

TITLE:	The Acute Effect of Heel to Toe Drops on Running Economy
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ABSTRACT:

The purpose of this study was to assess how the running economy of experienced runners was affected when wearing 4mm and 0mm heel to toe drop shoes as opposed to regular running shoes. Previous studies have shown that barefoot running and running in lower heel to toe drop shoes increases running economy (Squadrone & Galozzi, 2009). The participants (n=23; 18 male and 8 female) were subjected to 3 separate tests that were each 20 minutes. The tests were performed within 90 minute, the order randomized. During the first test, the subject ran for 20 minutes at a speed they would run at for 1 hour. During the second and third test, the subject ran at the same speed in their randomly chosen shoes. Gas analysis was used to measure VO2 in kilograms and measurements were taken one time per breath for 20 minutes with a Vacumed mini-CPX. Using one way repeated ANOVA, results were not significant (p>.05). The results of this study show that there was not a significant difference in running economy between running with 4mm or 0mm heel to toe drop shoes and running with regular running shoes.

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