

# Training to Walk a Marathon

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So, you are ready to challenge the marathon! Why is the marathon so appealing and yet so scary? All marathons are 26.2 mile or 42 kilometers; that's a long way to walk and you'll be on your feet a lot longer than ever before. It's a great challenge and if you accomplish it, you'll know why so many marathoners think they are invincible. There is nothing like the feeling of accomplishment one gets from finishing their first marathon. One of the reasons I love coaching marathoners is so that I can vicariously relive that feeling from their accomplishments and comments.

What are the secrets to successful training? Training is about change; the change you want to make is for your body to be able to go 26.2 miles. So first, you need to try to get your body to adapt to long distances. You do that by a gradual system of overload. Overload is the principle of training that is gradually applying greater stresses to the body to allow it to adapt to achieve your goal. In this case, the goal is to get your body to be used to being on your feet for about the same period of time it will take to walk the marathon. If you look at the training programs shown, note that the adaptation is slow. I have found that walkers can add about 10% per week to their mileage and stay healthy. For the adaptation to be successful; it needs to be followed by a rest or recovery period for the body to make the changes. The schedule follows what is called the hard/easy system of training. This system is used by athletes in almost every sport to get the maximum training gain with the least risk.

What are the risks of training for a marathon? I have been coaching marathoners for over 15 years, both runners and walkers, and have seen high potential for injury with the event, not the particular sport. The injuries are both physical and psychological. The hard/easy system helps keep the body and the head from overdoing by allowing adequate rest between hard workouts. Good shoes are another prerequisite for a healthy walker. Most of my marathon walkers are training in running shoes because the technology tends to be better for the biomechanics of longer distance walking. The program needs to include some stretching and other strengthening (weights) as well.

The schedules shown here are for a fairly short period (3 months). They assume most walkers have an adequate mileage base of at least 20 miles a week and have been walking regularly for at least 6 months. There are three sets based on the current fitness level of the participant. The beginner schedule assumes that the walker is doing a couple of days of other exercise as well as the walking. This brings us to the second principle of training, specificity. This means that to walk a long distance you need to train by walking long distances. You cannot swim for hours and hope to walk a marathon, you need to train specific muscle and physiological fitness. You will walk a faster and more comfortable marathon if you can walk at least 5 days per week. Some bodies and heads will not allow that and need to do other forms of exercise such as cycling or aerobics a couple of days per week.

One of the most important changes you need to make is for the body to be able to have enough fuel to cover the distance. Whether you walk or run, it takes about 2600 calories to finish the marathon. Calories come from two major sources carbohydrates and fats. Your body can store about 2400 - 2500 calories of carbohydrates with the liver, blood and muscle storage sites. It can only utilize 40 - 60 % of those, leaving an energy deficit if carbohydrates were the only source of fuel. The good news is that everyone has adequate fat stores to fuel for distances far beyond the marathon. (I'm certain you can locate those stores in your own body). The trick is for the body to

be able to access those stores and to be able to continue to use them throughout the marathon. For fat to be burned for fuel, there needs to be carbohydrates available as well. I'm certain you've heard the expression "hitting the wall". The "wall" happens when the body burns off its available carbohydrates and cannot use the fats with the consequence that pace slows dramatically as pain increases. The "wall" can be prevented by training the body to do 2 things: store more carbo's and utilize more fat. Those are both gained by long slow walking.

What does slow mean in terms of training? Resist the current temptation to do every walk at marathon pace. The body skips the physiologic steps needed to learn the fat burning and the "wall" will spring up during the marathon somewhere after about 18 miles. The long walks should be 1 - 2 minutes per mile slower than the projected marathon pace. How do you find your projected marathon pace? From tests of walkers in the marathon clinics, we have found you can make a prediction from a timed one mile walk test. Warm up, walk an accurately measured mile (IE on a track), check your heart rate at the end. Most of the clinic walkers completed the marathon 2 minutes per mile slower than the test. Those that trained 1 - 2 minutes per mile slower than that on their long walks felt much better both on their long walks and during the marathon.

How do you go from slow to marathon pace? The T's listed on the schedule are tempo walks or walks at projected marathon pace. These are important so that you know exactly how marathon pace feels and can start out there. You need to not get carried away at the start and go out too fast. The walks need to be at marathon pace not faster, You can all walk paces faster than the one your marathon will be;. so speed is not an issue in training. You need to be efficient and practice the pace that will take you 26 miles. The magic of motor learning is that you only need to do a little to get it.

Notice that last couple of weeks show a period of rest before the marathon. That is called taper and is important so that you are rested and recharged for the marathon. The last part of the taper is carbohydrate loading to make certain the muscles are filled with the highest possible amount of carbohydrate. Some rest is need to allow that to happen.

WALK MARATHON  
TRAINING SCHEDULES  
(distances in miles)

**Basic Beginning**

Week	S	M	T	W	T	F	S	Total
1	10	0	0	6	0	6	0	22
2	12	0	0	6	0	6	0	24
3	14	0	0	6	0	6	0	26
4	14	0	0	7	0	7	0	28
5	16	0	0	7	0	7	0	30
6	16	0	0	7	0	7	0	30
7	18	0	0	7(2T)	0	7	0	32
8	20	0	0	7(3T)	0	7	0	34

9	16	0	0	8(4T)	0	8	0	32
10	20	0	0	8(4T)	0	8	0	36
11	16	0	0	8(4T)	0	8	0	32
12	10	0	0	4(2T)	0	2	0	16
13	Marathon							

**Intermediate**

Week	S	M	T	W	T	F	S	Total
1	12	0	3	6	3	6	0	30
2	14	0	3	6	3	6	0	32
3	14	0	3	7	3	7	0	34
4	16	0	3	7	3	7	0	36
5	16	0	3	8	3	8	0	38
6	18	0	3	8	3	8	0	40
7	18	0	4	8(2T)	4	8	0	42
8	20	0	4	8(3T)	4	8	0	44
9	20	0	4	8(4T)	4	8	0	44
10	16	0	4	8(5T)	4	8	0	40
11	20	0	4	8(6T)	4	8	0	44
12	10	0	2	4(2T)	2	2	0	16
13	Marathon							

**Advanced**

Week	S	M	T	W	T	F	S	Total
1	14	0	3	6	3	6	3	35
2	16	0	3	6	3	6	3	37
3	16	0	3	7	3	7	3	39
4	18	0	3	7	3	7	3	41
5	18	0	3	8	3	8	3	43

6	20	0	3	8	3	8	3	45
7	16	0	4	8 (4T)	4	8	4	44
8	20	0	4	8 (4T)	4	8	4	48
9	16	0	4	8 (5T)	4	8	4	44
10	20	0	4	8 (5T)	4	8	4	48
11	16	0	4	8 (6T)	4	8	4	44
12	10	0	2	4 (2T)	2	2	0	16
13	Marathon							

(nT) = Tempo walks where n = equals number of miles walked at marathon pace. example 8  
(4T) = 2 mile warm up, 4 miles a marathon pace, 2 mile cool down  
All other walk from 1-2 minutes per mile slower than marathon pace

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You may hear many different terms to describe walking styles, such as: power walking, speed walking, aerobic walking, and race walking. Of those names, race walking is the only form of walking that has a clear cut definition because it is governed by a specific set of rules. The other terms are often used simply to help validate walking as a real form of exercise in the minds of the participants, and the different names do not usually refer to a technique different than the one we describe here. For the purposes of this Walk Training site, we will not distinguish one from the other; we will simply call it "**walking.**"

By closely following the technique and form described, you can significantly improve your performance. This training can help enhance the benefits you receive from walking. The benefits are:

- \* **increased efficiency**
- \* **better use of energy supplies**
- \* **decreased risk of injury**
- \* **increased comfort**
- \* **faster times**

In regards to your general fitness and overall health there are some more great advantages:

- \* **increased calorie burn**
- \* **increased muscle conditioning**
- \* **body shaping**

Practicing and becoming comfortable with your form should be your first objective.

As you practice your technique, break each component down to an individual motion and focus on one at a time. Then put it all together. It is up to you to select the portions of the walking stride that feel most comfortable and practice putting each piece into place to build the muscle memory that will help you achieve the consistency you will need. Each of us are individuals, and not all of us can or will want to perfect this technique in its entirety. It will be most productive if you select the pieces that you are most comfortable with. Go at your own pace.

**Taking It From the Top!**  
**STAND TALL, WALK TALL**

The foundation of a good basic stride is posture. The spine should be elongated by standing straight -- not in a rigid military position, merely straight, tall, and relaxed. You should be able to draw a straight line

from your ear down to your shoulder, to your hip, knee and ankle. A common problem to look for here is an unnatural arch in the lower back. Commonly known as a "sway back", this incorrect posture can create great discomfort, especially when walking long distances. To eliminate this problem, practice tucking your buttocks under your body, putting the pelvis area in a more neutral position. To accomplish this, pull in your abdominal muscles, and at the same time squeeze your buns.

### **HEADS UP**

The head should be level, eyes looking forward, and the chin parallel to the ground. A protruding chin or tilting the head down to look at the ground is a common mistake. If the head is allowed to tilt forward, excess strain is put on the neck and shoulders and will lead to undue fatigue. Focus on looking forward to about 12-20 feet in front of you. If you need to look closer to where you are stepping, lower your eyes, not your whole head.

### **ARM SWING**

A walker's shoulders should be relaxed, not drawn up towards the ears. Arms should swing naturally with each step, and should be bent at the elbow at a 90° angle. This is important. Straight arms on long walks lead to problems with swelling, tingling, and numbness of the fingers or hands. Bending them will not only eliminate this problem, it will help you gain upper body strength and tone your deltoids, biceps and triceps.

For many walkers, weight loss is a goal. By bending the arms, you will also burn 5-10% more calories.

One more great reason to keep the arms bent and moving in an athletic motion is that you will immediately be able to pick up your pace for greater periods of time.

The bent arms should swing comfortable and naturally at about waist level. Your hands should be relaxed and loosely closed. Any excess tension in the arms or hands should be avoided -- it wastes energy. The elbows should be close to the torso, with the hands going no higher than the center of the chest on the forward swing, or past the back of the hip on the back swing. Again, more motion than this is wasted energy.

If you are new to this technique, you might initially find your arms getting fatigued. When practicing, keep your arms bent for 5-10 minutes, then lower them to recover. As soon as you feel rested, raise them again. As part of your training, you might consider doing some upper body weight work (not while you are walking) to increase your endurance. Specific exercises are suggested later.

### **BELOW THE BELT**

The movement of the lower half of the body in this technique is the most difficult to describe, and for many walkers, the most difficult to achieve. This is usually due to the inflexibility of the hips. Flexibility can be improved by consistently stretching the hip flexors and lower back, and for most people, simply doing the technique will help them considerably. People new to this should go slow and practice. The time spent in learning and becoming comfortable with it will be rewarded with more efficient movement.

In your lower body, the walking technique begins by using the abdominal muscles and hip flexors to rotate the hip forward and lead the leg in its forward motion. As the leg swings forward and straightens, the body will land on the heel. The ankle should be flexed with toes pointed upward at about a 45 degree angle from the ground. The foot placement should be in front of the body, as if almost walking along a straight line. Keep in mind the shortest distance between two points is a straight line. As the body's weight passes over the leading leg, the foot should roll forward and push off from the toes to begin the next step. A strong push will give you more momentum and power.

That's the basic technique. As you practice it and increase your hip flexibility, you will naturally develop a slightly longer stride.

**A word of caution:** It is counter productive and potentially harmful to your back if you try to increase the length of your stride by taking longer unnatural steps. Speed and efficiency in walking are generated by hip flexibility and quicker, not longer, steps.

***THAT'S IT!*** At first, this technique may seem complicated; but actually it is a natural motion where the whole body works in unison. Because of its low impact nature, the head does not bob up and down. When done correctly, it is a very fluid movement that is easier on the body.

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## Flexibility Exercises

The more flexible the walker, the easier it will be to master the walking technique and put it to good use out on the road. The primary objective of the following exercises is to help develop a fuller range of motion.

### Hip and Back Exercises

#### Crossovers

Following a straight line (real or imaginary) on the ground in front of you, walk along it and land your right foot on the left side of the line and your left foot on the right side. Being careful not to lose your balance, take large enough steps to create a full rotation of your hips. All motion is from the waist down while the shoulders are held steady facing forward.

#### Leg Swing

Standing on one leg (use a stationary object such as a wall or fence to help keep your balance) simply swing your outside leg forward and back, like a pendulum. After several repetitions, expand your range of motion by swinging it in a figure eight.

#### Lower Back Stretch

Lie on your back and keep your lower back flat against the ground. Using your abdominal muscles, pull your legs toward your upper body. Hold your knees close to your chest while keeping your head on the ground and your spine elongated. Hold, release. Hold, release.

#### Hip Flexor Stretch

Keeping the lower back flat, go into a lunge position with the knee positioned directly over the ankle. This is an important stretch to help a walker overcome an exaggerated arch in the lower back.

### Shoulder Exercises

#### Windmills

As you walk, rotate one fully extended arm in a circular motion. Keep your elbow straight as if you were doing the backstroke. Repeat with the other arm.

#### Shoulder Rolls

With your arms at a rested position at your sides, make circular motions with your shoulders. These flexibility exercises should be used along with basic static stretches for all the major muscle groups, including the quads, hamstrings, Achilles tendons, inner thighs and calves.

## Strengthening Exercises

Thirty percent of a walker's propulsion can be generated by the upper body. So, a strong upper body will increase power and stamina. If you are not already in a strength training routine, here are a few common weight lifting exercises that will be beneficial. They should be done with light weights and high repetitions.

- Shoulders - Overhead press
- Chest - Bench press
- Latissimus Dorsi - Lateral pull downs or pull ups
- Back & Shoulders - Rowing
- Abdominals - Crunches

If you do not have the time, desire, or access to equipment, incorporate bent knee or full body push ups into your daily routine.

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We have created these sample training schedules as a guide to help you formulate an appropriate training schedule. Please remember that this is just a general guide. You are unique, and the training schedule may not fit into your personal schedules. If you do miss a day, we do not recommend that you try to make up the mileage the next day. Instead, focus on the overall weekly mileage and consistency in training.

### Training Level Definitions

The following charts are broken down into three categories: **Beginner, Intermediate, and Advanced.** The descriptions below will give you an idea of where you may fit into the training schedules.

**BEGINNER:**

An inactive person who has been doing little or no exercise at all; someone who has been walking sporadically; someone who has been walking 3 miles or less no more than 3 times per week. [CLICK HERE FOR BEGINNER TRAINING SCHEDULE!](#)

**INTERMEDIATE:** [Click here for schedule](#)

A person who participates in aerobic activities on a regular basis (3-5 days per week); someone who regularly walks 4-5 miles, or up to one hour, about 4-5 days per week. [CLICK HERE FOR INTERMEDIATE TRAINING SCHEDULE!](#)

**ADVANCED:**

A person who walks more than 5 miles, or one or more hours, almost every day; has done some distance walking in the past. [CLICK HERE FOR ADVANCED TRAINING SCHEDULE!](#)

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**Workout Descriptions**

We have broken down the descriptions into Easy, Medium, and Long, so you can gage the pace and determine the difficulty of your individual workout.

Even though you may have the goal just to finish the marathon, it is still a good idea to set a goal for your approximate finish time. This will help you judge the pace to walk your training sessions. Another idea to help you get started is to know where you are at now. Measure a one mile walking route. Then time your self walking that route at a comfortable pace for you. That will give you an idea of your per mile pace.

Check yourself once a month to see how you have progressed.

**Easy Days** - Do a slow to moderate (comfortable) paced walk. Use this as an "active" rest day. This is a great time to practice technique and form.

**Medium Days**- A medium distance walk should be at the same approximate speed as you will use during the marathon. For instance, if your goal is to finish in approximately 6 1/2 hours, that's a marathon pace of about 15 minute miles. Hence, during your training, on the "medium" days you should walk the mileage indicated at the 15 minute mile pace. (For those who are really interested in speed, they can supplement their "medium" days by doing some intermittent interval training).

**Long Days** - Walk the longer distances at a comfortable pace. Time should not be a concern.

**Cross Training Days** - Cross training is a great way to avoid physical and mental burnout. We recommend swimming, biking, or low-impact aerobic classes. They are very easy on the joints and work muscles differently so you will have a more balanced conditioning.

## Walking Warm-Up,

by Jo Ann Taylor

Begin each training session with a moderate 5-10 minute warm up walk. Not necessarily in the walking form we discussed above, just fast enough to let the muscles know they're getting ready to work. At a convenient location, stop and stretch any areas feeling tight. By taking the time to warm up and stretch, you will perform better and reduce the chances of injury.

It is even more important to develop a cool down routine. Walk the last half mile of each workout at a very moderate pace and finish by stretching the entire body. This is when your muscles will be warm and flexible.

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## Most Often Asked Questions, Concerns and Potential Problems!

### SHINS

Almost every walker experiences some muscle soreness in their shins. A walker lands on their heel with the foot at an approximate 45 degree angle from the ground, whereas runners land at about a 30 degree angle. This high degree of repetitive flexing of the shin muscle can create soreness when a walker increases their speed or mileage. To help alleviate the problem, take plenty of time to warm up before every work out. Also, regularly exercising by pointing and flexing the foot and ankle rotations will help stretch and build the shin muscle.

Consistency in training will also help relieve this temporary problem.

### SHOES AND SOCKS

Everyone has their own favorite brand of both shoes and socks; while we don't recommend any specific brand, here are a few things to look for when buying both.

As far as socks are concerned, we recommend they be made of one of the new synthetic blends such as acrylic or COOLMAX® to draw perspiration away from the foot. A cotton sock is NOT a good choice because your foot will remain damp creating an unhealthy environment. There are specialized walking socks that contain extra padding along the bottom to provide extra cushioning and prevent blisters and chafing. They are available in most sporting goods stores.

Recommending the best walking shoes is more difficult. Shoe manufacturers are just beginning to recognize the need for an athletic type walking shoe, and very few make one that is good for endurance training. The number one consideration for shoes is the fit. We recommend trying a wide variety of brands to find one that feels the best. Both shoes should be tried on with your walking socks prior to purchasing a new pair. Your heel should fit securely so that there is no excess movement. The forefoot should be very flexible because of the heel to toe rolling motion of the foot. The shoe should have a high toe box area to avoid cramping the toes, and should have a firm heel counter for stability. Look for heels 1/2 to 3/4 inch high. If a comfortable walking shoe cannot be found, do not hesitate to try a flexible running shoe. A properly fitting running shoe is better than an ill fitting walking shoe. Avoid cross trainers since they are made for lateral movement making them too rigid for the rolling motion. A good walking shoe should last you approximately 500 miles.

### CHAFING

As a walker learns to increase the hip rotation, your feet will hit the ground almost directly in the center of the body. Because this motion is a bit more exaggerated than in a regular walking stride, it can create very high friction between the inner thighs. Lubrication and wearing light weight apparel with flat seams should help. Throughout your marathon training you may encounter a variety of hot spots. By adjusting your clothing and the use of Vaseline you can relieve this discomfort. It is important to wear the clothing you intend to wear in the marathon before event day. Try out your clothes on short training sessions to make sure they will be comfortable before you wear them to compete or on a long walk. A seemingly comfortable pair of shorts on a 5 mile walk could be torture on mile twenty.

### LOWER BACK PAIN

If you experience any kind of pain, especially back pain, we recommend you see a doctor immediately. As far as your walking stride contributing to the pain, in many cases it is caused by what is known as "sway back", which is an unnatural arch in the lower back. By positioning the pelvis in a neutral position, with the buttocks tucked under the hips, and regularly doing the previously mentioned stretches, the pain should be relieved. Have your trainer

take a look at your form to help you make any necessary adjustments. Sometimes pain in the joints and back is a signal for new shoes. If your shoes are the culprit buy a new pair. It is worth the investment.

### FOOD IS FUEL

Each person out walking is doing so for a different reason. Weight loss, body shaping, and toning are often high on the personal list of many. The subject of eating, dieting, and nutrition is, at best, controversial, and opinions about it are very diverse. In trying to avoid any controversy and overly complex information, here are a few general suggestions that may help you.

Try to evaluate the foods that work best for your own body. Always think of eating as refueling your body. High carbohydrate-low fat meals are the best fuel. Concentrate on eating slow burning carbohydrates such as fruits, cereal, and whole grains to keep your energy supply balanced. These foods provide energy as well as vitamins and minerals, and are stored in the muscles as glycogen. During hard exercise, these glycogen calories are burned to meet your body's energy needs. Protein is an important part of your recovery. Don't make the mistake of trying to eat low fat by cutting out all sources of protein. Try to include foods such as legumes, skim milk, low fat yogurt and cheeses, chicken and fish. The current general guidelines are that a person's diet should be 50%-70% carbohydrates; 15%-20% protein; and no more than 20%-25% fat.

During long walks it is very important to keep your energy stores up. On your long training walks experiment with foods that you can carry along that will keep you feeling strong. Each walker has their own preference of what works for them. Many find some of the high energy sports nutrition bars are effective while others prefer fruit. Keep in mind that part of your training is practicing which means all aspects of participating in the marathon so you are prepared for marathon day.

### THIRST AND FLUIDS

Thirst is a poor indicator of your body's need for fluid. In fact, by the time you feel thirsty, you are well on your way to dehydration. Dehydration will affect your performance. Drink plenty of water before, during, and after the training session. But don't stop there, water is a crucial part of your preparation. It will help you recover after your walk and help you keep up your energy.