

Jump Into Summer with Proper Footwear

The walking/bike paths here on Hilton Head Island are great because they lead to the beach; however, if we are going to be exercising on that hard pavement, then we better make sure that we have a supportive shoe under our ankle bones. Bunions, corns, calluses, foot pain, ankle pain, knee pain, hip pain, back pain, neck pain, and balance problems are just some of the problems that can occur with poor footwear!

Feet are awesome! They take countless pounding steps each day and they rarely complain. It is important for us to understand the basics of how our feet work so we will know why it is important to choose good shoes or even use orthotics to prevent or reverse problems. So let's 'take a walk' in foot mechanics.

When a foot hits the ground, the heel makes first contact. Muscles in the foot and leg respond to control the motion. As our body weight is directly over the foot, the middle of the foot rolls in (technically called pronation) and this cushions the step. Finally, when we push off our toes, the foot rolls back out (supination), allowing the foot muscles to efficiently propel each step forward.

Problems commonly occur when shoes don't have an appropriate arch support. The combination of walking on hard surfaces and the use of non-supportive shoes leads to the repetitive stress of over-pronation ("flat foot"). This stress over time can contribute to many aches and pains in the feet and throughout the body because of its effect on posture. Posture is affected all the way up the chain – flat feet lead to internal rotation of the leg and thigh which causes increased curves of the low back, upper back, and neck.

Flat feet directly cause the dreaded bunion (from the Latin "bunio," meaning enlargement). A common deformity of the big toe joint, a bunion occurs mostly among people who wear shoes. Women are more frequently affected with bunions because of tight, pointed, confining or high-heeled shoes. Wearing high heels is especially stressful on the joints of the foot because all of the body's weight rests there. The foot is then forced into a narrow, pointed "toe box", compounding the problem.

Barefoot Exercise

It is also interesting to note that primitive cultures that don't stuff their feet into shoes tend to have very few foot problems. Of course they also walk on a more suitable surface that cushions each step – the grassy fields and the beach. Walking without shoes will strengthen the muscles in the foot helping to maintain a good arch. So with that in mind, it may be a good idea to start integrating barefoot exercise activities in the grass and in the soft sands of our beautiful beaches!

Orthotics

Orthotics (shoe inserts) may be useful in controlling abnormal foot movement and may reduce or prevent foot pains and postural-related problems. Orthotics are either pre-fabricated (\$15-\$25) or costume-made (\$50-\$120) to exactly fit your

foot. Modifications can be made to either type with wedges and a variety of pads to make it work for you. Foot lifts can be placed underneath to accommodate for leg-length differences, which is a common contributor to low-back pain. The materials from which an orthotic is finished range from hard plastic to soft sponge and is chosen based on foot flexibility and personal preference.

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