



2024 NORTON SPORTS HEALTH TRAINING MANUAL



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Welcome

Welcome to the 2024 Norton Sports Health Training Manual for the GE Appliances Kentucky Derby Festival miniMarathon and Marathon. Norton Sports Health is proud to be 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.

Whether you're a beginner or veteran racer, you'll find tips for safe walking and running, injury prevention, cross-training and nutrition, along with 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 Wednesday and Saturday group runs. The program also offers discounted training opportunities at the Norton Sports Health Performance & Wellness Center, nutrition tips and more!

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





Congratulations on taking your first step on the road to the 2024 GE Appliances 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, a dietitian, 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 athletics, Hanover College athletics and multiple private and public schools in Jefferson County, Kentucky, and in Southern Indiana. 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 GE Appliances Kentucky Derby Festival miniMarathon/Marathon. Now let's get started.

Steven T. Hester, M.D., MBA
Senior Vice President
Chief Clinical and Strategy Officer
Norton Healthcare



Welcome to the Norton Sports Health Training Program! Whether this is your first race or just one of many, this program will help make your race experience safer and successful.

Set for Saturday, April 27, 2024, the GE Appliances

Kentucky Derby Festival miniMarathon, Marathon, and Marathon Relay mark the largest day of road racing in Kentucky. Participants come from all 50 states and many countries, so you'll be in great company on race day. The 2024 race will be even more special, as you'll get to run through historic Churchill Downs just one week before Derby 150!

Over the next 15 weeks, we hope you'll take advantage of everything this program offers — from the weekly group runs to the nutrition and training tips, as well as injury prevention and treatment guidelines. It's a proven regimen and is designed for participants of every level.

You've made a big commitment to train and run with us, and, thanks to Norton Sports Health, we're able to help you achieve your goal.

We appreciate your support of the Kentucky Derby Festival and our spring races. Best of luck over the next several weeks.

We'll be cheering you on to the finish!

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) 891-8326 (TEAM)**.



Meet your training team



Robin G. Curry, M.D.

Medical Co-director
GE Appliances Kentucky Derby Festival miniMarathon and Marathon
Orthopedic Sports Medicine
Norton Orthopedic Institute

Dr. Curry currently is the head team physician for Bellarmine University. She also serves on the medical advisory board of the Atlantic Sun Conference. She previously served as medical co-director for Ironman Louisville. She also was a member of the board of directors for Girls on the Run Louisville. Dr. Curry is an avid runner.



Ryan E. Modlinski, M.D.

Medical Co-director
GE Appliances Kentucky Derby Festival miniMarathon and Marathon
Orthopedic Sports Medicine
Norton Orthopedic Institute

Dr. Modlinski is a team physician for Bellarmine 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 and semipro football, among others. Dr. Modlinski also has served as a medical co-director for Ironman Louisville. He is an avid runner and enjoys taking care of local runners of all levels.





Jeffrey S. Stephenson, M.D.
Medical Co-director
 GE Appliances Kentucky
 Derby Festival miniMarathon
 and Marathon
Orthopedic Sports Medicine
 Norton Orthopedic Institute

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 served as medical co-director for Ironman Louisville.



Stephanie Fish
Training Program Manager
 Norton Sports Health

Stephanie Fish is a two-time Ironman finisher and has completed many long-distance running races and triathlons. She currently coaches cross country at duPont Manual High School in Louisville and is a certified yoga instructor and certified health coach. Stephanie serves as a program manager for Norton Sports Health and the Norton Healthcare Foundation. She is a member of the Louisville Landsharks and Tri-LoCo. You may see her out running with one of the local run clubs and with her dog, Ivy.



Jennifer M. Brey, M.D.
Pediatric Orthopedic Surgeon
 Norton Children's
 Orthopedics of Louisville
 Affiliated With the UofL
 School of Medicine

Dr. Brey is a board-certified orthopedic surgeon who specializes in pediatric orthopedics at Norton Children's Orthopedics of Louisville. She is the team physician for Western High School in Louisville, Kentucky.

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.



Ryan J. Krupp, M.D.
Executive Medical Director of Orthopedics
Director of Sports Health and Shoulder Reconstruction
Orthopedic Surgeon
 Norton Orthopedic Institute

In addition to his leadership roles with Norton Healthcare, Dr. Krupp is an orthopedic surgeon with Norton Orthopedic Institute. He specializes in sports medicine for adults and children, as well as complex shoulder reconstruction. He currently serves as team physician for numerous local athletic programs, including Bellarmine University, Eastern High School and Kentucky Country Day School.

As director of sports health, Dr. Krupp leads initiatives to improve the care of athletes in Louisville and surrounding areas with programs such as injury prevention education, clinical research, certified athletic trainer education, athletic event coverage and community partnerships.



Elliot Mattingly, P.T., DPT, OCS
Physical Therapist

Elliot is a physical therapist for KORT physical therapy in Bardstown, Kentucky. Elliot is an avid runner and triathlete, completing over 30 half marathons and

finishing Ironman Louisville in 2016. He has been part of the Norton Sports Health training program for the past three years and has enjoyed working with the runners to help them reach the finish line. In his free time, Elliot likes to travel and spend time outdoors with his wife and daughters, and with his dog, Alastor.



**Marisa Faibish, M.S., R.D.,
CSSD, LDN**

Performance Dietitian
Norton Sports Health
Performance & Wellness
Center

Marisa is the dietitian for Norton Sports Health Performance & Wellness Center and the Bellarmine University Knights. Prior to joining Norton Healthcare, she was director of performance nutrition at Florida State University, Tallahassee, where she led the nutrition program for athletics. Her duties have included translating scientific research into practical performance nutrition recommendations, leading cooking classes, working on individualized nutritional needs for all athletes and playing a key role in overall nutrition for competition and travel. Previously, Marisa was the first full-time dietitian and director of performance nutrition at Appalachian State University in Boone, North Carolina. Marisa has a master's degree in exercise physiology and sports nutrition from Florida State, where she also earned a bachelor's degree in dietetics with a minor in chemistry.



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 30 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.



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Be in the **KNOW**



Go to DerbyFestivalMarathon.com and register for the Norton Sports Health Training Program to receive weekly email updates throughout the program leading up to race day.

Text **NortonRun** to **37492** to get free text alerts about the training program.

Go to NortonTrainingTips.com or scan the **QR code** below to join the Norton Sports Health Training Program Facebook group.*

**This is a public page. You do not need a Facebook account to access it.*



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 low-impact 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.



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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 self-treatment 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.

Dehydration 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 anti-inflammatory 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.

Norton Sports Health Resources

What we offer

Norton Sports Health partners with numerous organizations throughout the community and offers easy access to sports health specialists. We also provide an administrative team to assist with expedited appointments and diagnostic test scheduling, support and coordination of medical coverage for community events, and coordination of primary care and specialty care. To learn more, visit NortonSportsHealth.com.

Need an appointment?

SCAN HERE to schedule an appointment online today, or call **(502) 891-8326 (TEAM)**.



Norton Sports Health Performance & Wellness Center

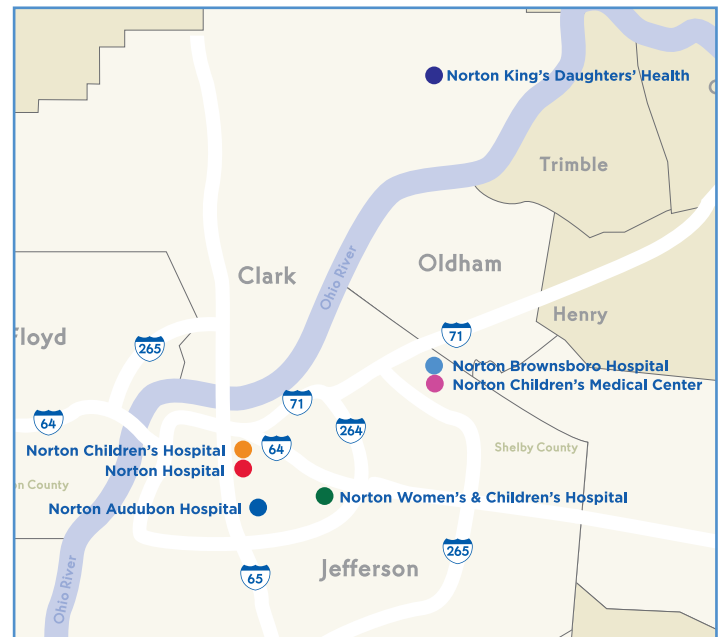


9451 Westport Road
Louisville, Kentucky

Norton Sports Health Performance & Wellness Center caters to all levels of fitness, offering progressive training programs to enhance fitness or sports performance and boost team camaraderie. Programs include LIFEready and Senior LIFEready for adults and SPORTready for third through 12th grade, as well as RETURNready for athletes looking get back to 100% after injury. In addition to coach-led fitness classes, the facility offers yoga, open gym, performance nutrition packages, and baseball and softball pitching and hitting group lessons for youth athletes. Interested in signing up your entire sports team or individual athlete for classes? Call **(502) 409-8888**, email NSHPWC@nortonhealthcare.org or visit NortonSportsPerformance.com.



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Hospital and medical center locations

- Norton Audubon Hospital**
1 Audubon Plaza Drive
(502) 636-7111
- Norton Brownsboro Hospital**
4960 Norton Healthcare Blvd.
(502) 446-8000
- Norton Children's Hospital**
231 E. Chestnut St.
(502) 629-6000
- Norton Hospital**
200 E. Chestnut St.
(502) 629-8000
- Norton King's Daughters' Health**
1373 E. State Road 62
Madison, Indiana
(812) 801-0800
- Norton Women's & Children's Hospital**
4001 Dutchmans Lane
(502) 893-1000
- Norton Children's Medical Center**
4910 Chamberlain Lane
(502) 446-5000

Sports health locations

Norton Children's Orthopedics of Louisville - Hikes Point

Affiliated with UofL School of Medicine
2933 Breckenridge Lane
Suite 103
(502) 394-5678

Norton Leatherman Spine - Stonestreet

9300 Stonestreet Road
Suite 200
(502) 935-8061

Norton Neuroscience Institute Sports Neurology Center

Norton Medical Plaza 3 -
St. Matthews, Suite 101
4123 Dutchmans Lane
(502) 899-6782

Norton Orthopedic Institute - Audubon

Norton Medical Plaza East -
Audubon, Suite 430
3 Audubon Plaza Drive
(502) 636-4900

Norton Orthopedic Institute - Brownsboro

Norton Medical Plaza II -
Brownsboro, Suite 250
9880 Angies Way
(502) 394-6341

Norton Orthopedic Institute - Downtown

Gray Street Medical
Building, Suite 604
210 E. Gray St.
(502) 629-5633

Norton Orthopedic Institute - St. Matthews

Norton Medical Plaza 3 -
St. Matthews, Suite 401
4123 Dutchmans Lane
(502) 559-1400

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 long-distance 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.

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 quadriceps, hamstring and Achilles stretches.

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.



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.



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SPORTS HEALTH



Fueling for the race

Proper nutrition is a key component in achieving optimal athletic performance — not just for race day, but every day. It's 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 of your fitness routine and training by allowing your body to produce energy most efficiently for peak performance.

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.

Good sources of carbohydrates include whole-grain 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. Good sources of protein include poultry, fish, lean beef, beans and tofu. Dairy products also are a great source of

protein, as well as carbohydrates. Top choices are low-fat or nonfat milk and yogurt, low-fat cheese and, for a nondairy choice, soy milk. Combining a protein with a carbohydrate allows the body to absorb the carbs slower to provide energy longer. Aim to have a carb with a protein to help refuel and repair muscles.

Fats

Fats are needed as an alternative energy source, and they perform other functions. However, too much saturated and trans fats in our diet can lead to health complications including heart disease and obesity.

Choose proteins that are low in saturated fat, such as lean beef, chicken, fish or legumes. Oils for cooking should be low in saturated fat. Examples are olive, canola and avocado oils. Aim to have fats that are higher in omega 3s to help with the recovery process. These are found in foods such as salmon, flax seeds, and nuts (such as walnuts).

Hydration

Drinking adequate amounts of fluid is vital for proper athletic performance. Choose water most often unless you are exercising for 60 minutes or longer. For those longer workouts, choose a sports drink with electrolytes. Aim to drink half your body weight (number of pounds) in fluid ounces every single day, and for every hour of exercise, increase by 16 to 24 fluid ounces.

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.
- Check the color of your urine — ideally it should be clear to light yellow. If it is dark yellow, you need to drink more.
- Roughly three hours before exercise we want to have a meal that is **high in carbs**, **moderate in protein** and **low in fat, fiber**, and **fried foods**. This can look like
 - ▶ Turkey sandwich with cheese; apple; low-fat chocolate milk
 - ▶ PBJ sandwich with a banana and low fat milk
 - ▶ Chicken breast with pasta and marinara sauce and green beans
 - ▶ English muffin egg sandwich with cheese and fruit
- Before an early-morning workout, be sure to incorporate a simple carbohydrate snack like applesauce, granola bar, bagel, apple juice or fruit to give you the fuel for your workout.
- Make sure also to have a relatively larger dinner, high in carbs, to make sure you have energy stored for the morning workout as well.

During exercise

- **Hydrating:** Drink regularly during exercise to replace fluids lost through sweat. If you're concerned about fluid loss, weigh yourself before and after a run to determine fluid loss, replacing 16 ounces of fluid for every pound lost.
- **Electrolytes:** Be sure to incorporate an electrolyte beverage into your runs that are longer than 60 minutes in duration. Electrolytes will help you retain water throughout your run and aid in hydration.

- **Eating:** If your workout will be shorter than 45 minutes, there is no need to take along a snack. Sports bars, gels, drinks and fruit are ideal for longer distance runs or workouts over 45 minutes. Aim to have about 30 grams of carbs for every hour of exercise.

After exercising

Fifteen to 30 minutes after exercising, consume a healthy snack and 16 ounces of fluid, for example, low-fat chocolate milk, a smoothie with yogurt and berries, or a sports drink. Make sure the quick snack is high in carbs and protein (preferably a 2-to-1 ratio) to help aid in refueling and repairing muscles.

Race day

- Since the race is early in the morning, you don't want to wake up three hours before to have a meal. Therefore, make sure you have an adequate dinner that is **high in carbs**, **moderate in protein** and **low in fat, fiber**, and **fried foods** the night before.
- The morning of, top off your tank with a snack high in carbs and moderate in protein about one hour before the race:
 - ▶ Bagel with peanut butter, banana and honey
 - ▶ Egg sandwich
 - ▶ Oatmeal and Greek yogurt with berries

Be sure to hydrate consistently throughout the entire week and to top off the tank with 5 to 10 ounces one hour before the race as well. (Include electrolytes!)

If you want to dive deeper into your personal nutrition, set up a free initial consultation by emailing marisa.faibish@nortonhealthcare.org or call Norton Sports Health Performance & Wellness Center at **(502) 409-8888**.

FITNESS for ALL

Norton Sports Health Performance & Wellness Center

Offering group fitness classes for kids and adults, yoga, an on-site dietitian and more! Come check out our facility at 9451 Westport Road, near Hurstbourne Parkway.



**SPECIAL
OFFER**

For Norton Sports Health training participants

Weekly Wednesday Night Group Runs at 6 p.m. (Jan. 17 to April 17)

After the run, enjoy a 30-minute guided stretching session or 30 minutes of cross-training in the open gym!

- Facility closes at 7:30 p.m.
- Sample routes and workouts will be provided; run routes will not be marked.

Membership discount offers*

20% off LIFEready unlimited package

10% off nutrition package

**Must purchase in person between Jan. 11 and April 27 and show proof of training program registration*

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There will be no in-person group training runs on March 2, 16 or 30, but runners are encouraged to participate in the Louisville Triple Crown of Running 5K, 10K and 15K races instead! These are great opportunities to get miles in and get an official “race” under your belt (or under your feet in this instance)!

March 2, 2024 • 5K

March 16, 2024 • 10K

March 30, 2024 • 15K

LouisvilleTripleCrown.com

Use code NSH10 for a \$10 discount.



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Use code NSH10 for 10% off registration for the Snowman Shuffle on Feb. 10!

RiverCityRaces.com

Training for the race

This guide provides an interval training method for those who choose to walk and run the race, and a training method for those who choose to run the entire race.

Run/walk interval method

Whether this is your first attempt at a long-distance 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.

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

Novice

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

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

Intermediate

The intermediate level is 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

- 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

There's more to training than just running

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

Pace: When you're training, 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: Start out running shorter distances and work your way up to running longer distances. The training program will help you build as you go.

Speed/interval work: In order to run at a faster pace, you'll have to train at a faster 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.

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. Recovery weeks are built into the training program.

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

Race: It's not necessary to participate in additional races, but if you have the opportunity, try to participate in one or two leading up to the miniMarathon/marathon. Try a 5K or 10K. Participating in these races will allow you to test your fitness level and predict your finish time.

Tempo runs: Tempo runs are designed to get you used to running the pace at which you expect to run the race. Try to include some tempo runs into your workout, particularly toward the end of your training. You also can incorporate a tempo run into one of your longer runs.

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



Speed work and hill training

Track training 101

All track workouts should include a 1-mile warmup and cooldown.

200-meter sprints

- 200-meter jog
- 200-meter sprint (90% effort)
- Repeat

400-meter sprints

- 200-meter jog
- 400 meters faster (75% effort)
- Repeat

Ladder sprints

- 200-meter jog
- 200 meters fast
- 200-meter jog
- 400 meters fast
- 400-meter jog
- 800 meters fast
- 400-meter jog
- Repeat backward

Strides

- 100-meter strides (3 to 5)

Strides are not sprints. A “stride out” is designed to lengthen your usual stride and improve running gait.

Hill training 101

Find a steep hill with a moderate to high gradient and perform the following:

1. Run five repeats of 60 seconds with a jog or walk back down the hill as recovery.
2. Take a two-minute rest.
3. Run four repeats of 45 seconds with the same recovery.
4. Take another two-minute rest.
5. Run three repeats of 30 seconds with the same recovery.

This workout also can be completed on a treadmill at an incline.

Be sure to properly warm up and cool down.

FIND A TRACK BUDDY!

Many local running groups train on tracks in Louisville. Find a group that works best for you!

Track option not available? Workouts can be completed on a treadmill.



Keep in mind your fitness level and training distance as you tackle track training and hill workouts.

Start small, then elevate your track and hill workouts as the training program progresses.



We come together to *support* good things, for life.

Louisville has been our home for the past 70 years. It's where we invent, design and build the world's best appliances. It's also where our employees live and work, and we believe in the impact of building stronger and healthier communities. That's why we're honored to have teamed up with the Kentucky Derby Festival as the title sponsor of the 2024 Derby Festival miniMarathon and Marathon. We congratulate this year's participants on their spirit, drive and perseverance.

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