P03-G-44

IMPACT OF SUPPORT SURFACE CHARACTERISTICS ON POSTURAL SWAY DURING STANDING

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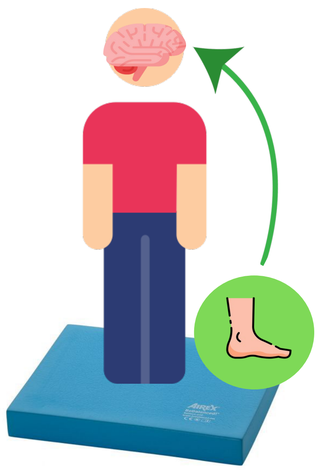
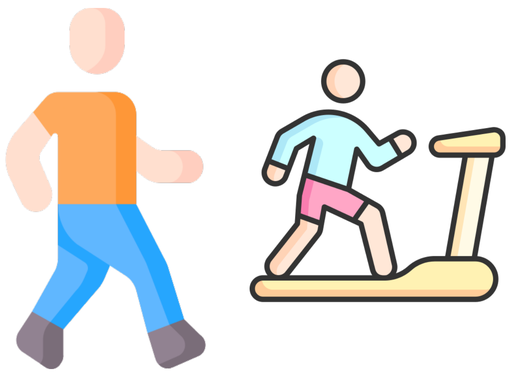
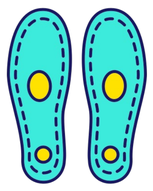
INTRODUCTION





Foam pads challenge the somatosensory system.

Limited use for gait



Insoles as a dynamic alternative

To compare the effects of foam pads and insoles with varying densities on postural sway.

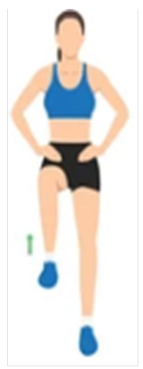
METHODS

a. Postural Sway Assessment

Stance type

K-force plates®
(Kinvent®, Montpellier, France)

Surface conditions * 1 trial

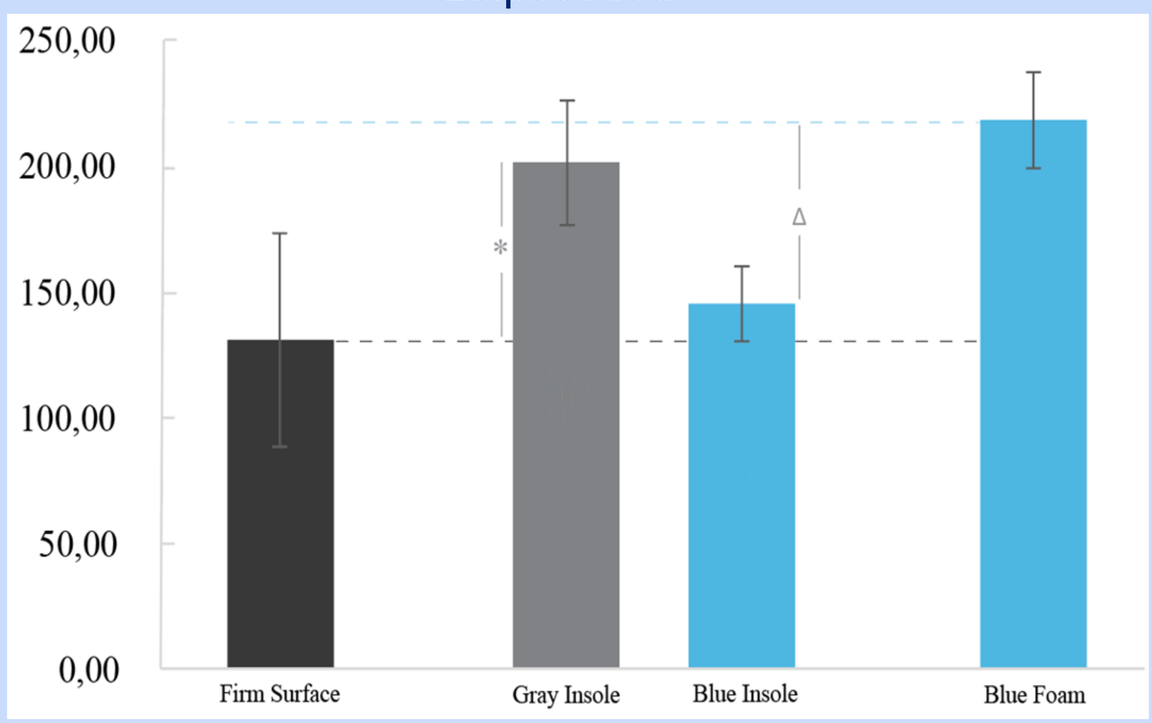


No difference

b. Indentation Force Deflection (IFD) Test

Properties	Blue Foam	Gray Foam
Dimensions (cm)	48 x 40 x 6	40 x 33 x 5
Density (kg/m3)	66.0	41.2
Load (N)	368.9	780.9
E (MPa)	0.07	0.27

Ellipse Area

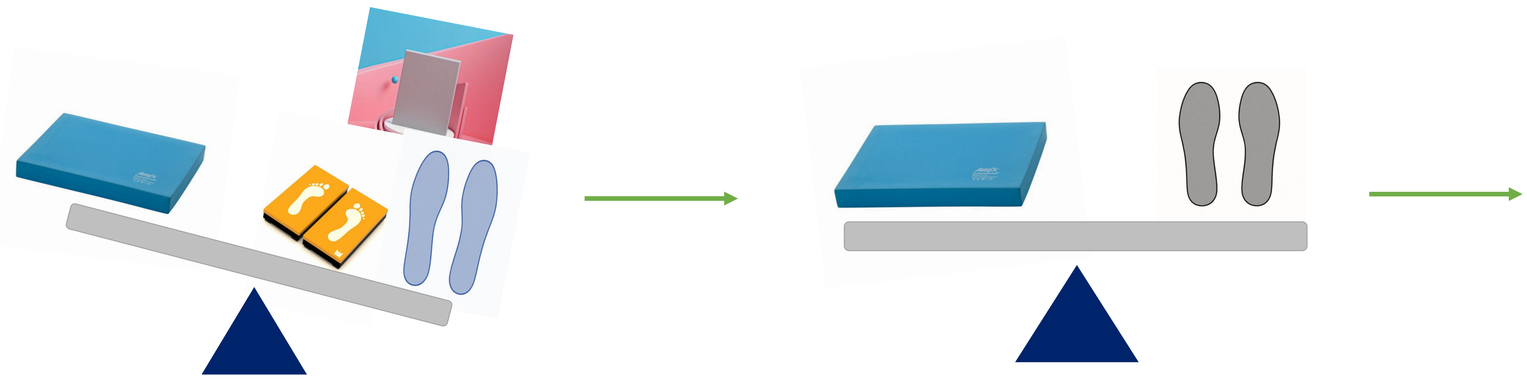


Bipedal stance: p<0,001

RESULTS

n=20
26.7±3.3 years
70% female
23.4±2.4 kg/m2

CONCLUSION



Gray insoles could be a viable alternative to foam pads, especially in dynamic tasks like gait.

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