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Authors: Joel T. Fuller, Dominic Thewlis, Margarita D. Tsiros,

Nicholas A.T. Brown, Jonathan D. Buckley

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Six-week transition to minimalist shoes improves running economy and time-trial performance

Joel T Fuller^{a,b}, Dominic Thewlis^a, Margarita D Tsiros^a, Nicholas A.T Brown^c, Jonathan D Buckley^a

^a Alliance for Research in Exercise, Nutrition and Activity (ARENA), Sansom Institute for Health

Research, University of South Australia, Adelaide 5001, SA, Australia.

^b Faculty of Medicine and Health Sciences, Macquarie University, NSW, Australia.

^c Australian Institute of Sport, Bruce 2617, ACT, Australia.

Corresponding author:

Joel T Fuller

Department of Health Professions

Faculty of Medicine and Health Sciences

Macquarie University

75 Talavera Rd, Macquarie Park 2109 NSW, Australia

Tel: +61 2 9850 4040

Abstract

Objectives: This study investigated if gradually introducing runners to minimalist shoes during training

improved running economy and time-trial performance compared to training in conventional shoes.

Changes in stride rate, stride length, footfall pattern and ankle plantar-flexor strength were also

investigated.

Design: Randomised parallel intervention trial.

Methods: 61 trained runners gradually increased the amount of running performed in either minimalist

(n=31) or conventional (n=30) shoes during a six-week standardised training program. Five-km time-

trial performance, running economy, ankle plantar-flexor strength, footfall pattern, stride rate and length

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