

Running research: Heel-toe or toe-heel?

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Credit: Paul Brennan/public domain

New research from La Trobe University suggests there is no evidence that changing a runner's strike pattern will help prevent injuries or give them a speed boost.

In a bid to avoid [shin splints](#), sore knees and other injuries, many runners have adopted a toe-to-heel trend, running on the balls of their feet. This is often encouraged by coaches and [health professionals](#).

However, in research out this week in Sports Medicine, La Trobe [injury](#) researcher and physiotherapist Dr. Christian Barton found there is no evidence to suggest running on the front of your feet reduces injury risk or improves performance.

"We analyzed 53 studies which looked at the impact of forefoot, rearfoot and flatfoot running patterns on injury, running economy and running biomechanics," senior author of the study, Dr. Barton said

"Our comprehensive review suggests that telling someone to run on the ball of their foot instead of their heel may make them less efficient, at least in the short term. Additionally, there is no evidence either way on whether running on the balls of your feet reduces injury."

Dr. Barton said switching your running style shifts the body's loads but doesn't make them disappear.

"Running toe-heel might help injuries at the knee, where loads are reduced. However, it may cause injuries to the [feet](#) and ankle, where loads are increased," Dr. Barton said.

"Put simply, when it comes to running style: If it ain't broke, don't fix it."

More information: Laura M. Anderson et al. What are the Benefits and Risks Associated with Changing Foot Strike Pattern During Running? A Systematic Review and Meta-analysis of Injury, Running Economy, and Biomechanics, *Sports Medicine* (2019). [DOI: 10.1007/s40279-019-01238-y](https://doi.org/10.1007/s40279-019-01238-y)

Provided by La Trobe University

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