

Running Shoes: Has Advanced Technology Decreased the Risk of Injury?

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The Debate:

There is increasing debate regarding whether running shoes with large amounts of cushioning and motion control technology actually help to prevent injury. The debate is based on a number of studies which have shown: 1) running injuries have not decreased with the rise of new technologies in running footwear; 2) cushioned shoes result in greater impact at heel strike than running barefoot; 3) increased cushioning under the foot reduces the sensation of force at footstrike, resulting in less shock absorbing behaviours (such as knee flexion); and 4) if a person has a perception that shoe materials provide them with greater protection, they actually strike the ground with higher impact.

Implication?

Whilst some of this research may suggest that running shoes are not protecting us from injury, or worse, that they may be contributing to injury, this is not necessarily the case. True, some people may benefit from “minimal” shoes – shoes such as racing flats that have reduced mid sole cushioning and no motion control technologies. However, others may find greater comfort from a shoe with more cushioning and motion control - and a 2001 study reported that increased footwear comfort can decrease injury frequency.

Which shoes should you wear?

So what’s the answer? Actually, it is likely that the shoe is a small detail for most athletes when it comes to injury. The majority of injuries are training-related, and consequently any training issues should be addressed first. If this doesn’t resolve your problem, then its time to look at the type of footwear, its fit or your foot function. And if you do decide to try minimal shoes, you need to ease into them slowly, like you would any training adjustment. Speak to your Podiatrist about a program to help you adjust to running in more minimal shoes.

Lakeside podiatrists are experts in the assessment of running biomechanics and the prevention and treatment of foot and lower leg injuries. If your symptoms

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don't improve, or if you would like more information on footwear or foot problems, come down and see us on the ground floor at MSAC, or book an appointment on 9682 6029. We offer ALL MSAC gym and MSAC club members 10% off podiatry, physiotherapy and myotherapy consultations.

Some examples of minimal shoes

Brooks Racer ST:



ASICS Piranha:



Nike Free:



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