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PROJECT TITLE:



A Comparison of Rigid-Core Foam Rolling and Non-Foam Rolling in Regards to their Effect on Lower Extremity Flexibility and Power

Juli Connolly, Megan Schluckebier, Brent Alumbaugh, Michael Reeder
Colorado Mesa University, Grand Junction, Colorado

Foam rolling has been shown to increase joint flexibility. There is debate on whether increased joint flexibility will improve characteristics related to vertical jump performance, specifically momentum. Purpose: To determine the effect that pre-activity glute, hip, and lower limb rigid-core foam rolling has on hip and knee flexibility and vertical jump performance, specifically related to momentum during a vertical jump launch in Division II male and female collegiate athletes. Methods: Twenty Colorado Mesa University's student athletes will be recruited. Subjects will be randomly divided into groups of foam rolling (A) and non-foam rolling (B). Both groups will follow a warm up video. After warm up, group A will perform the foam rolling intervention with subsequent ROM measurements while group B will immediately be measured for ROM of hip and knee. Both groups will then perform a vertical jump on the force plates. Hypothesis: We hypothesize that foam rolling will increase ROM and improve momentum during a vertical jump test.

Keywords: Foam rolling, Flexibility, Range of motion, Power, Jump