

Daniel Fulham O'Neill, M.D., Ed.D, F.A.A.O.S.
Board Certified Orthopaedic Surgeon & Sports Psychologist

*PO Box N, Holderness, NH 03245
Tel: 603 536 2270 Fax: 603 536 2277*

WALKING THE WALK

Consider this for a personal profile: You want to feel healthier and stronger. You care enough to buy some low-fat items, though you're not ready for the "south-beach diet". You try to stay active although admittedly you lack consistency.

If this sounds vaguely familiar, the time had some to WALK. That's walk- not stroll, not graze, not ramble: WALK. Walking for fitness remains America's most popular activity. This is no doubt as it should be- walking is not only healthful, but probably the most natural activity that exists (at this point we won't classify changing the TV channel as an "activity"). After the trauma of birth, our next major milestone is learning to walk. Just look at a baby's face during these first steps- surprise, delight, pride, & fear. While a baby has no interest in fitness, they certainly have in interest in motion and travel. A child does not need encouragement to walk, because motion is as natural as eating.

It is our belief that fitness is passed down through generations similar to disease. How many top athletes are children of athletes? Since health is a combination of genetics and environment, perhaps the greatest gift we can impart to our families is the environment for health. The "great outdoors" should not be a foreign arena to your pets, your children, or yourself.

This country is in desperate need of exercise. A major downside to technological "advances" has been the amount of time people spend losing fitness (and polluting the environment) in their automobiles. Citizens in urban areas, with the use of public transportation, can often be more fit than rural counterparts, since the amount of exercise they get is often related to how much they drive.

BANG FOR YOUR BUCK

The benefits of exercise, especially walking, are endless. Walking will increase your lung capacity, thus increasing your energy. The stronger muscles and decreased fatty tissue will decrease your chance of injury and future surgical risks. Your immune system will see the benefits of increased oxygen and blood flow. Walking will reduce stress and clear your head for poetry, thought, and conversation.

At the risk of making a natural, simple motion complicated, I would like to present my suggestions for getting maximum benefits from your walking. Use any or all of these suggestions to increase your fun and health gains. Our walking involves not just simple locomotion, but breathing, posture, foot and arm positions, and a uniting of the mind and body to achieve the greatest gain from time spent.

The problem with walking as an exercise is that we're too good at it! Once one becomes efficient at an activity it loses its value for improving our strength and cardiovascular system. We recommend that you begin any program with a visit to your primary care physician. However, there is virtually no medical problem, whether it's heart, lungs, hips, or spine that will not benefit from some form of exercise, especially a low stress, low impact exercise such as walking.

START WET

If you are injured, obese, frail, elderly, or just generally out of shape, we suggest beginning you're walking in the pool. In waist deep water, the force of gravity diminishes by 50%, making water an easy way to being exercising in a completely safe environment. Begin in the shallow end of the pool. A buoyant vest or belt may be used if available. Walk forward, paying attention to posture and balance. Once reaching chest deep water, walk backward retracing your steps. This improves not only balance and coordination, but also positions sense. After just a few weeks of "walking in water" you will see improvements. Your legs will feel lighter and leaner, your oxygen use will be improving and your balance from walking properly will increase. Ideally water exercise should be a part of your lifetime exercise program.

INSIST ON QUALITY

This walking workout should initially last about 30 minutes, fitting nicely into your break or lunch hour. Research has shown that three weekly sessions of exercises for 30 minutes each is sufficient to strengthen your heart and lungs. We sometimes refer to these thirty-minute sessions as "quality" workouts since we ask you to raise your heart rate (i.e. pulse) to gain exercise benefits. Obviously if you have more time to spend this is even better. We divide the half-hour walking sessions into three ten-minute segments.

The first segment begins with three to five minutes of warming-up. Just as with any other exercise, we want our muscles warm and loose before making any fast motions. Start with a slow walk and roll your shoulders forward and backward. Pay attention (as always) to good posture. Proper posture serves to maintain balance, improve your heart, lung, and abdominal organ efficiency and decrease fatigue. Ideally your ear is over your shoulder, your shoulder is over your hips and your hips are in line with your ankles when standing with good posture.

When doing any activity, we strive to increase efficiency of work and motion. Once one becomes "efficient" at walking on flat ground, we then add hills or speed to increase work load.

The next minute or so, focus on stretching and warming-up the ankles. Ankles and feet are perhaps the most neglected areas of our body, but are the first to see stress from land activities. To stretch the ankles, stand on one leg and rotate your foot turning it in and out around the ankle joint. Do this for a few steps on one side and then switch to the opposite foot. Not only does this stretch and warm-up the ankle and foot, but it is also an excellent balance exercise

Finish your first 10 minute segment at a reasonably slow walking pace, concentrating on your breathing. This is also a good time to lift your arms overhead giving your shoulders and upper back muscles a big stretch. Feel how the motion of your shoulder blade seems to free your chest for even greater expansion while inhaling. Also note the stretch in the abdominal muscles below your rib cage. Try not to pinch off one side of your body while stretching the other. Bring your entire body position toward the sky.

POSTURE COUNTS

We refer often to maintaining "straight lines" of body position because this is the single most important mistake people make at work and at play. You should consider your position (i.e. posture) during all activities: sitting in a car, standing at the checkout, painting overhead, etc. While you walk, your feet should be at shoulder's width apart and pointing in the direction you are traveling. This applies not only when you are walking for fitness, but while you're walking to the post office, through an airport, and while you're pitching a baseball to home plate. The arms also move forward and backward for balance, rhythm and breathing, and to decrease fatigue.

If we sound like we're teaching you to walk all over again, your right! Begin with flat terrain to practice your new gait before mobbing on to hills. This is also the time to find a comfortable shoe and sock combination. You should be warned, however. That if you follow this program you would actually enjoy yourself and thus make walking a daily part of your life!

The next 10-minute segment consists of increasing your speed, but not at the expense of your breathing. You will often hear the phrase "aerobic" exercise. Aerobic simply means "with oxygen" (anaerobic means conversely, "without oxygen"). Once your body switches to an anaerobic mode, e.g. during a sprint, by-products build up causing pain and rapid fatigue. Any exercise that can go on for hours is by definition aerobic exercise. While most of us cannot sprint for more than a short distance, we can run or walk slowly for quite some time. Many people think of aerobic exercise as something you can talk during. While this is true, we actually discourage conversation during your walking sessions though we strongly encourage companionship. Ideally, instead of talking, we want to keep your mind clear to observe breathing, body position, muscle sensibility and the world around you.

DON'T JUST STAND THERE - BREATHE!

The benefits to your breathing is one of the great advantages walking has over many other forms of aerobic activities (e.g. running, swimming, aerobic dancing). During a walk you can pattern your breathing to your pace. If you have concerns regarding breathing capacity, this is something easily checked in any pulmonary lab.

While walking, breathe through your nose, filling your lungs from the bottom up. Singers and respiratory therapists will tell you that mouth breathing (panting) during a run does not fill the lung's lower air sacs. By using our diaphragm and abdominal muscles while walking we increase breathing efficiency during all activities. Bringing the air through your nose warms and filters it before reaching the lungs.

Finally, in the third 10-minute segment we are going to turn up the speed just a little bit more. At this point you should be feeling your heart beating faster than normal and hopefully you are breaking a light sweat. (PS...it hurts less to bring a fresh shirt or blouse to work than to die of a heart attack at age 45). Keep your motion smooth at the faster pace. If you cannot maintain good form, don't walk as fast. A good rule of thumb for any sport is- if you're too tired to maintain good form, you should slow down. Accidents and injuries happen to tired bodies with poor mechanics and thus, poor coordination. If you feel dizzy during your activity, stop, stabilize yourself on a tree or building and breathe slowly, sending oxygen to your brain.

COOL-DOWN

At the end of your walking session give yourself time for a cool-down. The cool-down will take longer during the summer months, but even in cold weather, it should not be neglected. Cooling-down is important to allow the heart rate to slow steadily, not precipitously. During exercise, we pump large amounts of blood to the muscles. The muscles in turn use the nutrients in the blood and then help pump blood back to the heart by squeezing the veins. When we stop any exercise abruptly, the heart continues to pump blood out, but the muscles stop pushing it back. This causes swelling through pooling of the blood in the muscles. Additionally, the muscles need time to eliminate their waste products via the high blood flow. In the last few minutes we're going to slow our pace from fast to medium to slow. Do some ankle rotations for each leg and finally end with some shoulder rolls. Give arms and legs a good shake to complete the cool-down process. Now go back inside with the knowledge that you've just spent the last half hour of your life doing something incredibly useful.

MIX IT UP

Avoid adaptation by adding a few jog steps, taking different routes, doing lunges, squats or 360° turns during the walk. Walking backwards is also a fun change that emphasizes different muscles. When you first add hills, try traversing up or down as if you were skiing. As you get stronger, increase your uphill speed since you'll be able to rest on the way down. Obviously, if you experience any pain during the walk, stop and head home on the shortest route. Pain, particularly in your chest, should never be negated.

Having some indoor equipment such as a stationary bike, elliptical machine, or treadmill are useful, but should be reserved for bad weather days. Set up this equipment in front of a television to ward off boredom and try to avoid exercising in the stale basement air. Try to walk in the daytime to provide the advantages of sunlight for vitamin D and to ward off depression. Daytime walking also tends to be safer both from a footing and personal safety standpoint. Walking near water provides added benefits to clear air and the elusive "mind/body connection".

Conditioning exercise should be used for sports, not sports for conditioning. Walking is the cornerstone of this conditioning. The "weekend warrior" basketball player is not necessarily fit, and each day of basketball on a poorly conditioned body increases the risk of injury.

What I am advocating is an improvement in quality of life. The coordination to do a 360° turn could be the difference between a simple fall and a broken hip. A day spent in elevators or sitting on your walking muscles must be counter-balanced by some type of exercise. Walking is safe, fun, and available. You don't have to suffer pain to do good things for your body! Remember, by developing an active, consistent approach to health you are not only benefiting yourself, but your entire family as well. Keep walking, and keep smiling.