

The Effects of Foam Rolling on Flexibility

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ABSTRACT

Studies have conflicting research based on whether foam rolling shows a significant difference in flexibility with the lower extremities. **PURPOSE:** To determine if there will be a significant difference in flexibility when using a foam roller compared to a five minute walk. **METHODS:** On the initial visit 14 participants self-reported their age, weight, and height, and then had their baseline flexibility assessed. Treatment conditions consisted of: 1) using a foam roller on the hamstrings, quadriceps, calves, and lower back, and 2) walking on a treadmill for five minutes. After each session, participant's flexibility was measured three times with the Sit and Reach test. SPSS(V23) was used to conduct a repeated measures ANOVA to explore the difference in flexibility between the trials. The alpha was set at .05. **RESULTS:** A Repeated Measures ANOVA indicated a significant difference existed among the three levels of flexibility, $F_{(2, 14)} = 15.6, p = .001$. Pairwise comparisons indicate a significant increase in flexibility after foam rolling compared to walking (+2.29 cm, $p = .003$) and baseline (+3.81 cm, $p = .001$). **CONCLUSION:** This study suggests that foam rolling is a better means to acutely increase flexibility compared to walking, therefore the predicted hypothesis that there will be a significant difference in lower body flexibility when using foam rolling compared to a five minute walk was accepted.