



Tip #6: CARRY ON WITH CROSS TRAINING

Injured? Prone to injury? Whether looking to prevent injury while building fitness, or maintain fitness (and sanity) while recovering from an injury, cross training is the answer. No form of cross training is a perfect replacement for running because our bodies adapt very specifically to the demands of running (specificity of training). But there are times when running is not an option, and each of us has a different tolerance level for the amount of mileage and intensity and may find cross training as the answer to increasing or maintaining fitness while staying injury free.

One of the most frequently asked questions asked by those suffering from injury is how quickly they will detrain. At 5 -7 days of inactivity, there is no loss, and there most likely will even be some running improvement because of the rest! After that, however, deconditioning occurs at a rate of about 2 – 3% per week of inactivity. The good news, however, is that cross training can slow or even stop the loss in cardiovascular fitness.

What are the best forms of Cross Training for Runners? According to Ed Eyestone, a two-time Olympic marathoner and Exercise Physiologist, the Elliptical Trainer and Water Running are the most effective methods of cross training for a runner. Benefits can be reaped, however, from a wide variety of cross training techniques and the nature of the running injury may prevent some of these from being an option. Below is a brief summary of several of the most popular:

Elliptical Trainer

The elliptical trainer is the closest form of cross training to running in terms of muscles and aerobic systems used. You can do almost any workout on an elliptical that you can do while running; long runs, lactate threshold or VO2 max. When using the elliptical, to most closely simulate running, use a lower resistance and a faster turnover of 180 to 200 steps per minute. This will help maintain your leg turnover.

Water Running

Deep water running with a flotation vest or belt is one of the most effective methods of cross training for runners because it closely simulates land running, and it is safe for most running injuries. Most fitness centers with a pool make these available. Like the elliptical, you can perform almost any type of workout in the water that you can on land. It is difficult to maintain running form in the water; the most important factor is to be able to maintain proper intensity. Your stride rate will be slower in the water, and it will be even slower if you try to simulate land running exactly; try to concentrate on intensity to maintain fitness. Some runners move forward slowly in the water while others stay in place; either is ok. If you maintain a relatively upright posture, it will reduce the tendency to move forward. Also, if you heart rate train, be aware that your heart rate will be 8 – 11 beats per minute lower for the same level of oxygen uptake than it is when running on land.

Stair Climbing

Stair Climbing provides a great cardiovascular workout and also very closely approximates running. Because the stair climber stresses the body in a similar way to running, it often cannot be used as a cross training option for injury recovery. For a healthy runner, however, stair climbing makes a great substitute for recovery runs.

Cycling

Cycling is a great cross training option that works the cardiovascular system while eliminating the impact that causes most running injuries. There are many options; you can ride a bike outdoors, indoors on a bike trainer, or use an exercise bike at home or at the gym. If you ride outside, you get to cover ground much like you do in running, eliminating some of the monotony. The downside is the risk of colliding with a vehicle, and to get a good workout you have to travel at high speeds on a bike which requires some skill. Because cycling uses a limited range of motion, there is also the risk of shortening your stride. You can minimize this by walking and then running (if injury permits) and then stretching your hamstrings, quadriceps and hip flexors. The bike can be used to do long endurance workouts, or lactate threshold workouts. When using the bike, be sure to keep it in an easy gear with RPM's of at least 90.

Swimming

Swimming is a great form of cross training that works the cardiovascular system with none of the stresses of running. It does require a bit of skill to get in a good workout, but with some instruction you can build up quickly. Swimming isn't as similar to running as some of the other cross training methods, but if most of your training primarily consists of running, that doesn't matter. It is a great way to increase your overall general fitness and helps to promote recovery at the same time. Feeling a bit sore? A good swim in place of a recovery run is a great solution!

Cross Country Skiing

Cross country skiing is the only form of exercise that provides cardiovascular benefits equal to or greater than running. Because it uses the entire body it works the cardiovascular system very hard: some of the highest VO2 Max values have been found in cross country skiers. The drawback is that it does require some skill (and snow!) and those without experience may not be able to go fast enough to get in a good workout. Cross Country ski machines are not as much fun, but make a great alternative.

When you are recovering and ready to work your way back to running, the smart way is to work your way back up to running slowly, and perhaps through cross training options as you heal. You may only be able to do deep water running at first, graduate to the elliptical trainer, and then finally run easy on a treadmill.

References:

1. Pfitzinger, P., and S. Douglas. 2001. *Advanced Marathoning*. Champaign, IL: Human Kinetics.
2. Glover, B., and S. Glover. 1999. *The Competitive Runner's Handbook*. New York, NY: Penguin Group.
3. <http://www.runnersworld.com/article/0,5033,s6-78-82-0-6039,00.html>