

#DERBYFESTIVALMINI #DERBYFESTIVALMARATHON 🖪 🖸 🎯

Humana.



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Welcome

Welcome to the 2021 Norton Sports Health Training Manual for the Humana Kentucky Derby Festival miniMarathon and Marathon. Norton Sports Health is the official medical provider and training partner for the races. The purpose of this guide is to help walkers and runners of all levels train safely while enjoying their time preparing for the miniMarathon or Marathon. This year, we recognize that the training program may look a little different. Therefore, many program offerings will be provided virtually. Norton Sports Health is committed to helping you prepare for the race while following CDC guidelines.

Whether you're a beginner or veteran racer, you'll find tips for safe walking and running, injury prevention, cross-training and nutrition; and how to train to reach your full potential. It is important to remain on schedule and keep track of your training during the week.

In addition to this self-guided training manual, we encourage you to take advantage of virtual training offerings from the Norton Sports Health training team. This year we will not have Saturday group runs. Instead, we invite you to join trainer Stephanie Fish Tuesday afternoons for an online community conversation. More information about how to join will be provided in weekly emails and at **NortonTrainingTips.com**.

Before beginning any training program, consult your sports health or primary care physician to ensure you are healthy enough to properly train and complete a race.



April 22 to 25, 2021

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Congratulations on taking your first step on the road to the 2021 Humana Kentucky Derby Festival miniMarathon/Marathon. We are glad you've chosen to train with Norton Sports Health, the official training partner and medical

provider for the event. We want to help you succeed in your running or walking goals, have some fun and, more important, improve your health and fitness along the way.

The Norton Sports Health training team includes athletic trainers, nutritionists, a sports psychologist and surgical and nonsurgical orthopedic specialists — all with experience in training athletes of all ages and levels. We provide specialized care for sports teams and organizations from around the region, including Churchill Downs, Bellarmine University, the Louisville Bats and Jefferson County Public Schools. We also are the official health care provider of the Louisville Cardinals. Of course, we've also helped thousands of individuals just like you achieve their fitness goals, and we are out there pounding the pavement ourselves.

As a part of Norton Healthcare, Norton Sports Health is grounded in a mission to not only care for those who are sick and injured, but to improve the health and wellness of our community. That's why we're here to help you train for the Humana Kentucky Derby Festival miniMarathon/Marathon. Now let's get started.

Steven T. Hester, M.D., MBA Division President, Provider Operations System Chief Medical Officer Norton Healthcare



The Humana Kentucky Derby Festival miniMarathon and Marathon mark the largest day of road racing in Kentucky, and we're excited to have you training to run with us. While the 2021 races will be different, there still will be the same

Derby Festival spirit our participants have come to know and love.

There's no better way to prepare to run 13.1 or 26.2 miles than with the Norton Sports Health Training Program. Over the next 15 weeks, we hope you'll take full advantage of this free program that will be offered virtually this year. It's customized for both walkers and runners at every level.

This year's virtual training regimen will offer week-by-week schedules to keep your mileage on track, along with nutrition, health and safety tips. Whether this is your first race or one of many, this program will help make your race experience safe and successful.

We appreciate your support of the Kentucky Derby Festival and our races. You've made a big commitment to run, and thanks to Norton Sports Health, we're able to help you achieve that goal.

Best of luck in the coming weeks. We'll be cheering you on to the finish!

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Matthew Gibson *President and CEO* Kentucky Derby Festival

About Norton Sports Health

Norton Sports Health, a part of Norton Healthcare, is one of the Louisville area's leading sports-related injury prevention and treatment programs. From professional, collegiate and high school competitors to those who just want to stay fit, Norton Sports Health provides advanced care for athletes and active individuals of all ages. The Norton Sports Health specialists are experts in surgical and nonsurgical treatments and rehabilitation for all types of sports-related injuries. In addition to caring for sports injuries, these specialists are involved in research to gain a better understanding of why athletes become injured. The Norton Sports Health team includes fellowship-trained orthopedic surgeons, nonsurgical orthopedic specialists, neurologists, a sports psychologist, nutritionists and athletic trainers who work together to design customized programs to meet each patient's specific needs.

To learn more about Norton Sports Health or to find a sports health specialist, visit **NortonSportsHealth.com** or call **(502) 629-1234**.

If you experience injuries or concerns

while training, you have access to preferential appointment services with our Norton Sports Health team. To take advantage of this service, call (502) 629-1234 and mention promo code "KDF Training" and our staff will work to get you an appointment with a sports health specialist as soon as possible.

Meet your training team



Robin G. Curry, M.D.

Medical Co-director Kentucky Derby Festival Humana miniMarathon/ Marathon

Dr. Curry currently is a team physician for Bellarmine University, Jefferson County Public Schools and Louisville

Collegiate School, and previously served as a team physician for the University of Louisville. She is an avid runner and serves as medical co-director for Ironman Louisville and the Norton Sports Health training team. Dr. Curry also has served on the board of directors for Girls on the Run Louisville.



Ryan E. Modlinski, M.D.

Medical Co-director Kentucky Derby Festival Humana miniMarathon/ Marathon

Dr. Modlinski is a team physician for the University of Louisville, Bellarmine

University, Spalding University, Jefferson County Public Schools and Kentucky Country Day School. He has served as team physician for many high school and college sports teams, as well as the Atlantic Coast Conference men's and women's basketball tournaments, minor league baseball, semipro football, rugby and the Marine Corps Marathon, among others. Dr. Modlinski has served as medical co-director for Ironman Louisville.



Jeffrey S. Stephenson, M.D. *Medical Co-director* Kentucky Derby Festival

Kentucky Derby Festival Humana miniMarathon/ Marathon

Dr. Stephenson is a team physician for Bellarmine University and Fern Creek

High School. He also has served as team physician for several schools in Cincinnati, Ohio, including Xavier University, and on the medical staff for the Cincinnati Reds and the U.S. Olympic Boxing Team Last Chance Qualifier. Dr. Stephenson serves as medical co-director for Ironman Louisville.



Jennifer M. Brey, M.D. *Pediatric Orthopedics*

Dr. Brey is a board-certified orthopedic surgeon who specializes in pediatric orthopedics at Norton Children's Orthopedics of Louisville. Dr. Brey earned

her medical degree from the University of Louisville School of Medicine and completed an orthopedic surgery residency at Drexel University College of Medicine, Philadelphia, Pennsylvania. Dr. Brey then completed a fellowship in pediatric orthopedic surgery at the Campbell Clinic in Memphis, Tennessee.

Dr. Brey works closely with therapists, trainers and coaches to reduce sports injuries among children and adolescents. Her research interests include fracture management and pediatric overuse injuries. She is a member of U.S. Masters Swimming and USA Triathlon.



Samuel Carter, M.D.

Orthopedics and Sports Medicine Norton Orthopedic Institute

Dr. Carter is an orthopedic surgeon who specializes in sports medicine and arthroscopic surgery.

Dr. Carter is a team physician for the University of Louisville, Male High School and Bellarmine University. He earned his bachelor's degree and medical degree from the University of Louisville. He also completed his residency training in orthopedic surgery at the University of Louisville. He then completed a fellowship in sports medicine and arthroscopy at Orthopedic Research of Virginia in Richmond.

Dr. Carter believes in a patient-centered approach to orthopedic care. He maintains relationships with other physicians, physical therapists and athletic trainers so that he can provide a team approach to care.



Stephanie Fish *Marathon Trainer* Norton Sports Health

Stephanie Fish began her endurance adventures in 1999 while a student at the University of South Carolina, where she served as the school's mascot, "Cocky."

The rigors of being a college mascot motivated her to increase her stamina and athleticism, which led to her running her first 10K race. Since then, Stephanie has completed many long-distance road and trail races and multiple triathlons, including Ironman Louisville. She is a leader of Derby City Run Club and coaches high school cross-country.

Stephanie was a race ambassador for the Kentucky Derby Festival miniMarathon/ Marathon in 2016, and an official pacer for the miniMarathon in 2017. She is a certified yoga instructor, certified health coach and avid dog lover. Stephanie also serves as an event coordinator for Norton Sports Health and the Norton Healthcare Foundation, and is a Louisville Landsharks Multisport Club board member.



Andrew R. Harston, M.D. Orthopedic Surgeon, Foot and Ankle Specialist Norton Orthopedic Institute

Dr. Harston is an orthopedic surgeon who specializes in foot and ankle surgery. He earned his medical

degree from the University of Louisville School of Medicine, where he also completed his residency training. He completed a foot and ankle fellowship at Duke University in Durham, North Carolina.

Dr. Harston is originally from Charlotte, North Carolina, but after meeting a Kentucky girl at Wake Forest University during his undergraduate years, he moved to Louisville and has been here ever since.



Ryan J. Krupp, M.D. Director, Sports Health and Shoulder Reconstruction Norton Healthcare

Dr. Krupp is an orthopedic surgeon with Norton Orthopedic Institute and director of sports health

and the shoulder reconstruction program for Norton Healthcare. He specializes in sports medicine for adults and children, as well as complex shoulder reconstruction. He earned his medical degree from the University of Louisville School of Medicine, where he also completed his residency training. Dr. Krupp completed a fellowship in sports medicine and shoulder reconstruction at the Steadman Hawkins Clinic of the Carolinas in Spartanburg, South Carolina.

As director of sports health, Dr. Krupp leads Norton Healthcare initiatives to improve the care of athletes in Louisville and surrounding areas with programs such as injury prevention education, clinical research, Saturday Sports Injury Clinics, certified athletic trainer education, athletic event coverage and community partnerships. Dr. Krupp currently serves as the head team physician for numerous local athletic programs, including Eastern High School, Kentucky Country Day School, University of Louisville, Spalding University and Bellarmine University.



Elliot Mattingly, P.T., DPT, OCS

Physical Therapist

Elliot Mattingly is clinic co-director for Kentucky Orthopedic Rehab Team (KORT) in Bardstown, Kentucky. He earned his

doctorate in physical therapy from Bellarmine University in Louisville and completed a residency with Select Medical Orthopaedic, in Louisville. Elliot is a board-certified orthopedic specialist.

Elliot is an avid runner and triathlete, completing over 25 half-marathons and finishing Ironman Louisville in 2016. He enjoys treating runners and helping them reach their goals. In his free time, Elliot likes to travel and spend time outdoors with his wife, Amanda, and dogs, Erasmus and Alastor.

Safe training tips

Running injuries are common, but they don't have to be. Reduce your risk by following these guidelines to maximize your safety.

Before you begin the program

- Always consult with your physician before beginning any new exercise routine.
- Develop a running/walking plan and strategy that is compatible with your goal and your current level of fitness.
- Set safe, achievable goals and advance slowly and cautiously.

What to wear

Shoes

A local running or sports shoe store is a good place to help you find the right shoes. These specialty stores have educated staff who can evaluate your feet and running patterns to help find the best shoe for you. Also keep these tips in mind:

- Buy shoes at the end of the day. Your foot expands throughout the day, so you will want to try on shoes when your foot is the largest.
- Orthotic shoe inserts can be valuable for people with flat feet, high-arched feet, unstable ankles or foot conditions.
- Sixty percent of a shoe's shock absorption is lost after 250 to 500 miles of use, so people who run up to 10 miles per week should consider replacing their shoes every 9 to 12 months.

Clothing

- Wear lightweight, breathable clothing, which will prevent perspiration buildup and allow for better body heat regulation.
- Dress in layers. The inner layer should be material that draws perspiration away from the skin (polypropylene, thermal); the middle layer (not necessary for legs) should be for insulation and absorbing moisture (cotton); the outer layer should protect against wind and moisture (nylon).
- To avoid frostbite in cold weather, do not have gaps of bare skin between gloves and jacket, wear a hat and cover your neck.

Keeping your skin safe

- Always wear sunscreen with SPF 15 or higher when training outdoors, regardless of time of year.
- In cold weather, protect exposed areas, such as the nose, with petroleum jelly.

Before you train

- Drink 14 to 20 ounces of water two to three hours before your run to ensure you're hydrated. You should be drinking water throughout the day.
- Start with easy walking or jogging to warm your muscles and increase your blood flow. This will optimize your transition from rest to running, which can help improve your performance. Walk easy for one minute, then walk briskly (on the edge of running) for one to two minutes before you start to run.
- Increase your speed slowly.

During your training

- In cool weather, you are less likely to get chilled if you run/walk into the wind when you start and run/walk with the wind at the finish.
- Use extra caution if you run/walk when it's dark outside. Wear reflective material, stay in well-lit areas and, if possible, run with a friend.
- Whenever possible, run/walk on a clear, smooth, resilient, even and reasonably soft surface.
- Run/walk with a partner when possible. If alone, carry identification.
- Avoid using headphones, especially if you are running/walking on the street, so you can hear traffic and warning sounds.
- Stop training if you are hurt; pushing through pain can make an injury worse, which will keep you from training for a long time.

After you train

- It's important to cool down after your run. Walk to help prevent tight muscles and injuries.
- You can lose between 6 and 12 ounces of fluid for every 20 minutes of running. Drink 10 to 15 ounces of fluid every 20 to 30 minutes along your route. Weigh yourself before and after a run. For every pound lost, drink 16 ounces of fluid.
- Inspect your shoes periodically during training; if they have worn thin or are angled, purchase new shoes before your next run/walk.



Preventing and treating running injuries

There are four periods of time when runners are most vulnerable to injury:

- During the initial four to six months of running
- Upon returning to running after an injury
- When the quantity of running is increased (distance)
- When the quality of running is increased (speed)

Most running injuries are caused by recurring factors that runners can often prevent or avoid. Improper training is the most common source of injury, particularly inadequate warmup, rapid changes in mileage, a sudden increase in hill training and insufficient rest between training sessions.

Signs of a running injury

Signs that you may be injured or need to alter or stop your running:

- Pain or discomfort while running
- Pain at rest
- Inability to sleep
- Limping
- Shortness of breath after little exertion
- Stiffness
- Headaches during or after running
- Dizziness or lightheaded feeling any time

Common running injuries and treatment

If you experience an injury, it is important to work with a sports medicine specialist to determine what caused the injury and follow the proper course to prevent it from recurring. Use the down time to get refreshed mentally, strengthen your major muscle groups and come back stronger than before the injury. Some of the most common running injuries are:

• Shin splints - The term *shin splints* describes pain felt along the inner edge of your shin bone. Shin splint pain concentrates in the lower leg between the knee and ankle. A primary cause of shin splints is a sudden increase in the distance or intensity of a workout schedule. This increase in muscle work can be associated with inflammation of the lower leg muscles.

In most cases, you can treat shin splints simply by resting and avoiding activities that cause pain, swelling or discomfort. You do not have to give up all physical activity. While you're healing, try lowimpact exercises such as swimming, bicycling or water running. You also can try compression socks or sleeves.

 Stress fractures - Stress fractures can be caused by overtraining, inadequate calcium in the body and/or by a basic biomechanical flaw in the runner's gait. Common stress fractures in runners occur in the tibia, femur and metatarsal bones in the foot. Stress fracture treatment means no running to allow the bone to heal. You should consult a physician. You may be able to cross-train prior to your return to running. Swimming, deep-water running and biking are all excellent alternatives for most people. Apply ice packs to the affected area for 15 to 20 minutes at a time, two to four times a day for several days. To protect your skin, wrap the ice packs in a thin towel.

To reduce pain, try an over-the-counter pain reliever such as ibuprofen (Advil, Motrin IB and others), naproxen sodium (Aleve) or acetaminophen (Tylenol and others). Return to your usual activities slowly.

 Achilles tendinitis – Achilles tendinitis is an inflammation of the Achilles tendon that usually occurs either due to repetitive stress or from a runner pushing to do too much too fast. If you start experiencing pain in your Achilles tendon, stop running. Take aspirin or ibuprofen and ice the area for 15 to 20 minutes several times a day until the inflammation subsides. Icing and massaging your calf also can help.

Light stretching of the calf muscles and alternative exercises, including swimming, pool running and bicycling, can help. Gradually return to running once the pain subsides. It can take several weeks to heal.

If the injury doesn't respond to selftreatment in two weeks, see a sports medicine professional.

Plantar fasciitis - Plantar fasciitis is the most common cause of heel pain. The plantar fascia is the thick tissue on the bottom of the foot. It connects the heel bone to the toes and creates the arch of the foot. If you strain your plantar fascia and the tissue becomes swollen or inflamed, it is called *plantar fasciitis*. It causes your heel or the bottom of your foot to hurt when you stand or walk, especially first thing in the morning. You may be prone to plantar fasciitis if your feet roll inward too much when you walk, known as excessive pronation; if you have high arches or flat feet; if you walk, stand or run for long periods of time, especially on hard surfaces; if your shoes don't fit well or are worn out; or if you have tight Achilles tendons or calf muscles.

To prevent plantar fasciitis, run on soft surfaces when you can and keep mileage increases during your training to less than 10 percent per week. It's important to go to a specialty running store to ensure you're wearing the right shoes for your foot type and gait. It's also important to stretch the plantar fascia and Achilles tendon.

At the first sign of soreness, massage (roll a golf or tennis ball under your foot) and apply ice (roll a frozen bottle of water under your foot). You'll usually experience pain in just one foot, but massage and stretch both feet. Do it first thing in the morning and three times during the day. What you wear on your feet when you're not running makes a difference too. Arch support is key, and walking barefoot or in flimsy shoes can delay recovery.

If pain continues for more than three weeks, see a sports medicine specialist.

• IT band syndrome – Iliotibial band syndrome, or IT band syndrome, is an overuse injury common in runners. It affects tissue that runs from the side of your hip down past your knee. Most of the time the inflammation causes pain on the outside of the knee. It can be quite painful and stubborn to heal. IT band syndrome is most often caused by overuse but also flares up as a result of tight tissue, weak hip muscles, poor running form or worn shoes.

Here are some steps you can take to get back on the road: Stop running. Running will only increase IT band pain. A good rule of thumb: If it hurts to run, don't run. You can, however, cross-train with nonimpact exercising, such as cycling or pool running, to maintain fitness, keep blood flowing and help speed recovery. Start slow and make sure the exercise does not cause pain to your IT band. In many cases, massaging the injured area with a foam roller or a tennis ball will help to work out tightness. Finally, work to strengthen the gluteus and hip muscles, which can be the underlying cause of IT band issues.

- Strains and sprains Strains happen when you stretch or tear a muscle or tendon – the fibrous tissue that attaches muscle to the bone. Sprains occur when you stretch or tear a ligament that supports a joint. Both can be caused by repetitive activity or by a single injury. Both injuries are often best treated using RICE protocol: rest, ice, compression and elevation.
- Dizziness, fatigue and nausea These are usually caused by improper hydration, not taking in enough calories or not replacing the sodium your body eliminates when you sweat.

One of the most important things you can do before a run is to eat a nutritious meal. Not eating properly before running will cause low blood sugar, which causes nausea and a general feeling of weakness. Eat a bowl of cereal, sandwich or fruit to properly fuel your body before a run.

Dehvdration also contributes to dizziness or nausea when running. Try to drink at least 8 ounces of water at least two hours before you run to hydrate the body in preparation. Why is water so important? It keeps the lung tissue moist, and breathing heavily causes water to be expelled from the lungs. The body uses water to keep you cool through sweating; because of heat produced from muscle activity, sweat is critical in keeping the body from overheating. Water plays another important role in helping your muscles operate and keeps muscle cells hydrated. Not drinking enough water can lead to fatigue.

Fatigue and nausea during a run also can be caused by pushing yourself too hard. The best way to run is relaxed. If you're clenching your teeth or tensing your shoulders and your arms are tight, stop the run and take a few deep breaths to relax yourself.

If your symptoms continue to occur even with proper hydration and relaxation, talk to your primary care provider.

RICE for minor injuries

Mild injuries, such as most sprains and strains, can be treated using the RICE protocol:

- **Rest** Stop running and do not return while symptoms persist. When you do return, gradually ease in, increasing distance by no more than 10 percent per week.
- Ice for 20 minutes at a time several times a day until swelling subsides.
- **Compression** dressings, such as ACE wraps, may help.
- **Elevate** injured area above your heart when possible to reduce swelling.

Over-the-counter nonsteroidal antiinflammatory medications can be used as directed to help relieve pain and reduce swelling.

Cold versus heat for treating injuries:

- Use ice during the acute stages of an injury (typically the first 48 hours).
- Ice is good after a workout.
- Heat can be used once the acute stages of an injury are over.
- Heat is good for tight muscles.
- Heat is good before a workout.
- You can alternate between ice and heat throughout the day.

For more serious injuries, it is important to see your physician in order to properly evaluate and diagnose your injury. Your physician will discuss treatment options with you at that time.

Cross-train and rest to be a better runner/walker

You can improve your performance by balancing runs/walks with cross-training and rest days. Cross-training with low-impact activities is a great way to prevent injuries. A cross-training session should last between 30 and 90 minutes and should be done at a moderate level or pace. Below are a few examples of cross-training activities. We recommend trying each of them.

Cycling or spinning

Cycling is one of the best cross-training activities for runners/walkers. Cycling builds your aerobic/cardiovascular endurance while maintaining range of motion in your muscles. It allows leg muscles to contract and increases blood flow, helping flush out any toxins that may have caused running fatigue. Cycling is low impact; and if the weather does not allow you to go outside, it can be done at your local gym or at home on a stationary trainer. Spinning is a more vigorous workout using stationary bikes and is available at most gyms.

Yoga

There are a variety of reasons to add yoga to a cross-training routine. Yoga helps loosen tight, contracted muscles, making it the ideal counterpart to the repetitive strains of running/walking. Yoga is a low-impact mind and body workout; it helps relieve tension, reduces stress and promotes balance. If you're looking for a workout to rejuvenate your exercise program and motivate you from the inside out, yoga might be right for you.

Swimming

Swimming is an excellent cross-training activity because it is a nonweight-bearing exercise. Swimming allows your joints to recover and muscles to contract and release soreness. It also allows you to build strength and endurance, and improve flexibility. Swimming is a great balance for running/walking because you'll work predominantly your upper body while giving your leg muscles a break. Swimming is especially recommended for people who are prone to running injuries or are recovering from an injury. With the help of a simple pool float, you can take your legs completely out of the equation and get a great cardiovascular workout.

Elliptical machine

The elliptical machine is a total-body cardiovascular workout and a great option for cross-training. The oval-like range of motion provides the feel of cross-country skiing, stair climbing or walking with no or little impact on your joints. Because the muscles used during elliptical training are similar to those used during running, the machine is a good low-impact cross-training option when an injury prevents you from running or you just need a change-up in your routine.

Interval training

Once you have established a base of longdistance running, add interval training to complete your program for improved racing fitness. Interval training refers to workouts in which you run hard for certain distances or times repeatedly with intervals of rest between.

Three main reasons to add interval training to your routine:

- Intervals are used to increase anaerobic threshold levels. By repeating sustained hard efforts, you will improve your ability to run hard without going into oxygen debt.
- Interval training also increases your endurance, allowing you to continue at a certain pace for an extended period of time.
- Interval training builds muscle strength. During typical distance running exercises, your leg muscles move in a certain range of motion. By running at faster speeds, you exercise all of your leg muscles, improving flexibility and muscle performance in races. This makes running at your race pace easier and improves your speed for sprint finishes.

The importance of rest days

Training for race day is hard work, mentally and physically. We all need a day off and here's why:

- When you exercise, you put strain on your muscles, tendons, ligaments, bones and joints. If your body doesn't get a break from continual work, it doesn't have time to repair. Rest days give your body the time it needs to recuperate.
- Not taking rest days increases your risk for injury. Running puts stress on your joints and lower extremities. When you don't take a day off here and there, tight calf muscles or tendons in the feet can lead to shin splints, muscle tears, overuse injuries and more.
- What you do on rest days depends on how fit you are. If you're training for your first race, your rest day should be no exercise at all. A more seasoned athlete can do some light exercise on a rest day.

Nutrition also is an important consideration with rest days. Cut down on carbohydrates on days when you do light or no exercise. Stick to your nutrition plan, but make it a light day. This will be different for everyone, so listen to your body. Remember to eat well, eat right, eat on time and drink plenty of water.

Use your day of rest to reflect on the progress you've made and celebrate your dedication.

Stretching: How and when

While there has been discussion in recent years about the value of stretching, the combination of dynamic and static stretching, when done properly, can help increase flexibility, improve performance and reduce the risk of injury.

Dynamic stretching

Dynamic stretching should be done as part of your warmup, before running or other exercise. It involves repetitive movement and should mimic what your body does during exercise. Dynamic stretching helps your muscles become more elastic and relaxed, and prepares your joints for movement. This increases range of motion and flexibility, reducing chances of injury.

Foam rollers

Foam rollers can be a valuable part of your warmup and cooldown. Using a foam roller improves circulation, which gets your body ready for a workout and helps it recover afterward. They are designed to help relieve overworked muscles through soft-tissue therapy, or myofascial release, providing the same type of benefits as deep-tissue massage. Rolling helps prevent injury and improve performance through increased flexibility and decreased muscle tension. Rolling also breaks down knots that can limit your range of motion and gets muscles ready to stretch.

Static stretching

Static stretches are designed for flexibility and to help you cool down after exercising when you are standing still. These are best done after your run or other workout. With static stretches, focus on relaxing the part of the body you are stretching and letting the stretch go further on its own. Holding the position without bouncing or forcing the stretch for 30 to 60 seconds can help increase flexibility in the tissue. Examples include

guadriceps, hamstring and Achilles stretches.





Tips for making your training more fun

Hitting the pavement for a training run can get mundane. You can fall into a rut doing the same thing and running in the same places. Here are some tips to shake it up a bit and have a little fun:

- Run with a partner, or train with Norton Sports Health! Fast or slow, most everyone likes company on their runs — especially the long ones. The miles go faster when you have someone to chat with or share a laugh along the way.
- Have a four-legged friend that needs some exercise? Bring your dog on your run. Be sure your dog is fit enough for your route and that there's a place along the way to stop for a drink of water. You both need to stay hydrated.
- Make a new playlist. Music can help motivate you through the tougher miles, plus who doesn't like to play "air drums" while running? Remember, if you are in a high-traffic area or running with a partner, keep the volume low or use only one earbud so you can hear your surroundings.
- Instead of music, listen to a podcast or an audiobook when your playlist starts getting stale.
- Change up your pace during your run. Open up your stride for a block and then bring it back for the next block. You'll cover ground a bit faster, too.
- Leave your watch at home. Just run. You might concentrate a bit more on how your body is feeling and you might enjoy the scenery rather than checking on your distance and pace.
- Want to spend time with a friend who doesn't run? Have them ride a bike to keep you company. Better yet, have them bring along a backpack with your nutrition and hydration needs.

- Run somewhere new. Go to another part of town. Run through a park you've only read about. Remember to be smart by mapping your route and taking safety precautions.
- Take a "selfie" every few miles and then post your best poses when you're done. It's OK to let folks know about your progress.
- High-fives for everyone! Make it a mission to high-five at least five strangers on your run. You'll make someone smile and it will help take your mind off your miles.

Have ideas of your own? Share them at **NortonTrainingTips.com** or use hashtag **#SeeNortonRun**.



Fueling for the race

Proper nutrition is a key component in achieving optimal athletic performance - not just for race day, but every day. It is always important to maintain a healthy, balanced diet, but it is especially important now that you're in training. Just as a car needs fuel to run, so do our bodies. If you've ever felt like you're "running on empty," it could mean you have not fueled your body with the proper nutrition. By including the right amount of carbohydrates, proteins and fats into your diet, as well as essential vitamins and minerals, you can make the most out of your fitness routine and training by allowing your body to produce energy most efficiently for peak performance and endurance.

Carbohydrates

Carbohydrates are a crucial fuel source. The sugars and starches found in carbohydrates are the building blocks your body uses to produce energy. They are the most important source of quick and long-lasting energy. Carbohydrates should make up about 60% to 65% of your daily calories.

Good sources of carbohydrates include wholegrain bread, bagels, pasta, rice and cereal. Fruits and vegetables are another great source of carbohydrates, with the added benefit of potassium, vitamin C and many other vitamins and minerals. Vitamins and minerals can help you use food more efficiently for fuel, as well as keep your immune system strong to protect you from illness.

Proteins

Proteins are used to rebuild and repair damaged muscle tissue that may develop during training. Protein should make up 15% to 20% of your daily calorie intake. Good sources of protein include poultry, fish, lean beef, peanut butter, beans and tofu. Dairy products also are a great source of protein, as well as carbohydrates. Top choices are low- or nonfat milk and yogurt, and low-fat cheese.

Fats

Fats are needed as an alternative energy source, and they perform other functions. However, too much fat can lead to health complications, including heart disease and obesity. For this reason, your fat intake should be limited to 20% to 25% of your daily calories. Choose foods that are low in saturated fat, such as canola and olive oil, nuts and avocados.

Hydration

Drinking adequate amounts of fluid is vital for proper athletic performance. Drink at least 8 to 10 8-ounce glasses of fluid daily, regardless of your workout plans. Choose water most often unless you are exercising for 60 minutes or longer. For those longer workouts, choose a sports drink with electrolytes.



Basic fueling guidelines

Before exercise

- Drink 14 to 20 ounces of water or a sports drink two to three hours before your run to ensure you're hydrated.
- Drink 8 ounces just prior to your workout or run, especially if it's hot or humid.
- Check the color of your urine it should be light yellow. If it is dark, you need to drink more.
- Two to four hours before your run, have a snack or light meal (400 to 800 calories):
 - High carbohydrate, moderate protein, low fat, low fiber
 - Good snacks are a smoothie, peanut butter and honey toast, oatmeal with fruit and almonds, low-fat cottage cheese, or crackers and fruit
- One hour before your run, have a light snack, such as an energy bar or fruit (30 to 60 g carbohydrates). For an early morning workout, eat something smaller, such as half an energy bar or a sports drink.

During exercise

- Hydrating: Drink regularly during exercise to replace fluids lost through sweat.
 Weigh yourself before and after a run to determine fluid loss, replacing 16 ounces of fluid for every pound lost.
- Eating: If your workout will be shorter than 60 to 90 minutes, there is no need to take along a snack. When workouts or distance runs increase to 90 minutes or longer, 200 to 300 calories should be consumed for every hour of exercise. Sports bars, gels, drinks and fruit are ideal.

After exercising

 Fifteen to 30 minutes after exercising, consume carbohydrates, protein and 16 ounces of fluid for every pound lost, for example, 8 to 16 ounces low-fat chocolate milk, a smoothie with yogurt and berries, or a sports drink and sports bar.

Repeat two hours after exercising.

Race day

- Eat a carbohydrate-rich meal one to four hours before the race, such as toast, bagel or English muffin with jam or jelly, cereal, fruit, low-fat yogurt, sports bar, fruit juice and skim milk.
- Avoid high-fiber and high-fat foods on race day, as they may cause abdominal cramping. Don't try any new foods, sports bars or gels on race day.

Sample meal plan for training

Breakfast: Bagel or two slices of toast with 2 tablespoons peanut butter, fruit, 8 ounces of milk or 1 cup of yogurt

Snack: 1 to 2 ounces of cheese with six to eight crackers

Lunch: Turkey sandwich (3 ounces turkey, two slices whole-wheat bread or bun, lettuce, tomato), pretzels and side salad

Before working out: Energy bar (200 to 250 calories), peanut butter and honey on toast or bagel, cereal with milk or fruit. For a long run, eat a larger snack/meal, such as a sandwich with lean meat, hummus or peanut butter, an energy bar and 8 ounces juice or a turkey burger with lettuce, tomato, side salad and yogurt parfait

After working out: 2 cups low-fat chocolate milk

Supper: 3 to 4 ounces of lean meat (fish, chicken, lean beef or pork), 1 to 2 cups cooked pasta with marinara sauce or olive oil, 1 cup cooked vegetables or 2 cups of salad

Snack: Two to three fig bars with 8 ounces of low-fat yogurt

Sample meal for night before the race

- Grilled or baked chicken breast
- Brown rice or baked potato
- Salad or cooked carrots
- Dinner roll
- Banana pudding or banana with peanut butter

Training for the miniMarathon

This guide provides an interval training method for runners/walkers and training methods for walkers (level 1) and runners (level 2). To determine your training level, read through each level's description and choose the one that best matches your fitness aptitude and goals.

Run/walk interval

Whether this is your first attempt at a longdistance race or you are a veteran marathoner, the run/walk interval method of completing a race can work for you. Any of the training plans in this program can be done with the run/walk method.

It works like this: Set a time interval to run and follow it with a set time interval of walking. For example, you may start with a 1-minute run segment followed by a 1-minute walk segment. Repeat that pattern throughout the entire training run or race.

This method is meant to be used from the start of your training. If you run as much as you can and then start to use the run/walk method, it isn't effective. The idea of walking early in a race when you are feeling fresh may be difficult to conceive, but if you do it, the payoff is great.

Run/walk is meant to help you keep a consistent pace throughout the course of the entire event. The walk intervals give you an opportunity for recovery, which helps keep pace consistent and lowers the risk for injury. As you train, you may find that your run segment can be lengthened. Play around with what works for you. Find an interval that will remain consistent throughout your run. For example, you may choose to run 4 minutes and walk 1 minute. But if you find that your pace steadily slows as the miles increase, you may want to back off to a 3-minute run/ 1-minute walk pattern. Walk intervals generally should not be longer than 1 minute and can be as short as 15 seconds. They should not be considered "strolls." Try to maintain a brisk pace that keeps your momentum going but allows you to recover a bit and keep your breathing even.

If you are going to use this method for the mini or full marathon, you have to commit to using it throughout your training and the event. It takes practice to pace yourself through the intervals.

A digital or GPS watch that can set interval alerts can be helpful when using the run/walk interval method. When you hear the beep or feel the vibration on the watch, change intervals.

Now that you know how the run/walk interval method works, choose your level (1 or 2) based on your fitness goals. Follow your level's weekly schedule using the interval method in place of running.

For more information and tips on the run/walk interval technique, visit **JeffGalloway.com**.

Level 1

This is the beginning level for first-time runners/walkers. You should be able to run or walk 2 to 3 miles three times per week.

- Includes three to five days of running/ walking per week
- Weekly training schedule: one long run/ walk plus two to four days of easy running or cross-training
- Maximum weekly mileage: 20 to 25 miles

Pace: If you're new to running, it is important to pace yourself. Don't be too concerned with speed — run at a pace that is comfortable for you. If you're running with a friend, you should be able to carry on a conversation with ease.

Distance: The best way to work up to running long distances is to start out small. Begin your training by running 1 to 3 miles and gradually increasing your distance over time. During a 12-week period, you should be able to go from running 3 miles to 10 miles or more.

Rest: Don't neglect rest! It is an important aspect of your training routine. Allow your body to rest and rejuvenate, and you will find it becomes increasingly easier to run longer distances.

Long runs: Long runs are the key to completing any marathon. Start out small and progressively increase your distance each week.

Cross-training: Cross-training allows you to recover after your long runs by using slightly different muscle movements during your workout. Swimming, cycling, walking and strength training are excellent cross-training exercises. Workouts that require sideways movement, such as basketball or tennis, may not be a good cross-training activities, because you run a greater risk of injury.

Walking: If you feel tired or need a break while running, feel free to walk. Catch your breath, regain your energy and begin running again when you feel ready. There's no shame in walking part, or even all, of a marathon!

Racing: Participating in a 5K or 10K race during your training may help you gauge your pace and predict your finish time, especially if you've never run in a race before.

Level 2

For individuals who can run 3 miles or more three to four times per week. This is a good level for those who have competed in a few 5K or 10K races and are performance driven.

- Includes four to seven days of running per week
- Weekly training schedule: one long run, one interval workout, plus two to five days of easy running or cross-training
- Maximum weekly mileage: 25 to 30 miles

Warmup: It's always important that you warm up before any fast run to prevent injury.

Distance: Start out running shorter distances and work your way up to running longer distances. Over a period of 11 weeks, your run should increase from 5 miles to 12 miles.

Rest: Rest is an important aspect of your training. If you feel excessively fatigued, especially during the last couple weeks of training, take an extra day off to recuperate.

Long runs: As an intermediate runner, you should be able to increase your longest run from 5 miles to 12 miles over 15 weeks. The last week is the 13.1 mile race itself.

Walking: Walk if you begin to feel tired or fatigued. During the race, it's usually a good idea to walk through the fluid stations to give yourself a chance to rest and rehydrate.

Racing: It's not a necessity to participate in a premarathon race, but if you enjoy racing, try to participate in one every third week leading up to the marathon. Participating in these races will allow you to test your fitness level and predict your finish time.

Speed/interval work: In order to run at a fast pace, it's necessary to train at a fast pace. Try alternating interval running (five to 10 400-meter sprints, for example, separated by walking or jogging) to work up to your desired speed.

Pace: Pace runs are designed to get you used to running the pace at which you expect to run the marathon. Try to include some pace runs into your workout, particularly toward the end of your training.

miniMarathon training quick plan

The Norton Sports Health program combines cross-training, mileage and rest and in a 15-week training plan designed to help you adapt to the physical demands a mini-marathon places on your body. Use this quick plan as a visual guide to check off your progress.

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
WEEK 1			Virtual kickoff	1m	2m	Rest	2m/3m
WEEK 2	Rest	XT	2m*	2m/3m**	2m	Rest/2m	3m
WEEK 3	Rest	ХТ	2m*	3m**	2m/3m	Rest/2m	3m/4m

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
WEEK 4	Rest	XT	3m*	3m/4m**	3m	Rest/2m	5m
WEEK 5	Rest	XT	3m*	3m**	3m/4m	Rest/2m	6m
WEEK 6	Rest	XT	3m*	3m**	3m/4m	Rest/2m	7m
WEEK 7	Rest	ХТ	3m*	3m/4m**	3m	Rest/2m	7m/8m

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
WEEK 8	Rest	XT	4m*	3m**	3m	Rest/2m	8m/9m
WEEK 9	Rest	XT	4m*	4m/5m**	3m	Rest/2m	8m
WEEK 10	Rest	ХТ	4m*	4m**	3m	Rest/2m	9m/10m
WEEK 11	Rest	XT	4m*	3m/4m**	3m	Rest/2m	10m/11m

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
WEEK 12	Rest	XT	3m*	4m/5m**	3m	Rest	8m
WEEK 13	Rest	XT	3m*	3m/4m**	3m	Rest/2m	12m
WEEK 14	Rest	XT	3m*	3m/4m**	3m	Rest	8m
WEEK 15	Rest	ХТ	3m*	2m**	2m	Rest/1m	Race

XT = Cross-train m = Miles; Level 1/Level 2

*Virtual Tuesday Talk at noon

**Tempo: 30-40 seconds/mile slower than your goal race pace/mile

KNOW before you go

Go to NortonTrainingTips.com to sign up for emails about training tips and announcements.*

Updates also will be listed on **NortonTrainingTips.com** and the Kentucky Derby Festival Marathon's Facebook page.

*Text alerts also available for a fee.



Training for the full marathon

This guide provides an interval training method for runners/walkers and training methods for walkers (level 1) and runners (level 2). To determine your training level, read through each level's description and choose the one that best matches your fitness aptitude and goals.

Run/walk interval

Whether this is your first attempt at a longdistance race or you are a veteran marathoner, the run/walk interval method of completing a race can work for you. Any of the training plans in this program can be done with the run/walk method.

It works like this: Set a time interval to run and follow it with a set time interval of walking. For example, you may start with a 1-minute run segment followed by a 1-minute walk segment. Repeat that pattern throughout the entire training run or race.

This method is meant to be used from the start of your training. If you run as much as you can and then start to use the run/walk method, it isn't effective. The idea of walking early on in a race when you are feeling fresh may be difficult to conceive, but if you do it, the payoff is great.

Run/walk is meant to help you keep a consistent pace throughout the course of the entire event. The walk intervals give you an opportunity for recovery, which helps keep pace consistent and lowers the risk for injury.

As you train, you may find that your run segment can be lengthened. Play around with what works for you. Find an interval that will remain consistent throughout your run. For example, you may choose to run 4 minutes and walk 1 minute. But if you find that your pace steadily slows as the miles increase, you may want to back off to a 3-minute run/ 1-minute walk pattern. Walk intervals generally should not be longer than 1 minute and can be as short as 15 seconds. They should not be considered "strolls." Try to maintain a brisk pace that keeps your momentum going but allows you to recover a bit and keep your breathing even.

If you are going to use this method for the mini or full marathon, you have to commit to using it throughout your training and the event. It takes practice to pace yourself through the intervals.

A digital or GPS watch that can set interval alerts can be helpful when using the run/walk interval method. When you hear the beep or feel the vibration on the watch, change intervals.

Now that you know how the run/walk interval method works, choose your level (1 or 2) based on your fitness goals. Follow your level's weekly schedule using the interval method in place of running.

For more information and tips on the run/walk interval technique, visit **JeffGalloway.com**.

Level 1

This is the beginning level for runners/walkers capable of running 3 miles three to four times per week. This level is best if you have previously competed in a few 5K or 10K races.

- Includes three to five days of walking/ running per week
- Weekly training schedule: one long walk/ run plus two to four days of easy running or cross-training
- Maximum weekly mileage: 35 to 40 miles

Long runs: When training for a full marathon, your long run should build from 6 miles in your first week to 20 miles by week 12. Every third week, however, you should reduce your mileage slightly to regain strength for the upcoming week's long run. Additionally, these runs should be at a comfortable, conversational pace. Consistency is important, so don't skip out on the long runs.

Walking: If you feel tired or need a break, feel free to walk. Catch your breath, regain your energy and begin running again when you feel ready. Walking part, or even all, of a marathon is perfectly acceptable!

Cross-training: Cross-training allows you to recover after your long runs by using slightly different muscle movements during your workout. Swimming, cycling, walking and strength training are excellent cross-training exercises. It's best to cross-train the day after your long run to rest your muscles.

Midweek training: As your mileage builds each week, so does your midweek long run. These runs should also been done at an easy, relaxed pace.

Racing: Participating in a race leading up to the marathon will give you an idea of what the marathon will be like. It also will allow you to gauge your pace and predict your finish time. Consider running a half-marathon during your eighth week of training, since you should be running that distance anyway (approximately 13 miles).

Rest: Typically, it is best to take a rest day during the week. Resting allows your muscles to regenerate and regain strength, and it is an important aspect of your training program. Ultimately, if you fail to rest, you will fail to meet your goals.

Level 2

This is for individuals who can run 3 miles three to four times a week, have competed in a few 5K or 10K races and are performance driven.

- Includes four to seven days of running per week
- Weekly training schedule: one long run, one tempo run *or* interval workout, plus two to five days of easy running or crosstraining
- Maximum weekly mileage: 40 to 45 miles

Long runs: As an intermediate runner, your long runs should go from 8 miles in your first week of training up to 20 miles. Every third week, reduce your mileage slightly to regain strength for the upcoming week's long run.

3/1 training: Run the first three-fourths of your long run at an easy pace, then do the final one-fourth at a somewhat faster pace. This increases your stamina and can be done once every three weeks.

Walking: It is OK to walk during training and during the marathon itself if you need to. During the race, it's a good idea to walk through the fluid stations to give yourself a chance to rest. You'll be able to run more comfortably afterward.

Pace: Pace runs will get you used to running the pace at which you expect to run on race day. Include some pace runs into your workout, particularly toward the last few weeks of your training.

Interval training: When training for a marathon, long repeats of 800 or 1,600 meters work better than short repeats. Run 800- or 1,600-meter repeats every third week, and alternate walking or jogging between each repetition.

Cross-training: Cross-train the day after your long run to give your muscles a chance to recover. Cross-training exercises can include swimming, walking or bicycling. Since you are using a slightly different set of muscles to cross-train, the muscles you use for running will be rested for your next long run.

Midweek training: As you build from 8- to 22-mile runs each week, your midweek long runs will build as well. Make sure you run these at a comfortable pace.

Rest: As an intermediate runner, it's best to take at least one day a week to rest, such as the day before your long run.

Marathon training quick plan

The Norton Sports Health program combines cross-training, mileage and rest and in a 15-week training plan designed to help you adapt to the physical demands a marathon places on your body. Use this quick plan as a visual guide to check off your progress.

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
WEEK 1	Rest	XT	3m/kickoff	5m	3m	Rest/2m	6m
WEEK 2	Rest	XT	3m*	5m**	3m	Rest/2m	8m
WEEK 3	Rest	ХТ	4m*	6m**	3m	Rest/2m	10m

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
WEEK 4	Rest	XT	3m*	6m**	4m	Rest/2m	11m
WEEK 5	Rest	XT	3m*	4m**	3m	Rest/2m	9m
WEEK 6	Rest	ХТ	4m*	6m**	4m	Rest/2m	14m
WEEK 7	Rest	XT	4m*	6m**	4m	Rest/2m	15m

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
WEEK 8	Rest	XT	4m*	6m**	5m	Rest/2m	16m
WEEK 9	Rest	XT	4m*	5m**	4m	Rest/2m	12m
WEEK 10	Rest	ХТ	5m*	6m**	5m	Rest/2m	18m
WEEK 11	Rest	XT	4m*	4m**	4m	Rest/2m	13m

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
WEEK 12	Rest	XT	5m*	7m**	4m	Rest/2m	20m
WEEK 13	Rest	XT	4m*	5m**	4m	Rest/2m	12m
WEEK 14	Rest	ХТ	4m*	4m**	4m	Rest/2m	8m
WEEK 15	Rest	ХТ	3m*	3m**	2m	Rest/1m	Race

XT = Cross-train m = Miles; Level 1/Level 2 *Virtual Tuesday Talk at noon

**Tempo: 30-40 seconds/mile slower than your goal race pace/mile

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