

Researchers explode the myth about running injuries

June 14 2013

If you are healthy and plan to start running for the first time, it is perfectly all right to put on a pair of completely ordinary 'neutral' running shoes without any special support. Even though your feet overpronate when you run – i.e. roll inwards.

There appears to be no risk that overpronation or underpronation can lead to running injuries through using neutral shoes for this special group of healthy beginners.

This is the result of a study conducted at Aarhus University which has just been published in the *British Journal of Sports Medicine* under the title "Foot pronation is not associated with increased injury risk in novice [runners](#) wearing a neutral shoe".

Healthy runners monitored for 12 months

Researchers have followed 927 healthy novice runners with different pronation types for a full year. All [study participants](#) received the same model of neutral running shoe, regardless of whether they had neutral foot pronation or not. During the study period, 252 people suffered an injury, and the runners ran a total of 163,401 km.

"We have now compared runners with neutral foot pronation with the runners who pronate to varying degrees, and our findings suggest that overpronating runners do not have a higher risk of injury than anyone

else," says [physiotherapist](#) and PhD student Rasmus Ø. Nielsen from Aarhus University, who has conducted the study together with a team of researchers from Aarhus University, Aarhus University Hospital, Aalborg University Hospital and the Netherlands.

"This is a controversial finding as it has been assumed for many years that it is injurious to run in shoes without the necessary support if you over/underpronate," he says. Rasmus Ø. Nielsen emphasises that the study has not looked at what happens when you run in a pair of non-neutral shoes, and what runners should consider with respect to pronation and choice of shoe once they have already suffered a running injury.

Focus on other risk factors

The researchers are now predicting that in future we will stop regarding foot pronation as a major risk factor in connection with running injuries among healthy novice runners.

Instead, they suggest that beginners should consider other factors such as overweight, training volume and old injuries to avoid running injuries.

"However, we still need to research the extent to which feet with extreme pronation are subject to a greater risk of running injury than feet with normal pronation," says Rasmus Ø. Nielsen.

Three key results

In the *British Journal of Sports Medicine*, the researchers point to three key results:

- The study contradicts the current assumption that

over/underpronation in the foot leads to an increased risk of running injury if you run in a neutral pair of [running shoes](#).

- The study shows that the risk of [injury](#) was the same for runners after the first 250 km, irrespective of their pronation type.
- The study shows that the number of injuries per 1,000 km of [running](#) was significantly lower among runners who over/underpronate than among those with neutral foot pronation.

Provided by Aarhus University

Citation: Researchers explode the myth about running injuries (2013, June 14) retrieved 17 April 2024 from <https://medicalxpress.com/news/2013-06-myth-injuries.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.