

Independent research confirms: FootBalance 100% insoles have the potential to prevent injuries

Finnish FootBalance 100% custom moulded insoles reduce the most common foot misalignment, overpronation, which increases susceptibility to pain and injuries during walking and running. This is the main conclusion of an independent research study carried out by the scientists of the University of Jyväskylä and the University of Salzburg.

The researchers discovered that FootBalance 100% custom insoles reduced the forefoot pronation angle during the ground contact phase and increased the height of the foot arch when compared with general insoles in running shoes.

The effect of FootBalance 100% custom insoles was noticed during walking and running, though in running much greater loads are placed upon the foot and lower limbs. The research results can be considered significant as over 75% of the population suffers from some form of foot misalignment, increasing the risk of various foot related injuries. Often the support offered by the standard insoles in running shoes is not enough to correct the effects of overpronation.

Insoles improve overall body alignment

Pronation is a normal movement that occurs during walking and running. It is the body's natural way to absorb shock and adapt to uneven surfaces. In overpronation the feet and ankles can rotate too far inward and the feet's own shock absorption mechanism does not work properly. This exposes lower limbs and the whole body to various injuries, such as shin splint, plantar fasciitis and problems with the Achilles tendon. FootBalance 100% custom insoles are now proven to correct the effects of misalignment by forefoot overpronation. When feet are supported in correct alignment, also the position of the knees, pelvis and hips are corrected, thereby providing a solid foundation for the entire body.

The dynamic support of FootBalance 100% custom insoles enables the foot's natural movement

Comparing with traditional stiff orthotics, FootBalance 100% custom insoles are dynamic: they aid the foot's natural movement. Therefore, the foot's own shock absorption works as intended and the body does not absorb the shock as is the case when using rigid orthotics, which block the forefoot's flexible motion.

The dynamic feature of FootBalance 100% custom insoles is essential especially in running, as with every step the lower limb joints receive the impact equivalent to three times the body weight – for example a person weighing 90 kilos, the impact is 270 kilos.

The research was carried out by the University of Jyväskylä and the University of Salzburg. It was the first time the same methodology was employed to study the effects of insoles in both running and walking. In addition, this was the first time the motion of forefoot and hindfoot was studied as two separate elements. The research has been published in the globally respected publication the Journal of Biomechanics in March 2017.

FootBalance was established by physiotherapist and innovator Erkki Hakkala in 2003. *His vision was to develop custom moulded, high quality insoles that improve foot health and reduce foot related pains and make them available to all.* FootBalance's innovative concept; a comprehensive foot-analysis and individually moulded insoles made directly on-site, has attracted a great deal of interest worldwide. After its commercial launch in 2007, FootBalance has grown from a domestic Finnish company into an international player, whose insoles are currently sold in more than 45 countries in 1500 sport stores and physiotherapy clinics.

Kosonen, J., Kulmala, J-P., Muller, E., and Avela J. Effects of medially posted insoles on foot and lower limb mechanics across walking and running in overpronating men. Journal of Biomechanics. (2017)
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