Elliptical Training

After aqua jogging, the elliptical machine is a runner's best choice for cross training equipment. The movement of the elliptical somewhat mimics running form, but without the impact, and you can easily monitor and change the intensities. Furthermore, elliptical machines are widely available in most gyms, making them an easy cross training solution. The only drawback to the elliptical machine for injured runners is that it can still aggravate some injuries, despite the lack of impact – think stress fractures, achilles injuries, and the IT band.

While direct comparisons between elliptical training and running are limited in scientific research, I did uncover some data for injured runners. In one study, researchers concluded that, during a cross training or noncompetition-specific training phase, an elliptical device is an acceptable alternative to a treadmill. Likewise, another study found that when training volumes and intensities were equivalent on the treadmill and elliptical, physiological adaptations remained relatively the same. So, while the elliptical is not a perfect substitution for running, it will allow you to maintain fitness during time off from running.

Sample workouts

**Easy** = 65-75% of maximum Heart rate. During a typical easy run, you would have a stride rate that is equivalent to a cadence that is 90 rpm (rotations per minute) on an elliptical. So, for easy elliptical sessions and breaks between intervals, lower the resistance and incline on the elliptical so you can maintain a rhythm of 90 rpm. As a note, some elliptical machines measure stride rate, which measures both legs, so stride rate would 180)

Easy elliptical sessions should be used for recovery between hard workouts or general maintenance. In general, you should replicate your time running on an average easy day with time on the elliptical. So, if your normal easy day is 45-50 minutes, than you would elliptical for 45-50 minutes. Generally, I prefer a lower incline since it more closely mimics the running motion.

**Medium** = 87-92% of maximum heart rate. This is what you would consider a hard tempo run effort; comfortably hard. Maintain 90 rpm, but increase resistance or incline to increase heart rate and effort to appropriate levels.

Medium elliptical sessions are great for runners who are injury prone and want to exercise and run more, but can’t add the volume to their training yet. They are also good as “maintenance” days for injured runners. The workouts will help keep your heart rate up, but aren’t so killer that you can’t perform them daily. To make the workouts longer or shorter, simply adjust the number of repetitions.
Elliptical Training for Runners

1. 10 mins easy w/u, 6 x 5 mins hard, 3 mins easy, 5 mins easy c/d

2. 10 min easy w/u, 1,2,3,4,5,6,5,4,3,2,1 minutes hard w/2 min easy btwn all, 5 min easy c/d

3. 10 min easy w/u, 1 min medium, 1 min hard, 1 min medium, 1 min hard, 1 min easy (x6), 5 min easy c/d

4. 10 min easy w/u, 1:00 hard, 30 sec easy, 30 sec hard, 30 sec easy, 2:00 hard, :30 easy (continue building up until 5:00, and then come back down by :30 second intervals) 10 min easy c/d

**Hard** = 95-100% of maximum heart rate. This would be considered a VO2max or speed workout type effort. Again, maintain 90 rpm and increase the resistance to achieve desired effort level.

Hard efforts are great for the inured runner who needs to maintain fitness and train to get back in shape fast. You should two or three of these hard workouts per week.

1. 10 min easy w/u, 20 min medium pace, 3 x 3 mins hard w/90 sec easy, 5 min c/d

2. 10 min easy w/u, start at level 1 and increase resistance every 4 minutes for 35-40 minutes, 5 min c/d (this is a simulated hill workout)

3. 10 min easy w/u, 5 min medium, 2 min hard, 5 min medium, 2 min hard, 2 min easy, (x 3), 5 min easy c/d

Cross training can be tough, especially when you’re injured or want to be increasing your volume faster. By providing a variety of workouts and implementing some elliptical training, you’ll emerge from your injury with minimal fitness loss and challenge your aerobic system without the pounding.

“The fight is won or lost far away from witnesses - behind the lines, in the gym and out there on the road, long before I dance under those lights.”

-Muhammad Ali