Sullivan County Public Health Services



The time to get moving is now! Sullivan County Public Health Services is proud to announce the "Desk to 5K Walk Training Program". Walking has been proven to be one of the most effective and inexpensive ways to increase the amount of physical activity, especially for beginners or those returning to fitness after a long time off. The training program is designed to gradually build endurance to safely and efficiently increase the time you are able to walk over a period of 6-12 weeks. You can follow this training guide whether you use a treadmill, track or other venue. This guide includes a training guide, information on safety, injury prevention, and other resources walkers may need.

The ending goal of this program is to participate in the Monster 5K Walk in Monticello on Sunday, August 6th. We are encouraging businesses and individuals to put together a team and participate in this fun event that raises money for the Sullivan County Veterans Coalition. Sullivan County Public Health issues the challenge to all of it's community partners and Sullivan County Departments to put together a team and raise money for our Veterans!

Some things you need to know:

What is a 5K?

A 5K equals 3.1 miles.

How long will it take?

At a typical walking pace, you can walk it in 45 to 60 minutes. If you are a slower walker, it may take up to 90 minutes.

The good thing about a 5K training program is that it includes the amount of exercise recommended to reduce health risks and improve health.

The goals for this program include:

- Walking the Monster 5K on August 6th in one hour or less.
- Improve walking posture and form
- Finish a 5K feeling energized rather than exhausted
- Maintain a habit of regular physical activity



5K Beginner Walking Program

The beginner walking program is designed for people who are normally active without significant health complaints but who do not regularly engage in fitness walking. If you have a health condition, you should consult with a physician prior to starting an exercise program.

In this program, you will begin to increase time spent walking each week before working on speed. If you find any week to be difficult, repeat that week rather than adding more time, until you are able to progress comfortably.

Each day you walk, you should also include a warm up time and a cool down time. A warm up only needs to be about 5 minutes and should include a light, brief walk of about 2 minutes and some stretching. See "Stretches for Walkers" for ideas on stretches to include.

The cool down should also be about 5 minutes. A cool down is designed to return your body to it's natural resting state by slowing down your heart rate and returning blood flow to normal. This may be particularly important when returning to work after a walk. A cool down also contains some easy paced, light walking and easy stretching.

Always remember to include rest days, especially as you get to a point where you are doing longer walks, or working on increasing speed. Rest days allow your muscles and body to recover and reduce the chance of injury. You can also incorporate cross training activities into your training routine on a rest day. Cross training includes activities that are not running or walking. They will benefit your workout routine as you will train different muscles and reduce boredom! See "Cross Training" for ideas on activities that you can include in your workout Rest also allows for your brain to take a break, and refuel your desire to work out. Any activity you do on your rest day should also help your mind take a break. Whether that's yoga, a walk in the park, or taking the dog out with your spouse, do whatever clears your head and stops you from thinking about counting reps or reaching your goal. Just like setting your daily steps goals, set your rest goals. Plot out a schedule and pick your weekly rest days; one or two days where you limit your activity to allow your body/muscles to recover.

Sleep is an important part of a workout routine as well. When you're sleeping is when most of your growth hormone is produced, the benefits of which include stronger biceps, increased calcium retention and fat loss, and reduced fat storage. The importance of sleep relates to hunger as well, since the body evens out two of the hormones that control hunger. So, make sure to get enough quality sleep each night.

Week 1: Getting Started!

Time: Start with a daily walk an easy pace. Weekly goal is 60-75 minutes. You should walk five days the first week. We want to build a habit, so consistency is important. Spread out your rest days. An example of a schedule for the first week might be:

Week 1						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Walk 15 minutes	Walk 15 minutes	Rest or Cross Train	Walk 15 minutes	Walk 15 minutes	Rest or cross train	Walk 15 minutes

Tip for the Week:

Shin splints are a common complaint among beginning walkers. Shin splints are a pain felt along the shins caused by irritation and inflammation of the muscle along the shin. Shin splints usually during the first week or two of training.

Prevention: Shin splints can be prevented by keeping your strides shorter and wearing sneakers with flexible shoes and a low heel. You can also do shin stretches and lower leg strengthening exercises (see Strengthening exercises).

Treatment: Icing for 20 minutes before and after walking can help control pain and reduce inflammation.

Week 2: Work on Walking Posture and Form

Time: Add 5 minutes a day so you are walking 20 minutes, 5 days a week. You may wish to incorporate a longer day one day a week, followed by a rest day. Weekly goal is 75-100 minutes. An example of a schedule for week 2 might be:

Week 2						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Walk 20 minutes	Walk 20 minutes	Rest or Cross Train	Walk 20 minutes	Walk 25 minutes	Rest	Walk 15 minutes

Tip for the Week:

Walking form: Use your walks this week to concentrate on developing good walking posture. This can greatly improve your technique and walking speed.

Some tips for good walking posture:

- 1. Keep your head upright, looking ahead. Your chin should be in a neutral position, and your shoulders back and relaxed.
- 2. Foot placement: Keep feet close to an imaginary line in the center of the pavement in front of you.
- 3. Stride: Always keep at least one foot on the ground. Heel strikes first, followed with rolling onto the ball of the foot, finishing with a strong push off the toes. Avoid slapping the ground with your feet.
- 4. Arm swing: This makes your walk a total body exercise, and will burn an extra 5-10% calories. Let your arms bend at the elbows amd swing them in step with your feet in an arc from your waist to the front of your chest; your hands should reach just below chin level. Don't clench your fists. Your forearms should brush your hips to keep your stride forward.

Week 3: Walk at a Moderate Pace

Time: Add 5 minutes a day so you are walking 25 minutes a day, 5 days a week. Weekly goal is 100—125 minutes. This week you should be walking at a moderate, determined pace; you may be breathing noticeably. You are not out of breath, and you can still carry on a full conversation. An example of a schedule for Week 3 might be:

Week 3						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Walk 25 minutes	Walk 25 minutes	Rest or Cross Train	Walk 25 minutes	Walk 25 minutes	Rest or cross train	Walk 20 minutes

Tip for the Week:

Now that you have been walking regularly for a few weeks, consider whether you need walking shoes that will allow your best performance. Everyone's foot and walking style are different, but here are a few tips for picking out a shoe:

- 1. The most important thing, of course, is a shoe that fits properly. Be sure your foot has enough room in the toe box. There should be about half and inch between your toes and the end of the shoe. The shoe should be wide enough in the toe that your toes can move freely. Your heel should not slip, and the shoe should not pinch or bind, especially across the arch or ball of your foot.
- 2. Go shoe shopping at the end of the day or after your walk when your feet may be slightly swollen. Also be sure to wear the same socks you will be wearing during your walks. This can make a huge difference in how the shoe fits. Try on both shoes. Your feet may not be the same size (really!). Also if you are walking long distances you may need to move up 1/2 to 1 full size to accommodate for foot swelling.
- 3. Do not shop when you are in a hurry. Be sure to walk around the store for a few minutes on a hard surface. If the store has an objection to this, find another store. It is worth the effort to find the right shoe for you and it is worth spending a few extra dollars.
- 4. Wear your shoes in the house for a few days to try them out. Don't venture outdoors until you are sure the shoes are going to work for you. If the shoes are not going to work out you will want to exchange them before scuffing them up outside. Be sure to inquire about the store refund policy prior to making a purchase.
- 5. Look for a shoe that is light weight and breathable. The last thing you want is the clunky heavy leather walking shoe.

Week 4: Add a Long Day

Time: Add 5 minutes a day to walk 30 minutes, 4 days a week, at a moderate pace. Make your 5th day a mileage-building day. For week 4, this walk should be 40 minutes long at an easy pace. Each week, you will add minutes to a long day. A schedule for Week 4 might be:

Week 4						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Walk 30 minutes	Walk 30 minutes	Rest or Cross Train	Walk 230minutes	Walk 40 minutes	Rest or cross train	Walk 30 minutes

Tip for the Week:

Drinking right: Now that you are walking more than 30 minutes, you should locate a water source so you can take a drink each mile. If there are no handy water fountains, you may want to carry water with you. It is better to carry it in a fanny pack with a water holster, or a water bottle that can attach to your belt than to carry the water bottle in your hands. Carrying a water bottle in your hands can lead to muscle strain and poor walking form.

To prepare for a walk you should plan to drink about 2 cups of water (16 oz) 2 hours before your walk. This will allow any extra water to pass through your system before hitting the walking trail. You should also avoid caffeinated beverages before your walk as they make you lose fluids, making you thirstier.

After your walk, you another large glass of water (around 16 oz) to replace any water you lost during the walk.

Week 5: Work on Speed

Time: Walk 30 minutes a day, 4 days a week. For your long walk on day 5, walk 45 minutes at an easy pace. An example of a schedule for Week 5 might be:

Week 5						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Walk 30 minutes	Walk 30 minutes	Rest or Cross Train	Walk 230minutes	Walk 45 minutes	Rest or cross train	Walk 30 minutes

Tip for the Week:

Building Speed: During each of your shorter walks, concentrate on improving your walking form to add speed. If you have not been swinging your arms, this can be the key to increasing speed. To go faster, fast walkers take more, smaller steps rather than longer steps. Use the powerful back part of your stride to move you forward, and increase the number of steps per second.

Open up your stride behind your body by concentrating on getting a full roll through the rear foot and good push off with the rear toes.

Week 6: Build Mileage

Time: Walk 30 minutes a day four days a week, paying attention to form and speed techniques.

Long Walk: Walk 60 minutes at an easy pace.

A schedule for this week might look like this:

Week 6						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Walk 30 minutes	Walk 30 minutes	Rest or Cross Train	Walk 30minutes	Walk 30 minutes	Walk 60 minutes	Rest

Tip for the Week:

Once you have finished this week, you know you are able to complete the 5K! Continuing the training program will allow you to complete the 5K more comfortably.

Blister Prevention: Now that you are walking longer and faster, you may experience a hot spot or blister.

Blister Prevention:

- Lubricants: Before walking, use a lubricant on all areas that generally blister. Some people use petroleum jelly or bag balm. Anti-chafing lubricants can also work to prevent blisters when applied before walking
- Socks: Be sure to launder socks at least once prior to wearing to wash out sizing. Podiatrists recommend not using cotton socks as they retain moisture. Look for socks with modern synthetic fibers formulated for walking and running. Experiment with different brands to see which ones you like best.
- Shoes: Shoes should fit properly; not too loose or too tight. See shoe buying tips in Week 3.
- Treatment: If it is small and closed leave it alone and cover it with a loose bandage. Protect the blister with a donut-shaped pad, leaving the area over the blister open.

Weeks 7 & 8: Add Intervals

At this point, you could complete the 5K walk. But if you have the time to build your aerobic fitness and speed, add interval workouts to your shorter within weeks walks while keeping your longer walk at an easier pace. You may wish to switch your schedule a bit to have a longer walk on the weekend.

Long Walk: Walk 60 minutes at an easy pace.

Weeks 7&8						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Walk 30 minutes	Economy Walk	Rest	Threshold Walk	Rest	Rest	Walk 60 minutes

Tip for the Week:

Economy Workout for Faster Walking

This workout trains your muscles to expect you to want to go really fast at times. It uses short bouts of walking as fast as you can for 30 seconds, slow for 2 minutes, repeat 8-12 times. It should only be done once per week.

Warm up for 10-20 minutes at an easy pace, stretch and do flexibility exercises.

Take off at a moderate pace for 2 minutes.

After 2 minutes, speed up to walk as fast as you can for 200 meters/yards.

Slow to a moderate pace for 200 meters/yards (about 2 city blocks)

Speed up again for 200 meters as fast as you can.

Repeat this 8-12 times.

Finish with 10-20 minutes of easy walking, followed by stretching.

Threshold Workouts

Threshold workouts bring your body up to the anaerobic threshold at 80-90% of your maximum heart rate. These get you and your body used to high performance. You should do 2 threshold workouts per week.

Threshold Workout #1 - Speed

10 minute warm up at easy walking pace, followed by stretching and flexibility exercises.

Walk fast for 8 minutes or 1 kilometer at 85-92% of your max heart rate.

Then slow down to an easy pace for 2 minutes.

Repeat this for 3-4 repetitions.

Cool down for 10 minutes at an easy pace.

The threshold pace is strenuous, but one you could maintain throughout a 10 kilometer/6 mile **race**. You will be breathing very hard and able to speak only in short phrases.

Week 9 and Beyond

If you still have time before your walk, you can turn your long walk on the weekend into a simulated race every other week. Aim to walk it at 80% of the speed you hope to walk the 5K, rather than keeping it at an easy pace.

You can also increase the distance of your long walk on the week where you are keeping the pace easy. Add 15 minutes to it every other week. The increased distance and time will increase your stamina and endurance.

Week 9						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Walk 30 minutes	Economy Walk	Rest	Threshold Walk	Rest	Rest	Walk 60 minutes at 80% of race speed

Week 10						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Walk 30 minutes	Economy Walk	Rest	Threshold Walk	Rest	Rest	Walk 75 minutes at an easy pace

Tip for the Week:

Add an abdominal core workout two to three times a week to strengthen your abdominal muscles, which will help you maintain good walking posture. See strengthening exercises for more information.

Race Week!

The week of the walk, prepare with this race checklist to make sure you are ready to go. Also, check out he race etiquette suggestions to make sure the race is fun for everyone!



Before the Walk Checklist

- ♦ What to Eat: Walks generally have plenty of snacks and drinks along the walk and at the start/finish
- Water Before, During, and After Your Walk: Drink a large glass ofw ater before the walk, then nothing until you get started. That gives your body enough water and you enough time to use the bathroom before you start. Along the walk, drink water at each water stop. At the end of the walk, drink a large glass of water.

What to Wear:

Shirt: Remember the shirt from the event is probably cotton, which will retain sweat and moisture during the event and make you feel damp and clammy. A shirt made of a wicking fabric is best.

Bottoms: Shorts or Pants. If it isn't good weather for shorts, then select comfortable pants that move easily with you. Many people will wear jeans, but they are a bad choice. They are made of heavy, water absorbent fabric. However, if they are your most comfortable pants, then wear them.

Hat: I any weather, a hat to keep your head warm or the sun off your scalp is a requirement.

Packs: Ditch the purse and dig out a waist pack in which to carry your keys, ID, and other essentials.

Race Day Checklist!

- Start / finish location
- Registration/start time
- Where to park
- Race number (if you get it ahead of time)
- Safety pins for race number
- Sunscreen applied

- Give yourself time to get to the portajohn before the start
- If you wish to walk with your pet or stroller, check with race officials to see if it is allowed.

Race Manners—10 Etiquette Rules for Walking Events

When you enter an event, your behavior is important. Know basic rules of etiquette before you cross the starting line.

- 1. Line Up With the Correct Pace Group: If the event has different pace groups, get into the correct one.
- 2. Do Not Walk More Than Two Abreast: The biggest complaint you will hear from other participants is difficult in getting around a large group of runners. The simple rule is—no more than 2 abreast. Even if you start at the back of the pack, you can be assured there is someone behind you getting angrier and angrier that they can't easily pass you.
- 3. Allow Yourself to Get Passed: Be aware of people who want to pass you. You will be correct if you just assume somebody wants to pass you and allow room on the left for them to pass. If they ask to pass on the right with a "Passing on the right" then keep your arms in and allow them to pass on the right.
- 4. Don't Pass Somebody and then slow down right in front of them: Remember the foljs behind you don't slow down when you do. Never race ahead of anyone unless you continue to check that you are still going faster than they are.
- 5. Pull to the side if you must stop: If you have a shoe problem, get a phone call, or want to take a photo, you must move completely to the side of the course and ensure you are not blocking anyone. Do not stop near the start of a race or you will risk being trampled.
- 6. Move through the water stops: The proper way to get water at an aid station is to do it at a steady pace, on the move and pull completely through the aid station. If you need to stop, go all the way off the side of the course to do so. Watch where you fling your cup after using it so you don't toss it on racers approaching you from the side.
- 7. Move Predictably and Keep Your Arms to Yourself: Try to move predictably rather than weaving and veering into other people. Don't fling your arms out suddenly—someone may e trying to pass you and get clothes-lined,
- 8. Don't be a Hog at the Feeding Stations: There are other, slower people behind you. Take only what you need at the moment. Above all, don't cart off a box of goodies from the finish unless you are the absolute last finisher and everyone else is out of the finish area and the medical tent. The food is for others, not just for you, and for today only.
- 9. Spit Happens—Don't Share It: If you need to spit, vomit, or toss anything liquid, try to pull to the side and ensure you aren't projecting onto somebody else.
- 10. Portajohn Line Courtesy: Somebody in line behind you is desperate for that portajohn. If here is a line, line up close to the doors and keep paying attention to a portajohn being vacated. If you're going to hand stuff to a friend or put it outside the door, do that or plan for that before you are at the head of the line. Allow others with greater need to go first if they look desperate. Do not complain about "Smelly portajohns". It's best to carry your own toilet paper or Kleenex and hand sanitizer as the portajohn may be out of those.

Warm-Up Stretching For Walkers

Walking is a great way to add physical activity into your lifestyle. But remember stretching is a very important part of any activity program. Be sure to warm up for several minutes to get your muscles warm and then stretch slowly for at least 5 minutes before you begin.

You can start with these basic stretches but be sure to only stretch as far as is comfortable for your body. If you have certain medical problems that prevent you from some activities, check with your healthcare provider to be sure that you are in the right condition to perform these stretches.

- **Abductor (inner thigh) stretch:** Keeping your torso upright, lunge to one side with a bent knee over the toe. Keep your other leg straight. Push your weight to the "bent knee" side until you feel a stretch in the inner thigh of your straight leg. Hold 20–30 seconds on each leg.
- Calf Stretch: Stand facing a wall with both hands on it. Position one foot forward (knee bent) and the other leg back with the leg straight, toes pointing at the wall. With your stomach tight, lean in toward the wall until you feel a stretch in the lower part of the back leg. Hold 20–30 seconds on each leg.
- Chest stretch: Place your fingertips lightly on the back of your head. Push your elbows back while squeezing with your upper back until you feel a stretch in your chest near your underarms. Hold for 20 –30 seconds. Option: Another option is to stand in a corner with one hand or elbow on each wall. Your feet should be 1½–2 feet away from the corner in a split stance. Keeping your back straight and tummy pulled in, lean into the wall until you feel a stretch in your chest near your underarms. Hold for 20 –30 seconds.(Keep feet staggered, one behind the other.)
- Hamstring Stretch: Prop one foot up on a low, secure bench or stair step. Stand tall. Keeping your
 chest high, hips square and tailbone lifted, bend forward from your hips. Feel a stretch in the back of
 your high or knee. Hold 20–30 seconds on each leg.
- **Hip Flexor Stretch:** Lunge forward with one leg, knee bent. The back leg can stay straight or bent slightly. Push your hips forward until you feel a stretch in front of your back thigh near the groin. Keep your torso upright and your front knee behind your toes. Hold 20–30 seconds on each leg.
- **Palm Touch:** Bend your knees slightly. Try to touch the floor by bending from the waist, but don't bounce. Hold the position for 10 seconds, then repeat 1–2 times. If you have lower back problems, do the same thing, but with your legs crossed.
- **Shoulder Rolls:** Lift your shoulders up toward your ears, then down and backwards in a circular motion. Repeat 5–10 times. Perform with both shoulders simultaneously or alternate right and left.
- **Toe Touch:** Place your right leg on a chair or railing, making a 90-degree angle with the other leg. Keep your left leg straight and lean forward, touching the toes of your right leg. Don't bounce. Switch legs and do the same thing. Repeat the entire exercise 1–2 times.
- Wall Push: Stand 18 inches away from a wall. Lean forward, pushing against the wall with your hands and keeping your heels flat on the ground. Hold it for 10 seconds, then relax. Repeat 1–2 times.



Cool Down

Cooling down after a workout is as important as warming up. After physical activity, your heart is still beating faster than normal, your body temperature is higher and your blood vessels are dilated. This means if you stop too fast, you could pass out or feel sick. A cool-down after physical activity allows a gradual decrease at the end of the episode.

It's good to stretch when you're cooling down because your limbs, muscles and joints are still warm. Stretching can help reduce the buildup of lactic acid, which can lead to muscles cramping and stiffness.

There's no need to be super flexible, but it is worth doing just a few minutes of stretching after each walk, when your muscles are the most warm and compliant. That's enough to help maintain your mobility and a healthy range of movement, and it's likely to reduce the chance of injuries or limitations, especially as your walking becomes more varied and vigorous. Here are three simple, stand up stretches you can do any place, after any walk.

Do all of these stretches slowly, never to the point of discomfort; hold each stretch for six to eight slow, deep breaths. Begin each stretch standing up, and feel free to rest one hand on something for balance if necessary. If you have time, go through the cycle twice.

- 1. **Calf and hip stretch.** Take a giant step forward with your left foot. Bend your left knee (but don't push it beyond your foot) and keep your right heel on the ground and your right leg straight behind you. Keep your abdominal muscles gently contracted so there's no excess arch in your back, and you should feel the stretch in both your right calf *and* hip. Hold. Then switch legs and repeat.
- 2. **Back and hamstring stretch.** Stand with your feet together and your knees soft (not straightened). Lean forward from the waist and let your arms and head hang loosely toward the ground. Don't necessarily try to touch your toes just let your body hang under its own weight, and let it ease into the stretch with each deep breath. Slowly stand up and repeat.
- 3. **Shin and thigh stretch.** Grasp your right toes with your left hand, and gently pull your foot up behind you, keeping your right knee pointed toward ground. Your heel does not have to reach your buttocks -- just pull to the point of feeling a gentle stretch in the front of the thigh, hip, and shin. Hold, then switch legs and repeat.



Cross Training For Walkers

Cross training is generally considered participating in any fitness activity other than your primary sport. Cross training is more important and beneficial than many walkers realize. Cross training is used to improve your fitness level and stay active without over using walking muscles. Using a different activity also helps strengthen muscles not used by walking. Cross training is also useful to help vary your workouts and keep things interesting, and help keep you motivated. The result is better walking workouts and less injuries.

Some popular cross training activities might include:

- Cycling (outdoor or stationary)
- Swimming
- Hiking
- Rock climbing
- Inline skating
- Elliptical trainer
- Stair machine
- Nordic Trak (ski machine)
- Step videos or other aerobic videos
- Snow shoeing
- · Cross country skiing
- Sports such as football, soccer, boxing, etc.

In addition to cardiovascular cross training, a strength training routine is also recommended.

Strength activities can include things such as:

- Weight training
- Pilates
- Yoga

Strength Training for Walkers

The following modest-but-mighty moves -- recommended by walking coach Elaine Ward, founder and director of the North American Racewalking Foundation, and exercise physiologist Doug Garfield, Ed.D., developer of TrainS.M.A.R.T., a program for high-performance athletes -- can make a huge difference in the effectiveness of your walking routine.

The great thing about them is that they can be done on the go, without weights or other gadgets. The only "equipment" called for is the nearest tree or pole for balance.

You can incorporate these exercises into your workout any way you want. Do them all at once, or split them up between bouts of walking -- walk for 10 minutes, do a set of an exercise, walk for 10 minutes, do a set of another exercise, and so on. If you close your eyes while you do the standing stretches, you will improve your balance as well. To avoid muscle soreness, start with the smallest number of repetitions and work up gradually. Remember, too, that these numbers are only suggestions. If you need to start with fewer reps, that's fine. Allow your body to guide you.

Have fun and get stronger fast.

If your shins scream, "Slow down!" whenever you make an effort to increase your pace, add either of the following exercises to your routine. You don't need to do both unless you have the time and the desire.

Heel-toe rock. With your weight balanced equally on both feet and your knees bent, gently rock back on your heels and pull your toes off the ground. Then with one smooth motion, rock forward and roll up onto your toes. Use all of your muscles to perform smooth, controlled movements. Do 12 to 15 repetitions, counting the entire heel-to-toe motion as one.

Pause walk. Swing one leg forward as if to take a step. But before your heel hits the ground, pause with your foot about 3 inches off the ground and your toes pointed toward the sky. Slowly count to three, and as you do, continue pulling your toes back toward your shin. Repeat the pause with each step forward as you walk for 1 minute. Then walk normally for 1 minute. Repeat the entire cycle two more times.

Strong, flexible hip flexor muscles add power and grace to your walk while helping you lengthen your stride. Try the following two exercises to limber up and increase your range of motion. They can also help alleviate any stiffness that you may notice after long periods of sitting.

Figure eights. Stand on one leg, holding on to a pole or a tree for support. With the opposite foot, draw a figure eight in the air, making the top loop in front of your body and the bottom loop behind your body. Gradually increase the size of the figure so that your hip rotates fully in front and back. Do 10 to 20 repetitions with each leg.

Hip stretch. This stretch is great for walkers as well as for anyone who has to sit most of the day. Stand tall, with your back straight. Step forward with your right leg, keeping your left foot on the ground. Make sure that your right knee is squarely over the center of your right foot, forming a 90-degree angle. Tilt your hips forward until you feel a mild stretch in your left hip. Keep your left heel flat. Hold for a slow count of five. Step back. Repeat two more times with your right leg forward, then switch legs to stretch your right hip.

Weak abdominal muscles contribute to poor posture and sway back, which can lead to back discomfort, especially on longer walks. These two crunches will help strengthen your stomach muscles and relieve back tension. And, even better, you don't need to lie down on wet grass to do them.

Standing crunch. Place your palms on the tops of your thighs. Round your back and contract your abdominal muscles. While crunching, slide your hands down your thighs to your knees, applying firm pressure along the way. This intensifies the contraction of your abdominal muscles. Relax. Do 12 to 15 repetitions.

Strength Training for Walkers, Continued

Twisting abs. Place the palm of your right hand on top of your left thigh. Round your back and contract your abdominal muscles as you twist down and to the left. While crunching, apply firm pressure to your left thigh with your right hand to intensify the contractions of your abdominal muscles. Do 12 repetitions, then switch sides.

If you walk on level ground most of the time, hills may seem especially challenging. That could be because your quadriceps, the muscles in the front of your thighs, aren't sufficiently developed. Practice these exercises every day, and you'll quickly turn mountains into molehills.

Quads, part 1. This is a controlled leg squat. Be sure to do it slowly so it feels challenging. Stand with your feet shoulder-width apart. Moving to a slow count of five, squat down as far as you comfortably can, but no farther than a 90-degree angle at your knees. Make sure that your knees are over but not past your toes and your back is straight. Then straighten up to a count of two. If you reach your arms overhead on your way up, you'll finish each squat by stretching your waist and rib cage. Work up to 15 to 20 repetitions. Always follow this exercise with Quads, Part 2.

Quads, part 2. Stand with one foot on a curb, one in the street. Line up the toes of your street foot just below the instep of your curb foot. With your weight on your street foot, squat down to a count of two, then straighten up to a count of two. Again, don't bend your knees more than 90 degrees. You're using your whole body as a weight for your leg. Work up to 10 to 15 repetitions per side.

Common Walking injuries

It's not just activities like running, weightlifting and football that could cause injuries.

Despite its reputation as being an ideal low-impact exercise, walking can also lay you up if you're not careful. Injuries ranging from blisters to tendinitis happen to walkers, but that certainly doesn't mean you should hang up your walking shoes. "The benefits of walking for exercise outweigh the risks," says Liz Poppert, an assistant professor of physical therapy at the University of Southern California.

Here are a few of the most common walking injuries and tips on how to manage them — or avoid them altogether.

BLISTERS

Blisters are caused by friction from ill-fitting shoes and sweaty socks. Even though they're usually small, these fluid-filled sacs can derail a walk, hike or run. No matter how tempting it might be, podiatrist James R. Christina, the executive director of the American Podiatric Medical Association, warns against popping blisters. "When you puncture the skin, you open up the potential for bacteria and that can make the problem worse," he says.

The Fix: For a minor blister, a bandage is often a simple solution to continue walking. For a larger blister, consider switching to another activity until it heals. To avoid blisters altogether, Christina suggests wearing shoes that fit properly and socks that wick moisture.

PLANTAR FASCIITIS

The inflammation of the band of tissue, called the fascia, that connects the heel bone to the base of the toes can cause severe pain. In mild cases, the pain often disappears during a walk, says Poppert. "A walking workout may be initially uncomfortable for the first several minutes, then often the pain goes away for the remainder of the walk," she says. "If it is more severe, symptoms may escalate during the walk."

The Fix: An over-the-counter pain reliever and applying ice to the fascia for 20 minutes at least three times a day can help ease the pain; regular stretching or physical therapy can also help stretch the fascia and ease the tension. Supporting the arch with taping or arch supports or strengthening the arch muscles may ease tension on the fascia, says Poppert. "Once tissues are less irritated, activity level can increase again."

SHIN SPINTS

Pain and inflammation along the inner edge of the shinbone (or tibia) is often diagnosed as <u>shin splints</u>. The pain can be sharp or dull and throbbing — and it can occur both during and after exercise.

Although shin splints are most often associated with running, walking can cause them, too. "You can get shin splints from overuse or doing too much too soon," explains Christina. Ill-fitting shoes are another common cause of shin splints; the pain is also more common in people with flat feet.

The Fix: A combination of rest, ice and over-the-counter pain relievers can help calm inflammation and alleviate shin splints. To keep the pain from returning, go slow.

"You need to ease into an exercise program, even walking," says Christina.

TENDINITIS

An inflamed tendon causes tendinitis. The condition, which can result from tight calf muscles, bone spurs or walking too far or too fast too soon, can trigger swelling, pain and irritation. Depending on which tendon it affects, tendinitis can make a walking workout next to impossible.

Poppert says that it most commonly affects the Achilles tendon, connecting the calf muscle to the heel bone, and the tibialis posterior tendon, which runs under the foot and supports the arch.

The Fix: Don't walk through the pain. Rest, apply ice and take over-the-counter anti-inflammatory medications to ease tendinitis. When the pain subsides and you're ready to return to your walking workout, Poppert notes that adding heel lifts and/or arch supports to your shoes can prevent a recurrence.

CAUSES AND SYMPTOMS ASSOCIATED WITH COMMON RUNNING/WALKING INJURIES

INJURY	SIGN/SYMPTOM	COMMON CAUSES
Runner's Knee or Patellofemoral Pain Syndrome	Pain under the patella	Weak core muscles, improper footwear, overtraining
Plantar Fasciitis	Aching on the bottom of your foot or sharp pain on the bottom of the heel, especially when you take first steps out of bed in the morning	Improper footwear, overtraining
Achilles Tendinitis	Achilles irritation, pain, tightness and inflammation	Weak or tight calf muscles, uphill running, rapid increase in mileage
Hamstring Strain	Tightness, severe pain and tenderness	Fast running without adequate warm-up, imbalance in quad/hamstring strength
Stress Fracture	Bone hurts to the touch	Rapid increase in mileage, running on hard surfaces, inadequate nutrition
IT Band Syndrome	Irritation or pain near the hip bone or on the outside of the knee	Over pronation, lack of core strength, overtraining
Shin Splints	Tenderness or pain in shinbone and surrounding muscles	Inadequate footwear, rapid increase in mileage, calf muscle weakness

HOW TO RESPOND TO INJURIES

For all runners and walkers, it is important to intuit the difference between harmless soreness and pain associated with an injury. If you're entering into a new training program after a period of inactivity, you're likely to experience a few aches as your body adjusts. If, however, you experience sharp or intense pain anywhere, you should respond immediately. This is your body signaling something is going haywire.

If it's just run-of-the-mill soreness, proceed with your training as planned. Delayed onset muscle soreness can rear its ugly head a couple of days after an activity, so it may take a week or so before you're feeling fresh again. Fortunately, soreness doesn't signal anything catastrophic and will resolve on its own.

For more serious injuries, your first move should be to pull back the reins on your running or walking program so you can assess the situation. Catching an injury in the early stages and responding appropriately can mean the difference between a couple days off and a couple months off.

AT-HOME SOLUTIONS

If you identify what you think might be a developing injury early on, here are a few things to try at home:

1. Decrease mileage.

Since overtraining is one of the leading causes of running and walking injuries, adjusting your training is the first thing you should do when responding to a suspect pain. Depending on the injury, this may mean ceasing running or walking completely, or simply reducing the time on your feet each week. If the issue resolves itself in a couple of days, be conservative about bumping up your mileage again.

2. Cross-train.

If your knee hurts, for instance, try swapping some of your walking or running mileage for time biking or swimming. Choosing a low-impact aerobic activity will allow you to keep building cardiovascular fitness without all the pounding on your bones, joints and muscles.

3. Apply ice.

Icing helps to reduce inflammation. Draw yourself up an ice bath, grab a bag of frozen peas, or freeze paper cups full of water and apply it to the source of the pain for 10 minutes 2–3 times per day.

4. Try self-massage.

Foam rollers and massage sticks are a great way to work out many common soft-tissue problems before they develop into full-blown injuries. When caught early, injuries such as IT band syndrome can often be addressed simply by foam rolling a few minutes each day

WHEN TO SEEK ADDITIONAL HELP

If the at-home strategies have failed you or if you are experiencing intense or persistent pain, you should schedule an appointment with a specialist. The question is, which doctor should you see? Here is a run-down of some of the best docs to turn to for running and walking injuries:

Sports Medicine Physician: If you're stumped on where to turn for an injury, sports medicine doctors are a good place to start. Not only can they diagnose a wide range of running or walking issues, but they also work closely with physical therapists and athletic trainers who can help devise a rehab plan and get you on the road to recovery.

Podiatrist: For injuries that affect the knee on down to the foot, a podiatrist may be your best bet. Specializing in foot issues, they treat everything from plantar fasciitis to Achilles tendinitis. They can also assist with creating custom-made orthotics, which can help runners and walkers avoid injuries up the entire kinetic chain.

Chiropractor: Many active people swear by their chiropractors to keep their bodies in optimal alignment. Not only can a chiropractor assist in addressing a whole host of bone and soft tissue injuries, but they also serve as a good option for regular maintenance work. In addition to adjustments, they can employ soft-tissue therapies like Active Release Technique and Graston.

Sports massage therapist: These soft-tissue specialists are trained to work out knots and adhesions that are causing pain and limiting adequate muscle function. Many of them are also certified in Active Release Technique and Graston for more serious issues.

Physical therapist: They provide a rehab plan for existing injuries and can also assist in identifying the root cause of your issues. Through a series of tests, including running or walking on a treadmill and strength and



Mackenzie Lobby

<u>Mackenzie Lobby Havey</u> is a freelance journalist and coach based in Minneapolis. She contributes to a variety of magazines and websites including TheAtlantic.com, OutsideOnline.com, espnW.com, *Runner's World* and *Triathlete Magazine*. She holds a master's degree in Kinesiology from the University of Minnesota, and is a USA Track and Field certified coach. When she's not writing, she's out biking, run-

http://about.mapmyfitness.com/2015/11/the-beginners-guide-to-coping-with-running-and-walking-injuries

Resources

Www.verywell.com

Www.thewalkingsite.com

Www.sparkpeople.com

Www.runnersworld.com

Www.prevention.com

Www.halhigdon.com

Www.active.com

Www.mayoclinic.org

Www.heart.org

Www.cdc.gov