

## Training Guide

Congratulations on starting your next running journey! These tips summarize everything that we've learned from running and coaching over the years. We hope it can make your road to race day easier and more fun. No matter your experience level, please take the time to read through each section. If you have additional training questions, feel free to [ask them here](#).

—Coaches Jeff, Marci, Tom, and David

### General Tips

#### New to Running

If you're running for the first time, finishing the race should be your goal. As you begin logging miles, focus on slowly working yourself up to the distances on your training chart (located in the [Participant Center](#)). Feel free to add a couple of walk breaks between your runs.

#### In Case of Illness

If you feel sick, just relax and let your body heal. When it's time to run again, don't try to play catch-up with your training. Those runs are gone, but you can still pick up where you left off. A week or even two is not enough time to lose your existing fitness level. Your first couple of runs may feel tough, but you'll find your stride again in no time.

#### In Case of Injury

Are you feeling aches and pains not related to soreness? Maybe something in your foot or knee isn't feeling quite right? Go to your doctor. Don't ask your coaches, and don't ask for advice from a friend who had a similar injury. The only person qualified to diagnose an injury is a doctor. Trying to run through or self-diagnose pain can turn an annoying injury into a run-ending one.

#### Running Etiquette

For your own and others' safety, please be aware of your surroundings. If you're on a marked path, stay in the appropriate lane and keep right unless passing. If you want to change lanes, look before doing so. Think of running like driving. If you're in a large group, run no more than two abreast and don't take over the road. We want Fred's Team to be the best-trained, safest, and most polite team.

#### Increasing Your Distance

When the weather is nice and everyone is doing long runs, it can be tempting to throw caution to the wind and go for it. But even the most seasoned runners follow the 10% rule: Never increase your distance by more than 10% in a week. Following this rule allows your body to slowly adjust to a new distance. Not giving the body adequate time to adapt can lead to injury.

## **Avoid Overtraining**

If you're still sore and tired from your last tough run, extra rest may be in order. It's easy to overtrain. When this happens, your body gives you clear signals, including an accelerated resting heart rate, difficulty sleeping, and a lack of appetite. If you suffer from any of these symptoms, rest for a few days. Take this time to relax and reevaluate your training program. In an ideal world, we could nap after every training run — but work, family, and life happen. Train hard, but also train smart.

## **Find Your Pace**

Are you hitting your target race pace on long runs? If you're averaging one to two minutes above it, it's OK. But remember, if you're not meeting your target in training, your body surely won't be able to sustain that pace for a full race. Consider adjusting your goal. Our suggestion is to start slow and let your body ease into the run. If you have energy to spare during the last few miles, go for it! We just don't want you going out too fast and struggling to hang on.

If you are hitting your targeted race pace, consider taking yourself out of your comfort zone. Runners often choose a pace that will leave them with enough energy to finish strong. But if you finish really strong, you likely haven't left enough out there on the course. Don't fear going too hard on a training run and bonking (when your body shuts down from a loss of glycogen). You may have to slow down or — worst-case scenario — walk. You'll get through it and be better off in the long term. Somewhere between your comfort zone and your bonking pace is your true race pace.

## **Keep a Running Journal**

We're often asked, "Why is it that on some days I feel like I can run forever, and on others every step is rough?" Keeping a training diary can help give you an answer. By tracking the weather, terrain, distance, time, your diet, the time of day you ran, and how you felt, you'll gain a better understanding of your body. You'll also learn what foods are best for your energy levels. We can't control the weather, but we can control what goes into our bodies. Life and work dictate the time of day we run, so most people tend to be morning or evening runners. Switch it up and see what happens. No matter how well you plan, there will still be times when you just don't have it.

## **Switch Up Your Workouts**

Consistency is the key to a successful running program. But a good routine doesn't always translate into good training. Our bodies are wonderful at adapting. If you do the same workout every day, your muscles get used to it, and the benefits diminish. By changing up your exercises, you'll become a faster, fitter runner. To mix things up, add some intervals to your training runs by adjusting your pace throughout the run.

You probably have a workout you dislike as well. Our advice is to take it on and make it your own. Overcoming new challenges will make you stronger physically and build resilience and mental toughness, which are extra important for long runs.

## **Find Your Inner Strength**

Every runner is looking to get a step ahead — whether it's with the latest sports drink or running shoe technology. However, the greatest advantage you can get comes from within. No matter your experience level, you can talk yourself into being a better runner. The late deep-water running coach Doug Stern had a great saying: "If you think you can or you think you can't, you are right." Mental imagery is a powerful tool. We all have days when we struggle during a run. Instead of focusing on how bad it feels (which will make it worse), focus on your breathing, smooth out your stride, and most of all, relax. When you're out of sorts, your running efficiency diminishes. Clear thoughts, rhythmic breathing, and a steady stride will help propel you to the finish line.

## **Stay Focused**

As you move into the later stages of your training, it can be easy to lose focus. While it's important to take an extra day off when your body needs it, don't allow one day to turn into a week. You need to be working out consistently if you want to run your best race, and getting the most out of your training each week will make all the difference.

## **Stay Smart**

Be wise and listen to your body, especially on race day. Sometimes it just doesn't cooperate, and you're forced to settle for a pace that's slower than your goal. Or you may feel pain and decide to end your run early. Both are tough choices, but risking your health or the possibility of an injury that ends your running career is never worth it.

## **Running on a Treadmill**

Training runs should be outdoors, so your body can get used to running on pavement and other surfaces. However, inclement weather and other factors can force you inside. If you use a treadmill to log some miles, we recommend setting it at a 3% incline. You can also use a treadmill for speed and hill work.

## **When to Taper**

Your training chart will have fewer miles in the weeks leading up to race day. That means it's time to taper and save your legs for the race. For marathons, some runners take three weeks to taper, so that they have more time to recover from training. Others opt for two weeks, if they tend to bounce back quickly after long runs. Whichever you choose, you'll be fine on race day.

# Prepare for the Weather

## Rain

Unless there's thunder and lightning, you should run in the rain. If it rains during your race, you'll have no choice, and there are no do-overs. So you might as well get to know what it feels like. Dress for the temperature more than the wetness. Be careful of waterproof materials that aren't breathable. They can cause you to overheat. Wear a moisture-wicking visor or cap to keep the rain out of your eyes. Put A+D diaper rash ointment or another lubricant on your toes, since the friction of wet sneakers and socks can cause blisters. When you come home, shove newspaper in your sneakers to help absorb the moisture.

## Heat

Let's face it, hot days can make training tough. But there's a big difference between being uncomfortable and pushing yourself to exhaustion. If you start to feel sick, pull back on your pace and distance and consider cross-training in a cooler environment. Running in warmer weather can also cause dehydration, if you don't properly hydrate. Be sure to monitor your water intake before, during, and after your runs.

## Cold

If the temperature is too cold and road conditions are rough, run on a treadmill or an indoor track. If this is not an option, pay extra attention to your footing when you're outside. It's best to slow your pace down and limit your mileage. Your stabilizing muscles work extra hard in wintry conditions, so you'll end up spending more energy per mile. Fresh snow has more traction than packed snow, but it can hide ice patches. Make sure that your planting foot is aligned with your center of gravity, below the hips. Run with short, light strides. If the path is very icy, walk instead. It's not worth falling.

# Cardio Training

## Speed Workouts

No matter your running pace, you can always shave a few seconds off your mile. The most efficient way to do it is with speed work. Speed workouts will improve both your level of fitness and the quality of your other training runs.

A quarter-mile track is the perfect location for speed work. If you don't have access to a track, you can use a map tracking app or a GPS watch to mark out a mile-long course in quarter-mile segments.

### Here are the steps:

1. Run a 1-mile warm-up and keep track of your time.
2. Run a quarter mile at the same pace. (Find your quarter-mile pace by dividing your 1-mile time by four.)
3. Run a quarter mile at the recovery pace. (Find your recovery pace by subtracting 30 seconds from your quarter-mile pace.)
4. Repeat steps 2 and 3.
5. Run a 1-mile cooldown.

The distance of your workout will determine how many times you should repeat steps 2 and 3. Start easy and slowly increase your intensity. As the workouts progress, you can build up to half-mile and 1-mile repeats. You can also recalculate your repeat times to increase the difficulty of the workout.

### Speed Workout Example (10-minute mile pace)

Distance: 5 miles

Warm-up: 1 mile

1/4 Mile Repeats:

1/4 mile at 2:00 pace

1/4 mile at recovery pace

1/4 mile at 2:00 pace

1/4 mile at recovery pace

1/4 mile at 2:00 pace

1/4 mile at recovery pace

1/4 mile at 2:00 pace

1/4 mile at recovery pace

1/4 mile at 2:00 pace

1/4 mile at recovery pace

1/4 mile at 2:00 pace

1/4 mile at recovery pace

Cooldown: 1 mile

## Hill Workouts

Hill workouts are a great complement to speed workouts and will get your body used to running hills. Most courses feature uphill and downhill stretches, so you need to be used to them. Even if you are going to run one of the few flat courses out there, hill work will make you a faster and stronger runner.

Find a challenging hill in your area and mark out a quarter-mile course from the bottom of the hill. You'll calculate your uphill pace as you did with the speed workouts; however, your recovery pace will be running down the hill at a gentle speed. Also, don't worry about your uphill pace starting out, since the hill itself will present enough of a challenge.

### Here are the steps:

1. Run a 1-mile warm-up.
2. Run uphill for a quarter mile.
3. Run downhill for a quarter mile.
4. Repeat steps 2 and 3.
5. Run a 1-mile cooldown.

### Hill Workout Example

Distance: 5 miles

Warm-up: 1 mile

1/4 Mile Repeats:

1/4 mile uphill

1/4 mile at recovery pace downhill

1/4 mile uphill

1/4 mile at recovery pace downhill

1/4 mile uphill

1/4 mile at recovery pace downhill

1/4 mile uphill

1/4 mile at recovery pace downhill

1/4 mile uphill

1/4 mile at recovery pace downhill

1/4 mile uphill

1/4 mile at recovery pace downhill

Cooldown: 1 mile

## Running Downhill

During short races, going downhill with reckless abandon is fine. But the stress on your quads will take its toll during longer distances. When running downhill, picture yourself gliding. Since the ground is falling away from you, you don't have to lift your knees as high to propel yourself forward. Lean forward slightly and let gravity do the work. Take deep breaths and allow your heart rate to come down. Your quads will be fresh, your heart rate low, and you'll be ready to charge up the next hill.

## **Swimming**

Swimming is the best cross-training workout for runners. It uses the same muscles as running, but without the impact on your joints, which means you can do a hard swimming workout and recover quickly for your next run. Swimming also helps increase your lung capacity, since you can only breathe between strokes.

### **Freestyle Method**

The most effective swimming style for runners is freestyle. To start, float on your chest with your body in a straight line, parallel with the bottom of the pool. Reach your left arm in front of you as far as possible, pull the water, and rotate your shoulder to get a high elbow. When your hand exits the water on the outside of your hip, that's known as the recovery phase. There should be a catch-up in your stroke — meaning your left arm and shoulder should stay extended in front of you until your right arm is reentering the water from the recovery phase of the stroke. That's your glide.

Roll your head from side to side, in tandem with your arms. Rotate your hips to help drive your stroke, similar to the way you would when swinging a baseball bat or tennis racket. This motion also helps you elongate your body and slide through the water. Be sure to maintain a smooth rhythm without thrashing.

### **Kickboard Method**

Use a kickboard for another great water workout. No swimming experience is needed.

To start, grip the edges of the board with your hands and extend it out in front of you as far as possible. Kick while trying to keep your legs as straight as you can. They will bend slightly from the pressure of the water. But if you purposely bend at the knee while kicking, it will create a reverse motion and you will not get anywhere.

Both swimming methods require endurance. While running stamina does not translate to the pool, swimming stamina will greatly improve your running ability. Start with a couple of pool lengths at a time and go from there. If you can build up to at least 30 minutes of swimming, we guarantee you'll be a faster runner.

# Strength Training

## Plyometrics

Plyometrics are great weight-free exercises if you don't have a gym nearby. Squat jumps are one of our favorites for building leg muscles. They work your quads, glutes, hip flexors, hamstrings, and calves, and get your body used to the impact of running.

To start, stand with your feet shoulder-width apart and have your arms at your sides or in front of your chest. Do a regular squat and then jump up as explosively as you can, reaching for the ceiling. When you land, lower your body back into the squat position to complete one rep, then go straight into the next jump. We recommend three sets of 15 to 20 reps.

## High Weight, Low Reps

The goal of strength training is to fatigue your muscles so that they grow back stronger and healthier. While low weight and high rep resistance workouts build endurance, that method overlaps with your other cardio exercises. As we noted in the "Switch Up Your Workouts" section, muscles adapt to repetition. Lifting heavy weights will allow you to build muscle more efficiently. And don't worry about getting too bulky. Your running regimen will offset any muscle mass developed at the gym.

Warm up with light weights, working toward a heavier weight that you can handle for five to eight reps. Remember to maintain proper form to avoid any lifting injuries.

## Muscle Balance

It's true, one side of your body is probably stronger than the other. Running and weight training can reinforce that imbalance. Running also causes other muscular imbalances that can lead to bad form and injury. The impact of running causes the quads to build and strengthen faster than the other muscle groups in the legs. The workouts below will help address those issues.

## Workout Session 1

### Single-Leg Press

1. Place your legs on the sled just as you normally would to perform this exercise, then drop one leg out of the way. Do not center the working leg.
2. Lower the platform until your knee is at a 90-degree angle.
3. Press the platform outward until your leg is nearly straight. Do not lock out your knee or bounce the weight at the top or the bottom of the movement.
4. Choose a weight that you can do for 15 to 20 reps. Switch legs and repeat. Perform three sets.

### Single-Leg Curl

1. Lie on your stomach on the leg curl machine with your leg straight out.
2. Your knee should extend out over the bench.
3. Lift your heel up as close as possible to the buttocks. Contract your hamstrings at the top of the movement, pause, and lower your foot back to the starting position.
4. Choose a weight that you can do for 15 to 20 reps. Switch legs and repeat. Perform three sets.



### **Hip Adductors**

This exercise strengthens the inner thigh muscle.

1. Sit on the hip adduction machine and position your legs apart at the beginning of the movement.
2. Inhale and pull your legs together until the pads touch each other.
3. Exhale and return your legs to the starting position, keeping the movement steady and under control at all times.
4. Choose a weight that you can do for 15 to 20 reps. Perform three sets.

### **Single-Calf Raise**

Calf raises can be done while standing on a stair step or phone book. Hold the stair rail or wall for balance.

1. Stand on a step with the ball of your foot at the edge of the step, lowering your heel as far as possible until you feel a good stretch in your calf muscles.
2. Raise your heel and stand as tall as possible. Focus on your calf having to do all the work, and hold the contraction for a few seconds.
3. Do not bounce. Keep your leg straight and your knee and hip locked.
4. Do 20 to 25 reps. Switch legs and repeat. Perform three sets.

## **Workout Session 2**

### **Stationary Lunges**

1. Standing with your feet hip-width apart, take a stride forward and lower your hips toward the ground by bending both knees.
2. Make sure your positioning is correct, with your front knee directly over your foot and your back knee pointing at the ground. Both knees should be bent at 90 degrees.
3. Using your glutes and thighs, straighten your legs and raise your hips back up to the starting position.
4. Maintain the stance and complete 15 reps on one side, then switch and complete 15 reps on the other side.

### **Ball Hip Adductors**

A rubber ball (like the one used to play dodgeball) is an inexpensive and very effective workout tool. It can be found in the toy department at most discount stores.

1. Lie with your back on the floor.
2. Bend your knees and place your feet together flat on the floor. Place the ball between your knees.
3. Squeeze the ball tight: Hold for three seconds and repeat for 15 to 20 reps.

### **Single-Calf Raise**

Calf raises can be done while standing on a stair step or phone book. Hold the stair rail or wall for balance.

1. Stand on a step with the ball of your foot at the edge of the step, lowering your heel as far as possible until you feel a good stretch in your calf muscles.
2. Raise your heel and stand as tall as possible. Focus on making your calf do all the work and hold the contraction for a few seconds.
3. Do not bounce. Keep your leg straight, and your knee and hip locked.
4. Do 20 to 25 reps. Switch legs and repeat. Perform three sets.

*Perform your weight-training sessions on the cross-training days noted on your training chart. Make sure to perform a weight-training session once a week, alternating between session 1 and session 2. For more variety, you can do step-ups instead of lunges during the third week.*

### **Step-Ups**

Calf raises can be done while standing on a stair step or phone book. Hold the stair rail or wall for balance.

1. Stand next to a flat bench or chair.
2. Step up onto the bench with your right foot; bring up your left foot and tap the bench, then return your left foot to the floor.
3. Repeat for 10 to 15 reps, then switch and repeat with your left foot on the bench.

## **Core Workout 1**

### **Upper Crunch**

1. Lie faceup on a mat, knees bent and feet flat on the mat. Put your hands behind your head, with your arms flat on the mat.
2. Keeping your eyes focused on a point well in front of you, use your abdominals to lift your upper back off the mat. Keep your head, neck, and shoulders flat throughout the movement.
3. Bring your body up as far as you can without having to curl your spine.
4. Lower yourself down without lying back on the mat, then repeat. Perform three sets of 20 to 30 reps.

### **Lower Ab Leg Extensions**

1. Lie faceup on a mat with your arms at your sides, palms down.
2. Bring the upper part of your legs toward your chest, until your knees are pointing straight at the ceiling. Bring the lower part of your legs up until they are parallel with the floor.
3. Move your knees away from you, toward the wall, until you feel your abs engage. Keeping the upper part of your legs in this position, extend the lower legs up until your legs are straight.
4. Lower and repeat. Perform three sets of 20 to 30 reps.

### **Stability Ball Oblique Twists**

1. Sit upright on a medium stability ball, holding a 5-pound medicine ball.
2. Hold the medicine ball straight out in front of you, with your arms locked out.
3. Keeping your feet firmly planted, rotate your upper body from side to side in a slow and steady motion. Make sure your obliques are engaged and that you are just not swinging from side to side.
4. Perform three sets of 40 (doing 20 reps on each side).

### **Hip Extensions**

1. Lie facedown on a bench, with your pelvis at the end of the bench and your feet on the floor.
2. Keeping them straight, lift your legs toward the ceiling as far as you can without hyperextending your back.
3. Lower your feet to the floor, then repeat.
4. Perform three sets of 15 to 20 reps.

## **Core Workout 2**

### **Stability Ball Crunch**

1. Lie on a stability ball, supporting your upper glutes and lower back. Plant your feet firmly on the floor.
2. With your hands behind your head, curl your upper body up and tighten your abdominals.
3. Roll back, then repeat.
4. Perform three sets of 25 to 30 reps.

### **Stability Ball Crunch Hyperextensions**

1. Mount the back extension machine, with your hips on the pad.
2. Slowly lower your upper body, with your head moving toward the floor.
3. Slowly come back up, making sure you stop when your back is flat.  
Do not overextend your back.
4. Perform three sets of 15 reps.

### **Walk Outs**

1. Lie facedown, with the stability ball under your pelvis. Plant your hands firmly on the floor.
2. Once balance is maintained, walk your hands out in front of you, letting the ball roll down your legs until it reaches your ankles.
3. Perform three sets of 15 to 20 reps.

### **Bridge**

1. Lie faceup on the mat, with your legs out straight and your calves resting on the stability ball.
2. Tighten your abs and glutes, lifting your trunk off the floor.
3. Hold a straight position for as long as you can. Relax and repeat.
4. Perform one set of 5 to 10 reps.

# What to Eat

## Eat Like a Runner

You burn a tremendous number of calories when training, but that doesn't mean you can eat whatever you want. Although you can get away with a bad diet from a calorie perspective, it will negatively impact your performance and, more important, your overall health.

Eating according to a schedule is beneficial for everyone but especially runners. Think of your body as a machine and food as the fuel that keeps it running smoothly. You never want the tank to run low. Three meals and three snacks a day is optimal.

## Sample Meal Schedule

7 a.m. Breakfast  
9:30 a.m. Snack  
12 p.m. Lunch  
3 p.m. Snack  
6 p.m. Dinner  
8:30 p.m. Snack

When you're awake, you should never go more than three hours without eating. Regular meals and snacks will speed up your metabolism and trigger your body to release fat. And the bonus for runners is that a steady blood sugar level translates to steady energy.

You may be reluctant to adopt this eating pattern for fear of increasing your daily caloric intake. However, your net caloric intake will probably decrease with this schedule, because you'll be eating less overall. Consistent meals and snacks also encourage you to select the healthiest option, rather than the quickest one.

**Pro Tip:** Strive to eat well, but also make room for cheat days and the foods you enjoy. Everything should be done in moderation.

## Balanced Diet

Choose clean foods that have a balance of carbohydrates, protein, and dietary fiber. Carbs are the body's first choice for energy production, providing steady energy over long periods of time. Protein works to build muscle. Every time you run, you tear muscle fibers, and protein helps repair those tears so that your muscles grow back stronger. Dietary fiber regulates digestion and keeps your heart and skin healthy. It also helps improve blood sugar levels and aids in weight management.

## Superfoods

Quinoa is a grain with added benefits! It's full of quality fiber, amino acids, and low-glycemic carbs. Quinoa is also rich in vitamins and minerals — you couldn't design a better source of nutrition for runners.

Another superfood that's packed with key nutrients for runners: chia seeds. In particular, they contain alpha-linolenic acid, an essential omega-3 fatty acid that helps support the body's normal cardiovascular function.

## **Milk**

Milk is perfect for increasing calcium in your diet. Calcium promotes bone density, which is important for athletes. It also promotes heart health and helps regulate muscle contractions. If you prefer dairy alternatives, try calcium-dense foods such as fortified nondairy milk, tofu made with calcium sulfate, leafy greens, or fortified orange juice.

## **Sugar**

Watch out for hidden sugars, which are in a lot of seemingly healthy foods, especially low-fat foods. Be sure to read product labels and avoid ingredients like high-fructose corn syrup. Yogurt, for example, can contain a lot of high-fructose corn syrup and other unhealthy sugars — so look for Greek yogurt or full-fat yogurts that use pure cane sugar as a sweetener.

## **Gels, Sports Beans, and Chews**

During long runs, you'll need to replenish the carbohydrates that get depleted. There are a variety of gels, sports beans, and chews you can use to efficiently boost your nutrient levels. Take time to find the product that works best for you. Each item will have directions printed on the label, but a good rule of thumb is to refuel every 45 to 60 minutes during long runs.

## **Menu Options**

### **Breakfast**

A healthy grain cereal with dairy or nondairy milk  
Yogurt with granola  
Oatmeal with milk and berries  
Protein shake  
Yogurt and fruit smoothie  
(Supercharge any of the above by adding chia seeds)  
Hard-boiled eggs with toast

### **Lunch**

Fish, chicken, or eggs on a green salad (make it crunchy with plenty of veggies)  
Fish, chicken, or eggs with quinoa and a green leafy vegetable  
Fish, chicken, or eggs in a pasta salad  
Lentil soup with a green salad  
Beans with green salad (supercharge it with tuna)

### **Dinner (includes lunch choices)**

Grilled chicken with a green salad and vegetables  
Brown rice with beans and a green salad  
Turkey burger or roasted chicken with grilled vegetables  
Chicken stir-fry with vegetables and rice  
Baked chicken with a salad and sweet potatoes  
Salmon with brown rice

## **Snacks**

Yogurt

Protein shake

Handful of almonds

Peanut butter on crackers (try natural peanut butter)

Protein bar

Banana or berries

## **Vegetarian and Vegan Options**

If you follow a vegetarian or vegan diet, you have to be vigilant about combining foods that create full amino acid profiles. Mixing quinoa with legumes is the easiest way to do that. Just take the menu options above and replace the meat with legumes and quinoa.

# **Pre-Run and Post-Run Nutrition**

## **Pre-Run Nutrition**

Before a race, you need a good carb source that also has protein. Glycogen enters the bloodstream faster when there is a 4-to-1 ratio of carbohydrates to protein. Have some peanut butter on a bagel or grab a handful of almonds. Fruit with nuts is another good choice. Whatever you eat on race day, make sure you test it during training first.

## **Post-Run Nutrition**

There are three steps to run recovery: rehydrate, replenish, and repair.

Start by rehydrating to replace the electrolytes and other minerals you expended during your workout. It's important to do this as soon as you finish, because if you're dehydrated your body won't be able to fully absorb nutrients. A sports drink or water and pretzels is an excellent way to boost your liquids.

Next, you need to replenish your protein, carbohydrate, and antioxidant levels. Completing this step 20 to 30 minutes after your workout will kick-start muscle recovery and relieve the oxidative stress you just placed on your body. It will also help replace stored glycogen. The easiest thing to do is have a healthy protein shake.

Repair is last. After a long run, people often reward themselves with junk food. However, this is the time to make sure you get quality sustenance. Increase your intake of clean carbohydrates and proteins by choosing foods that are rich in vitamins and minerals. Together, these nutrients will supply your body with the fuel it needs to repair itself, which will help you bounce back for your next workout.

# What to Wear

## Clothing

Your clothing should provide moisture-wicking properties (like the Fred's Team uniform shirts do). It should also be comfortable. Try out several brands and styles to find your ideal outfit.

Be mindful of the weather when choosing your gear. Layers are often the best choice. As fatigue sets in, your body has a harder time regulating its temperature. Even though it might be a little chilly, your body temperature will warm up as you run — so dress accordingly!

If the temperature varies during your race, it's a great idea to wear a long-sleeve shirt over your T-shirt. During the race, if you get hot, you can take off your long-sleeve shirt and tie it around your waist. Even on a warm day, you can catch a chill in the later stages of a run. As you become fatigued and your body has a harder time regulating its temperature, that long-sleeve shirt will become your best friend.

## Running Belt

Every runner should have a running belt to hold liquids, energy gels, etc. A belt can also hold your bib, so that you can keep it visible if you're wearing layers and the temperature varies.

## Running Bras

Running bras will either compress your breasts inward or encapsulate them. If you're larger-breasted, you might have to wear both kinds for proper support. Every body is different, so test what works well for you. Take a few bras into the changing room and jump up and down in each of them. The one that eliminates the most bounce wins. The band should fit slightly tighter than a lingerie bra, but not so tight that it cuts off circulation. Your breasts should be completely held in the cups, and the fabric should be smooth. Wrinkles indicate that the cups are too big.

## Running Shoes

Quality footwear is essential. Visit a specialty running store, so you can try on and choose the best-fitting shoe. Experts there may be able to provide a gait analysis and review your foot type. Once you find the right shoe, stick with it. Even a slight shift in support can throw off your form and cause an injury. Remember, successful running starts with consistency.

**Pro Tip:** Buy two pairs of shoes and alternate them on each run. Even though you'll be spending more money at first, you will save money over time. Moisture speeds up your shoes' breakdown and contributes to their musty smell. Switching between pairs gives them sufficient time to dry out.

## Non-Running Shoes

The shoes you wear when you're not running are as important as the ones you wear when you do. They should have good arch support, sturdy backs or straps, heels of no more than 2 inches, and a soft upper material.

**Sandals** are great for airing out your feet after a long run, but avoid flip-flops. In addition to providing very little cushioning, flip-flops alter your walking biomechanics and can cause your stride to shorten. The reason: The front of your feet don't come up as high in flip-flops, which

causes your heels to hit the ground with less force as your leg swings forward. Your toes also tend to curl a bit to grip the shoe and keep it from slipping off. Together, these changes to your gait lead to overpronation, meaning the foot rolls too far inward and doesn't absorb enough shock.

**Mules and slides** cause similar problems. Any backless footwear creates abnormal walking biomechanics and should be avoided.

**Flats** might be comfortable, but they give absolutely no arch support. Doctors have linked this lack of support to back pain, heel pain, straining of the Achilles tendon, and plantar fasciitis.

**High heels** greater than 2 inches force you into an unnatural posture and stress the knee joints and associated tendons. They also tighten the calf muscles, increasing the chances of Achilles tendonitis or shin splints. The instability of the heel increases the risk of ankle sprains as well. If you must wear high heels, choose the occasion wisely, make sure the shoes have a strap, and limit the amount of time you wear them.

## **Socks**

Moisture-wicking socks are crucial in all weather conditions. Whether you choose thick or thin socks is up to you — just try a few brands and find a comfortable material that feels supportive. Note: Always change out of your socks and shoes as soon as you finish a run, to let your feet breathe.



# Body Maintenance

## Blisters and Chafing

**Nipple chafing:** Cover your nipples with Breathe Right nasal strips. Unlike Band-Aids, these strips are designed to adhere to sweaty skin, so they will do a better job of staying in place during your run.

**Sports bra chafing:** Place surgical tape where the bra band is rubbing against your body.

**Blisters:** Increase your shoes by up to one size. You can also apply A+D diaper rash ointment to the blister area. A+D has thicker viscosity than Vaseline and will last longer than most lubricants.

## Wear Sunscreen

Sunscreen should be part of your daily skin routine and is a must for outdoor runs. Apply SPF 30 or higher sunscreen before training, and don't forget to cover your ears, neck, and ankles.

## Ice Baths

An ice bath is an effective way to speed up your recovery and can be done within a few hours or even a few days of your run. Fill your bathtub with cold water and as much ice as you can. Slowly submerge your lower body into the ice bath. The first couple of minutes will be painful, but your body will adjust. The cold temperature helps immediately bring down muscle inflammation caused by the pounding of running, and it works to flush out built-up lactic acid. You can make yourself a little more comfortable by wearing a hat and sweatshirt and sipping a hot beverage. Soak for 15 to 20 minutes. This bit of icy discomfort is worth the spring it will put back in your step. Turn on the hot water and open the drain. Slowly turn it into a hot bath. Once the water is hot, self-massage your legs.

## Massages

A massage is a great (and relaxing) way to recover. It can help restore function, ease muscle spasms, reduce cramping, increase circulation, correct physical asymmetries, and flush out lactic acid. Massages can be pricey, but as a runner you are asking a lot of your body. Be kind to it.

## Stretching

When you run, the cross fibers in your muscles shorten. Stretching lengthens these fibers, increasing your range of motion. It also improves blood and oxygen circulation, which will expedite muscle recovery. Stretching is extremely important for a runner's body and recovery. After logging so many miles, it's crucial to take the extra time to treat your body right by stretching.

## Yoga

Yoga is very beneficial for runners. There are many styles, but we recommend vinyasa because each session flows through a range of dynamic movements. There are many free resources and classes available online.

## Foot Care

When you're running, your feet absorb more force than any other part of the body. Here are three exercises to add to your routine to keep your feet healthy:

- Self-massage: Roll your foot back and forth on a wooden roller or golf ball. Go gently, since your foot might be very tight.
- Towel grabs: Put a towel on the floor, grab it with your toes, and release. Do this 10 times with each foot.
- Alphabet: Write the letters of the alphabet with your big toes. To increase ankle flexibility, hold the back of your knee and write the alphabet with your whole foot.

## Calluses

As you take on longer distances, you may develop calluses. Don't book a pedicure! Calluses protect your feet from blisters. Time and again we hear about runners getting pedicures and ending up with blisters on their next run because their calluses had been removed.

## Toenails

Keep your toenails as short as comfortably possible. Warning: They may turn blue or even fall off from running. You can prevent this by increasing your shoes by up to one size, but don't go any larger than that. You should also take off your shoes and socks immediately after a run. Changing into open-toed sandals with backs can help you avoid toenail fungi and athlete's foot.

## Sleep

Training for a race is demanding on the body, and your muscles need rest to repair. Be sure to get at least seven to eight hours of sleep every night. You'll reduce your risk of injury and improve your progress. Get into the habit early to ensure that your routines are set in stone by race day.

# Last-Minute Race Tips

## Stick With What Works

As you gear up for race day, focus on consistency. This is not the time to try new running drinks, gels, apparel, or shoes. You'll find the latest gear at every race expo, but resist the temptation to try it out during the final stages of your training. Running shoes with even a slight shift in support, for example, can throw off your form and cause an injury. Keeping the same gear and diet routines that you developed over the past few months will help you avoid getting hurt or ill. You don't want any surprises on the big day.

## Protect Sensitive Areas

Review the "Body Maintenance" section above for tips on how to prevent blisters and chafing.

## Start Slowly

The most common mistake when running a race is starting too fast. Don't let your adrenaline take over when the gun goes off. Ease yourself into the run and work to find a consistent pace. Starting too fast can mean struggling to finish the race.

## Relax

Holding tension in your upper body can zap much-needed energy. Relax your neck and shoulders. Don't clench your fists. Let your body flow as if you are out for an easy run.

## Drink Up

Try not to skip water stations. The time you gain by blowing past them will be lost in the later stages of the race. Even the slightest level of dehydration will significantly decrease your performance level. Don't wait until you're thirsty. By then it will be too late — you'll already be dehydrated.

## Be Safe at the Water Stations

When approaching a water station, aim for one of the end tables. While gradually working your way over, make sure you don't cut off another runner in the process. If you're going to slow down or walk to drink, make sure you move over as far as you can to avoid blocking the other runners.

## Crossing the Finish Line

Congratulations! Running any race is a tremendous achievement. Enjoy every moment, and don't look at your watch when you reach the finish line unless you want a nice photo of the top of your head. Happy running.

# Resources

## Strava

Strava is a social-fitness network. If you haven't already, [join us on Strava](#) and virtually connect with Fred's Team runners from around the world. Open the mobile app, click "Groups," then "Explore Clubs," then search for "Fred's Team" and select the "Request to Join" button. We have runners worldwide, so this is a great way to train along with your teammates wherever you are.

## Books

*Programmed to Run* by Thomas S. Miller is an incredibly useful book for runners of all levels. It covers a wealth of important race topics, from biomechanics to running efficiency.

The cookbooks below are by Elyse Kopecky and New York City Marathon–winner Shalane Flanagan. They provide easy-to-follow recipes for runners, featuring clean foods with balanced carb, protein, and fiber levels.

- *Run Fast. Eat Slow: Nourishing Recipes for Athletes*
- *Run Fast. Cook Fast. Eat Slow: Quick-Fix Recipes for Hangry Athletes*
- *Rise and Run: Recipes, Rituals and Runs to Fuel Your Day*