Who eats shoots, and leaves?

IT'S John Bell – who has also made yet another valuable contribution to Vetrun's continued campaign of making healthy, long-lived readers. (We gotta keep the old one's going folks!)

However, John points out that this article omits mention of nutrition in the plan, regarding the lowering of gout and cholesterol levels by means of less dairy, less eggs, less food from animal sources.

You know his message: eat more fibre.

eat more leaves less seeds.

The centre of chlorophyll is a <u>magnesium</u> iron (not iron like in haem, of blood.) "So," says John "like Bill Clinton, these days I eat heaps of baby spinach, cabbage, citrus. "I smash up fruit and veg in a blender with ice - because I'm scared of pain!"

What Is Plantar Fasciitis?

http://www.irun.org.au/News/plantar-fasciitis-88583

for the full story on plantar-fascitis, compiled by *Rob O'Donnell, Physiotherapist and Director of Southern Suburbs Physiotherapy Centre and former Australian Distance running representative.*

For more details go to www.sspc.com.au

Plantar Fasciitis is a painful condition affecting the bottom of the foot.

It is a common cause of heel pain and is sometimes incorrectly called a heel spur. The plantar fascia is a thick fibrous band that runs the length of the sole of the foot. The plantar fascia helps maintain the complex arch system of the foot and plays a role in one's balance and the various phases of gait.

Disabling

Injury to this tissue, called plantar fasciitis, is one of the most disabling running injuries and also one of the most difficult to resolve.

Rehabilitation can be a long and frustrating process. The use of preventative exercises and early recognition of danger signals are critical in the avoidance of this injury.

Signs and symptoms

Symptoms include pain in the centre and/or inside of the heel when weight is placed on the foot. It's usually most pronounced in the morning when the foot is first placed on the floor. After several minutes of walking the pain usually subsides only to return with the vigorous activity of the day's training session.

The most common site of pain with plantar fasciitis is at the attachment point of the plantar fascia on to the heel bone (calcaneus). The plantar fascia fans out over the sole of the foot ending at the base of the toes.

How Does It Happen?

Far and away the most common cause of plantar fasciitis is a series of biomechanical factors (high arch, poor stability, tight gastroc complex, uneven leg length, myofascial trigger points) that combine to produce cumulative micro traumas that push the plantar fascia past its elastic limits.

The foot is a very complex structure required to absorb ground impact forces of running or jumping anywhere from 3-22 times one's body weight.

Any muscular imbalance, ligamentous laxity or aberrant mechanical action (due to injury, flat feet, high arches, blisters, etc.) predisposes the foot to injury.

Plantar fasciitis is usually not the result of a single event but more commonly the result of a history of repetitive micro trauma from training errors (too much too soon) combined with a biomechanical deficiency of the foot.

When the foot is on the ground a tremendous amount of force (the full weight of the body) is concentrated on the plantar fascia. This force stretches the plantar fascia as the arch of the foot tries to flatten from the weight of your body. This is just like the string on a bow is stretched by the force of the bow trying to straighten. This leads to stress on the plantar fascia where it attaches to the heel bone. Small tears of the fascia can result.

These tears are normally repaired by the body.

As this process of injury and repair repeats itself over and over again, chronic pain can arise. Occasionally a bone spur sometimes forms as the body's response to try to firmly attach the fascia to the heel bone. However this bone spur is rarely the cause of pain.

As we age, the very important fat pad that makes up the fleshy portion of the heel becomes thinner and degenerates. This can lead to inadequate padding on the heel and chronic pain in this area. It is also thought that the small nerves that travel under the plantar fascia on their way to the forefoot become irritated and may contribute to the pain. Both of these problems produce similar symptoms to plantar fasciitis but need to be managed differently.

How do I treat Plantar Fasciitis?

Treatment of plantar fasciitis can be a long and frustrating process although most athletes do manage to recover without surgery. I would generally recommend a sustained period (6-12 weeks but could easily be double that in some people) of treatment focusing on biomechanical changes and soft tissue therapy before considering surgery.

Stretches and massage for the calf muscles on the back of the lower leg can help take tension off the plantar fascia.

Rehab begins in bed.

Check the sheets at the foot of your bed. Tight sheets at the foot of the bed force the foot into plantar flexion (straight out) position that promotes a short, tight gastroc complex that can over time lead to chronic shortening of these muscles, the exact opposite of one of our goals. This may seem like a small point but remember one-fourth to one-third of one's life is spent in bed.

A *night splint* can be worn while you sleep (eg. the Strassburg sock (pictured on site) or Rigid Night Splint). The night splint keeps your foot from bending downward, and it places a mild stretch on the calf muscles and the plantar fascia. People seem to get better more quickly when using a night splint, and they report having less heel pain when placing their sore foot on the ground in the morning.

Treatment will include passive stretching of the calf muscles, ankle mobilising to increase the range of motion available, dynamic proprioception and strengthening of the foot muscles. The use of heel cups and orthotic supports for the foot may be used.

Inspection of footwear is vital and orthotics may be of assistance in some cases. Supporting the arch with tape or a well fitted arch support, or *orthotic*, may help reduce pressure on the plantar fascia and delay the amount of time the foot spends in an over pronated position

during walking / running. Also, placing a gel pad or *heel cup in the back of your shoe*, can reduce the pressure on the sore area and add padding to a heel that has lost some of the fat pad through degeneration.

Anti-inflammatory medications are sometimes used to decrease the inflammation in the fascia and reduce your pain. An injection of cortisone once popular is used sparingly these days but can be effective. Cortisone may contribute to the process of degeneration of the fat pad, actually making the problem worse.

Surgery

Surgery is a last resort in the treatment of heel pain but tends to be very effective for those who have failed conservative treatment. Physicians have developed many procedures in the last 100 years to try to cure heel pain. Most procedures that are commonly used today focus on several areas:

- remove the bone spur (if one is present)
- · release the plantar fascia
- · release pressure on the small nerves in the area

Lunge stretch

With your hands against the wall, place your leg to be stretched in front of you as demonstrated (figure 1). Keep your heel down. Gently move your knee forward over your toes until you feel a stretch in the back of your calf or Achilles tendon. Hold for 30- 45 seconds and repeat 4 times at a mild to moderate stretch pain-free.

Calf stretch

With your hands against the wall, place your leg to be stretched behind you as demonstrated (figure 2). Keep your heel down, knee straight and feet pointing forwards. I often find this even better if standing on a ramp. Gently lunge forwards until you feel a stretch in your calf / knee of your back leg. Hold for 30-45 seconds and repeat 4 times at a mild to moderate stretch pain-free.