

## Characterizing the Effect of a Sports Bra on Functional Movement in Healthy Women

Melissa A. Whidden and Bria Reid. West Chester University, West Chester, PA

Large breasts have been shown to limit movement in healthy women. Support garments such as sports bras may help to enhance movement by providing chest stability. Clinicians often use the functional movement screen (FMS) to assess and identify asymmetries and imbalances in mobility and stability. PURPOSE: To characterize the effect of a sports bra on functional movement in healthy women. METHODS: Six healthy women completed the seven individual tests of the FMS with and without a sports bra on. During the sports bra trials, each woman had the same brand and type of sports bra on. The seven tests included in the screen were 1) deep squat, 2) hurdle step, 3) in-line lunge, 4) shoulder mobility, 5) active straight leg raise, 6) pushup, and 7) rotary stability. Comparisons between sports bra and no sports bra were made by ttests.  $P \le 0.05$  was considered statistically significant. **RESULTS:** There were no significant differences in movement scores during the FMS when comparing sports bra on to no sports bra on. Squat (2.33 vs. 2.33), hurdle step (2.33 vs. 2.33), in-line lunge (3 vs. 283), shoulder mobility (2.5 vs. 2.17), active straight leg raise (2.33 vs. 2.33), push-up (2.33 vs. 2.33), and rotary stability (2 vs. 2.33) were analyzed and scored by the same investigator across subjects and for both experimental conditions. **CONCLUSION:** A support garment such as a sports bra does not affect functional movement in healthy women. For basic exercises, such as a squat or lunge, a support garment may not be necessary. SIGNIFICANCE/NOVELTY: This study is the first that we are aware of that examines the benefits or lack of benefits of wearing a sports bra for functional movement.