

# Just So You Know

## Staying Off The Sidelines: Injury Prevention 101

It can happen to the best of us. And when it does happen, it usually is not at the best of times....week 14 in an 18 week training program for a marathon, half way through a race, the point in time when you just start to notice an increase in performance after weeks of hard training. BAM! Just like that, it can sideline you for weeks, sometimes months, depending on the severity. And of course, you didn't do anything wrong...it just happened right? Wrong. Believe it or not, most running injuries are the product of sheer negligence (what we do and what we don't do) on the runners' behalf. We all mean well, but we don't always make the best informed decisions when it comes to our running health. After all, running is like a drug to most of us; we can't get enough. Sometimes our judgments can be clouded by our desire to succeed or can be driven by our very own egos. We like to believe (or hope) that we are invincible until it is too late. Most running injuries are avoidable and treatable if the proper precautions are taken...**before, during and after running**. Sports scientists suggest that injury rates could be reduced by 25% if athletes *took appropriate preventative action*. In reality, it's not the sheer act of running per se that causes your body to break down; it's the *amount and manner in which you run* in most cases. Here are some basic rules and tips to help you stay healthy so that you are not stuck on the path to recovery instead of improvement.

### TRAIN SMART

Without a doubt, training improperly is one of the major causes of injury. Since most of us do not have coaches telling us what to do, when to do it, and how often, the fine line between injury and non-injury can easily be crossed. Heck, if professional athletes can get hurt, and they have a crew looking after them, you bet-your-bottom that it can easily happen to the average joe runner. Most injuries are caused by what is called "the terrible too's": too much, too soon, too fast, too hard, too often, and too little rest.

Consider these tips to training safely:

#### **"RICE"**

**Treatment:** Rest, Ice, Compression, and Elevation. Ice the trouble spot for ten minutes on, then ten minutes off, repeating as necessary. You should ice as soon as possible after you have been injured, and immediately after a run if you are running with an injury. When combined with compression (with a cold pack, for example) and elevation, icing goes far to reduce pain and swelling.

- *Train consistently:* Avoid large gaps in training. If unavoidable, return to a low level of running. Do not attempt to make up for lost time.
- *Build mileage slowly:* Avoid doing too much too soon. General rule is to increase mileage approximately 10% per week. It is also recommended that you cut your mileage every third week to allow for recovery.
- *Follow hard-easy concept of training:* Hard workouts include long runs, races, speed work, hill repeats, and/or any other stressful workout. Plan at least 1 day of rest after every hard run. Don't do hard runs back to back.
- *Heed warning signs:* If something is hurting pay attention to it, find out why, and change what is making it hurt. For optimal results, start treatment at first sign. Ice can work miracles. Another option is to use Icy/Hot or Biofreeze when you experience tight, sore muscles (after, not during).
- *Pay attention to your body:* Do not become a victim to a running schedule *or your running partner*. Most training programs have one or two week's leeway in case of injury or other unforeseen circumstances. If you're feeling tired, take a day off during the week to save your legs for the long run. Or take it down a notch, and concentrate on just getting the miles in.
- *Incorporate speed work carefully:* Add one new element of training at a time (long run, speed session, hills). Allow 3-4 weeks to become accustomed to each new element. The total distance that you do in speed training should not exceed 10% of total weekly mileage. Limit yourself to two or three hard runs a week. When beginning speed training, it's a good idea to start with pickups or fartlek; then short distance intervals, increasing the length of intervals as you progress.

Everyone's body is different. There is no magic number. The key is to determine what works best for you and stick with it.

### STRENGTHEN CORE

Running injuries are often caused by poor mechanics and/or weak core strength. Strength training geared at the core can address instability and weakness of the hip and core stabilizers.

### CROSS TRAIN

This helps prevent muscular imbalances that can lead to injury. Cross train with weights, classes or other sports. Cross train in between hard workouts in place of complete rest. This will not only strengthen non-running muscles, but it will help with recovery by providing blood flow to the muscles. In addition, it's a great way to lose weight without increasing injury risk.

#### **Special needs for Athletes:**

- ✓ Require more nutrients
- ✓ Increase in protein
- ✓ Increase in carbohydrates
- ✓ Increase in vitamins/minerals.

## **NUTRITIONAL NEEDS**

Your level of fitness plays a major role in injury prevention, as does the substance of your diet. Poor eating habits can actually make you more susceptible to injuries. The opposite is true, too; you can chase away risks by pursuing the right nutrients. Avoiding damage starts with establishing and maintaining a diet that provides adequate calories and nutrients to keep your body functioning right and stocked with energy. You need energy to feed the muscles and keep them strong. Fatigue leads to poor technique, which makes you more susceptible to injury. What you eat daily is just as important as what you do before, during and after running - something that is commonly overlooked and not taken seriously. As runners, we ask a lot of our bodies, making it all-the-more important to provide it with the right nutrients in order to survive. (Watch for more on this topic in upcoming Just So You Know articles.)

### Daily regimen tips:

- *Eat More* - It is important to make time to eat. Low caloric intake does not provide enough energy for your muscles and more than likely will result in vitamin and mineral deficiencies. If dieting, try not to cut calories too drastically.
- *Eat a well-balanced, healthy diet* - It is recommended to consume 50-60% carbohydrates, 20% protein, and 10-20% from good fats. Try to eat protein with every meal (to help with recovery) and intake adequate amounts of vitamins and minerals through fruits, vegetables, dairy, etc.
- *Drink plenty of fluids* (this doesn't mean soda and sugary beverages!) - Dehydrated muscles do not perform or recover properly and are prone to injury. Try to aim at an amount in which your urine is almost clear. The recommended amount is 1 to 1.5 gallons a day. In addition, this helps flush out metabolic waste.

### Pre/Post run regimen tips (as tolerated by your body):

- Eat a carbohydrate rich meal 1-4 hours prior to exercising, depending on the type and duration of exercise. It is also ideal to add some protein to the mix as well. 5% of energy can come from protein during an endurance activity.
- During strenuous exercise, aim to drink about 8oz every 15 minutes or so. Try to consume 100-250 calories of carbohydrates per hour (food/gels) after the first hour of performing endurance exercise. This provides a constant source of energy for your muscles, warding off fatigue.
- Recover with adequate amounts of carbohydrates, protein and fluids. Food/fluids should be consumed within 1 hour after running for optimal recovery. Specifically, you need protein for tissue repair, carbohydrates to restock your muscles with fuel, and water to rehydrate.

#### **Interesting Facts**

- Inadequate protein intake will compromise your recovery from workouts and limit the amount of training you can handle without getting sick or injured.
- One study found that runners who consumed too little good fat were more susceptible to injuries.

## **STAY LOOSE**

Flexible muscles are stronger, more efficient, and can help runners avoid injuries. 15 minutes of gentle stretching after running can go a long way. Hold each stretch for at least 30 seconds. At the same time, you should never end your run abruptly. This helps muscles cool down properly and aids in recovery. Prior to running, it is a good idea to warm up with easy running versus stretching cold tight muscles. Before an intense, hard workout warm up with an easy mile, and do dynamic stretching.

## **SHOE HEALTH**

Running shoes should fit properly, not be overly worn and should accommodate the runner's style of running. Running shoes should be replaced every 300-500 miles. Try to avoid using running shoes for any thing other than running. Have your shoes fitted by a professional. The wrong shoe can actually aggravate existing problems, causing injuries in your feet, legs, knees or hips.

## **TIME TO REST**

Rest enhances the recovery process and reduces the risk of injury. Allow adequate rest days for muscles to refuel and recover. Taper at least one week before competition. For most runners, anywhere between one and three days a week should be devoted to rest or non-running activities. And don't be afraid of losing fitness. We get stronger when we rest because it allows our bodies to repair and take us to new "heights."

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If you have any questions or topics in which you would like to find out more about, please contact me at: [dwood5555@gmail.com](mailto:dwood5555@gmail.com). Stay tuned for the next bimonthly Just So You Know article.

