



Activity Au Naturele

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Root of the Problem

Shortly after primitive man first stepped on a sharp object or developed frostbite in extreme temperatures, shoes were developed. What a great idea! These foot covers, most likely made of animal hides, flat pieces of wood, and eventually leather, provided excellent protection for two of your most valuable appendages. You could now traipse through the countryside with little or no worry for the health of your feet. As society became more efficient at making and manufacturing shoes, they became more of a fashion statement for the wearer (this should be no surprise to any parents who have checked shoe prices lately). This led to adding rubber soles, arch supports, air pockets, heels, and if that weren't enough, flashing lights.

Here in lies the problem. As humans often do, we have taken an excellent idea and developed it into a problem. Many of the shoes we wear now restrict the natural movement of our feet and lower leg which if that is not a problem in itself, creates a chain reaction of unnatural movement for the rest of our body.

Today's shoes negatively affect our feet and lower legs in two ways. The first way is their restrictive nature. We usually select shoes that fit our feet just right and don't allow for much movement. By doing this we inhibit the ability of our feet to spread out and toes to react to different surfaces. An excellent example of the restrictive nature of shoes is the feet of any woman who has worn shoes with pointed toes for a number of years. Often, the wearer's toes are curved and look very unnatural. While this is an extreme example, it has been shown that the size and ability of human feet has decreased over time due to our reliance on shoes .

A second way shoes affect us negatively are the stable surface they provide. STABLE SURFACE???? I must be crazy! That sounds like a GOOD reason to wear shoes! However, by providing a stable surface, the muscles of our foot and lower leg (gastrocnemius, soleus, peroneals, etc.) are not given the challenge of reacting to different surfaces. This is not inherently bad until we ask these same muscles to perform physical activity such as running, jumping, and cutting. The muscles that spend most of their day in a confined, stable environment are now asked to produce and resist forces on a massive scale. When our muscles are confronted with these high level forces, they often times have forgotten how to function properly which many times leads to injury.

Wake Up Call

The following are some tips to help strengthen and improve the reactive ability for the muscles of your feet and lower leg.

1. Take your shoes off as much as possible: Due to the NO SHOES, NO SHIRT, NO SERVICE policy, we have to wear our shoes in public. However, at home, you make the rules. Take your shoes off and do as many activities as possible. After all...who doesn't love to take their shoes off when they get home from work?
2. Warm Up Barefoot: Whether you get your physical activity in a gym, your living room, or your backyard. Perform your warm up without shoes. Doing moderate activity such as jumping rope, jogging, or yoga sans shoes will greatly increase the strength and proprioception of these muscles.
3. Progress: Doing more activity without shoes should be done in a progressive manner to avoid unnecessary soreness. After your feet have been restricted for many years, it may be quite a shock to them when you toss those shoes aside. Take it easy and add in more difficult tasks after your feet have adjusted.
4. Before performing any moderate or high intensity activity without shoes, you should consult your doctor to ensure that your body can handle it. In special cases, orthotics or shoe inserts are necessary for proper function of the body. For this small population, shoes may indeed be a necessity.

<http://news.bbc.co.uk/2/hi/science/nature/4173838.stm>