Tapering

The importance of tapering for an endurance event cannot be over emphasized. Endurance events require a lot of mileage training and that training takes a toll on your body. In order to perform at your best in your goal event, it is important to time your taper so that you have the benefits of your built up fitness and sufficient rest so your body can handle the stress you are about to put it through.

Incorrect taper along with overtraining is the best way to ruin your race day. It can lead to injury, fatigue and lowered performance on race day.

Rest is a key component of your training for one key reason; if the training alone made you stronger, you would run faster at the end of the event than at the beginning. Your body actually adapts and repairs during rest so rest could be argued as more important than volume of training.

The goal of tapering.

We taper for two primary functions; to ensure our muscles are rested and fueled and to reduce the amount of fatigue due to lactic acid build-up. By allowing your muscle to repair themselves and reducing their fatigue, you can enter the race with the knowledge that your body will last longer before hitting the wall.

So when and how should you taper?

Depending on the length of the event, your taper should change. For a marathon for example you should spend a full 3 weeks tapering in order to let your muscles rest and repair and be ready for the race. For a half marathon you should taper for 2 weeks and for a 10K, one week should be sufficient.

The act of tapering require you to significantly reduce your mileage but increase the intensity of your runs. This gives your body more time for rest and repair but continues to increase or maintain your fitness level. This is an excellent time for some speed training where you can increase the number of mitochondria and your anaerobic threshold but be careful not to injure yourself at this late stage of training. Using a heart rate monitor to assist you in maintaining a suitable intensity is a much safer way of training than trying to run repeats at a particular pace which does not take into account factors like weather, inclines, your health or stress levels.

What is happening physiologically?

Whenever you exercise you are putting demands on your body. Your body reacts to these demands by adaptation in the form of muscle growth so in order to get stronger, you must first stress the muscle and deplete its stores of muscle glycogen. Your body's energy systems all work together and depletion of glycogen is inevitable as well as the production of Lactic Acid. By resting and carb loading you can replace the used muscle glycogen and allow your body to metabolize excess lactic acid. This

way you will be entering race day well fuelled and without fatigue.

The most efficient way to replace muscle glycogen is to eat carb rich foods soon after finishing exercise. Usually eating within 30 minutes of exercise is the recommended timeframe. This in effect 'loads' the muscle with fuel for the next bout of exercise. After this time period, when your metabolism has returned to normal, you body is much more efficient at converting the fuel into body fat.

Another by-product of exercise is lactic acid. Lactic acid is produced when your muscles do not have enough oxygen to produce a complete aerobic chemical reaction. The consequence of lactic acid build-up is that it causes muscle fatigue and eventually muscle failure. Ensuring you have plenty of rest time before your big race will reduce the amount of base lactic acid you have in your muscles and allow you to work for longer before fatigue sets in.

Guidelines for Tapering

The length of your taper depends on the length of your goal race. Reduce your weekly total distance by 1/3 each week.

As you decrease your mileage, increase the intensity with the exception of the last week.

Do nothing more than a few light jogs in the last week. You should not risk a last minute injury.

Drink lots of water. Lactic acid is very water-soluble so this is a good method to remove lactic acid.

Ice any little aches and pains to reduce swelling in the days leading up to your race.

Do not ignore nagging chronic injuries.

About The Author

Tony Denford is a certified personal trainer and owner or Hit the Road. He has been training primarily runners since 2002 and has worked with beginners all the way to Boston Qualifier Marathon runners.

Tony emphasizes balance and variety in his training methods and always tries to make sure his client's fitness routines are fun as well as beneficial.

Visit www.hittheroadrunning.com for more details on Hit The Road's programs and services.