Lateral Leg Swings, 44, 44
Lunge Matrix, 42, 42
Quick Feet, 47, 47
slow jogging, 39–40, 41
Straight-Leg Runs, 46, 46
Watches, 20
Water. See Hydration
Water running, 111–114, 111
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A New England native firmly transplanted to Southern California, Mario lives in San Diego with his wife, Christine; their four bikes; and more than 40 pairs of running shoes.
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