Nutrition for Recovery

Nutrition is the foundation of post-exercise recovery, because it provides the raw materials with which your body can make physiological adaptations in response to training. If you take in the right nutrients, in the right amounts, at the right time after workouts, you will recover far more quickly and thoroughly than you will if you don’t practice proper nutritional recovery.

The Importance of Timing
Timing is essential with regard to post-exercise nutrition because your body is primed to sponge up needed nutrients at this time. For example, synthesis of muscle glycogen – a form of stored carbohydrate that serves as the body’s primary energy source during endurance exercise – proceeds two to three times faster in the two hours immediately following exercise than it does at any other time.

There are three main components of post-exercise muscle recovery. First, it is necessary to restore fluids lost during exercise. When a walker sweats heavily, he or she loses a lot of water and electrolytes. Drinking a sports drink during walks can slow the rate of fluid loss, but can’t stop it completely. So it’s important to make up the deficit by continuing to use a sports drink with electrolytes after exercise. If you do not rehydrate properly before the next workout, you could experience overheating, muscle cramps, and other problems.

The second component of muscle recovery is putting carbohydrate fuel back in the muscles. Again, carbohydrate is the muscles’ main fuel source during moderate-intensity exercise. The longer a workout lasts, the lower your muscle fuel supplies become. By using a sports drink containing carbohydrates during walks, you can slow down this process. But it’s impossible to take in carbohydrate during intense exercise as fast as it’s burned. So you need to continue taking in carbohydrate after exercise, as well. If you don’t get your muscle fuel levels back to normal in time for the next walk, you’ll be sluggish and sloppy.

Repairing Muscle Damage
Finally, the third component of muscle recovery is fixing the damage done to muscle tissue during exercise. High-intensity physical activity can cause small tears in muscle tissues. In addition, some muscle proteins are broken down for energy during hard exercise. Also, hard exercise produces damaged molecules known as free radicals, which attack muscle cells. In order to undo all this damage, you need to consume protein after each walk. You should also get antioxidants such as vitamins C and E, which help protect the muscle tissues against damage from free radicals.

QUICK TIP
Consuming carbohydrate and protein within 45 minutes after your exercise will help you recover faster.
The most convenient way to get all of the nutrition needed for recovery is to continue drinking the same carbohydrate-protein sports drink that was used during the workout. These drinks contain exactly what is needed and the right proportions without anything extra that might slow down the recovery process. Most walkers also find them easier to swallow and keep down than solid food immediately after a workout.

If you are hungry after your walks, eating is fine. Just make sure you get all the same nutrients you would get in a quality sports recovery drink without a lot of extra stuff (fat, excess protein) that might slow down the delivery of nutrients to your muscles. Some energy bars are good recovery foods. In any case, you will need to drink some form of fluid to meet your body’s hydration needs after workouts. For more information visit www.poweringmuscles.com.

Preventing and Treating Injuries

Walking is not as likely to cause injuries as its high impact cousin running, but there are a few conditions that distance walkers are susceptible to, especially in the early stages of training. Fortunately, it is relatively easy to prevent and treat these conditions.

Bad shoes are the culprits in relation to many walking injuries. Always buy your walking shoes from knowledgeable professionals who understand the needs of walkers. Running stores are generally your best bet. For better support, replace the foot beds that come in your shoes with a separately sold over-the-counter foot bed or, if necessary, a custom foot bed made by a podiatrist.

Track the number of miles you walk in each pair of shoes and pay attention to signs of wear. Replace them frequently. For the Challenge Walk itself, be sure to wear shoes that are broken in but not broken down.

Let’s take a look at the three most common walking injuries:

Blisters
Blisters are abrasions that develop on the foot as a result of friction between the foot and the shoe, and sometimes the sock as well. Blisters can be hard to avoid for the beginning walker and indeed it is quite impossible to pursue a regular distance-walking program without the skin on the major friction areas of your feet being affected. But the goal is to develop protective calluses on these areas rather than blisters.
The common sign that a blister is developing is the feeling of a “hot spot” in a particular area of your foot as you walk. When you feel a hot spot, stop walking immediately and apply a lubricant such as petroleum jelly to the affected area. Lubricate this spot also before beginning your next several walks. This will allow these areas to adapt the friction of walking more gradually and develop protective calluses instead of blisters.

If a hot spot does turn into a blister, dress it with a product such as Moleskin that is made specifically for this purpose. Use the “donuting” technique of covering the area immediately surrounding the blister but not the blister itself. Do not walk with a bandage covering the blister itself – this will only make the problem worse. Use bandages and antibiotic ointments only between walks to prevent infections and promote healing.

**Shin Splints**
The term shin splints is a catchall term for more than one condition affecting the soft tissues of the shins. There are basically two categories of condition. Pain in the outer frontal area is just a natural part of the conditioning process. As long as you avoid overtraining during the period of time when you experience this pain, it will disappear within a week or so as your muscles adapt to the challenge of consistent walking.

Pain in the inner frontal area of the shin is generally associated with insufficient arch support and can become debilitating if not addressed. If you begin to experience pain in this area, reduce your walking volume and perform more cross-training workouts (e.g. bicycling) to make up the difference. Switch to a shoe with greater arch support or insert an over-the-counter or custom orthotics into your shoes. You may also try wearing a pressure wrap on your lower leg while walking.

Never try to push through pain in the inner frontal area of your shins. If you do, it could eventually become a stress fracture!

**Knee Pain**
In walkers, knee pain is generally caused by improper tracking of the kneecap resulting in wearing of the patellar tendon. Typically the failure of the kneecap to track properly during walking is associated with muscular imbalances in the leg that can be corrected with conditioning exercises. Specifically, walkers who develop knee pain are generally weak in the gluteal muscles (buttocks) and in the vastus medialis, one of the muscles comprising the quadriceps.

Bicycling is a great conditioner for the vastus medialis, while Pilates and calisthenics exercises such as lunges develop the gluteals. If you develop pain just below the kneecap, reduce your walking and emphasize these cross-training activities until you are symptom-free.

“I was overwhelmed by the camaraderie shown by all, from your wonderful staff to the crew and volunteers, (without them I would not have been able to finish) to the walkers themselves. This event has not only given my wife and I hope that we are "Closer to a Cure" but it also rejuvenated my confidence in the human spirit, in mankind.”

Comment of a past MS Challenge Walker