Ask the Exercise Physiologist: Plantar Fasciitis

Q: I recently started running outside and notice some pain in my left heel when I take my first steps in the morning. A co-worker told me that I have plantar fasciitis. What is this and how do I get rid of it?

A: It is not a good idea to assume a diagnosis. Rather, it is recommended that you consult with your doctor to receive a proper diagnosis and treatment plan. As warmer weather approaches, more individuals will start running outside or start a running program for the first time. It is estimated that each year, two million people in the United States are treated for plantar fasciitis or a foot-related injury, accounting for up to $376 million in annual health care costs. Although the exact etiology of plantar fasciitis is not completely known, it can be attributed to many factors. Following are some causes, preventive measures and treatment for this troublesome condition.

Causes:
- Improper shoes
- Improper foot mechanics (flat feet, over pronation)
- A lack of stretching
- Over-training (too much mileage)

Preventive Measures:
- Proper footwear
- Stretching
- Running on more forgiving surfaces (non-concrete trails)
- Easing into a running/walking program

Treatment:
- Soft tissue work (roll a golf ball or frozen water bottle under the foot)
- Calf stretching
- Plantar fascia stretch (visit the provided link for these two stretches)

Sources:
http://www.runnersworld.com/tag/plantar-fasciitis
Eating Organic: The Dirty Dozen, and the Clean 15

Q: What does “organic” really mean?
A: According to the Agricultural Marketing Service of the U.S. Department of Agriculture, “organic is a labeling term for food and other agricultural products that have been produced according to the USDA organic regulations.” Anything produced and labeled “organic” must not contain synthetic pesticides, fertilizers or genetically modified organisms (GMOs).

Q: Are organic foods more nutritious than non-organic foods?
A: No. According to a review in the journal, Annals of Internal Medicine, in 2012, researchers at Stanford University concluded that:

(1) Organic produce does not have a higher vitamin content than non-organic produce.
(2) Organic produce has a 30% lower risk of pesticide contamination than non-organic produce.
(3) The pesticide residue found in both organic and non-organic produce was within allowable safety limits.

Q: What are ‘the Dirty Dozen’ and ‘the Clean 15’?
A: The Environmental Working Group (EWG) analyzed government data and created a list of fruits and vegetables, rank-ordered according to their respective concentrations of pesticide residue. Produce with the highest concentrations, even after washing, is known as the “dirtiest,” while that with the lowest concentrations is known as the “cleanest.” Did you know that apples are thought to be the “dirtiest” fruit and avocados the “cleanest”? For the complete list, visit www.ewg.org, or download the free application, ‘Dirty Dozen’ on your smart phone.

Q: How can I reduce my exposure to pesticides if I can’t afford to buy organic produce all the time?
A: There are lots of things you can do!

- Make sure to wash all produce under running water and dry with a clean cloth or paper towel.
- Scrub firm produce with a brush and rub soft produce with your hands.
- Peel produce when possible. (Keep in mind this reduces the nutritional value of the fruit or vegetables, since most of the nutrients are found in the skin.)
- Consider growing a home garden or participating in a community garden.
- Shop at a local farmers market and talk to the farmers about their farming practices.
- Eat a variety of fruits and vegetables to minimize exposure to a single pesticide.

Sources:

- www.npic.orst.edu
- www.ewg.org