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Editorial

Shod Versus Barefoot Walking - An Ongoing Debate!

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Wearing shoes is second nature in modern society. However, in recent years, barefoot movement is gaining popularity among health-conscious individuals who are shunning shoes altogether [1]. From a biomechanical point of view, the foot is one of the least understood structures of the human body. Research studies and debates on the effects of shoes on the feet are ongoing across the globe. Many researchers have concluded that people did, in fact, have feet that were in better physical condition prior to the invention of shoes. A study examined 180 modern humans from three different population groups (Sotho, Zulu, and European), comparing their feet, and to the feet of 2,000-year-old skeletons. The researchers concluded that, prior to the invention of shoes, people had healthier feet. Among the modern subjects, the Zulu population, which often goes barefoot, had the healthiest feet whilst the European, who are habitual shoe-wearers had the unhealthiest feet [2]. However, expert opinions with regards to this subject matter are divided and depend largely on the specialized area of the expert in question.

It is a known fact that footwear provides protection from cuts, abrasions, bruises, and impacts from objects on the ground or the ground texture itself, as well as from cold or heat burns. Podiatrists believe that proper fitting shoes do not cause foot problems in healthy individuals and clinicians should provide patient specific advice with appropriate consideration given to all types of footwear and activities of daily living [3]. They also add that the use of custom orthotic inserts, designed to offer additional support for fallen arches and other biomechanical problems such as pronated or supinated feet, can greatly improve overall foot health. Since physical exercise and sports are today being advocated as important elements to improve general health status and weight loss, with recreational running being picked up by many individuals, it is of utmost importance to provide recreational runners and coaches with accurate evidence-based information regarding potential implications when choosing the appropriate footwear for walking and running [1].

Going barefoot, on the other hand, can sometimes be beneficial to the feet [4]. The main condition that can be corrected from walk-

ing barefoot may be weak feet and ankles. The feet consist of bones, muscles and ligaments. If the muscles are not exercised regularly with natural movements, flexing and complete range of motion, weakness can result. That weakness can also lead to stiffness that constantly pulls the bones out of their natural alignment. Wearing inappropriate shoes can lead to this very type of muscle weakness and result in problems for the feet and ankles. The weakness that is experienced in the feet and ankles can have similar effects on the knee joints and the legs in general. The effects continue to be seen in the spine and can negatively affect balance and posture. Over time, this leads to improper gait. Habitually barefoot people tended to have slightly wider feet than people who wear shoes. Relative injury rates are reported to be similar regardless of footwear state [5]. Young children's feet could also benefit from spending time barefoot [6]. When young children wear shoes, it can inhibit the normal growth pattern of the feet and interfere with proper foot development. By allowing babies and young children to walk barefoot, the feet are given the chance to develop and grow naturally, resulting in strong muscles of the feet and ankles. However, it is of upmost importance that parents who choose to let their children walk barefoot should always take any necessary precautions especially when outdoors.

However, walking barefoot can pose many dangers to the feet especially in high-risk patients! [7]. The most obvious risk of walking barefoot is stepping on an object and it getting embedded in the foot. Another issue with not wearing shoes is the lack of support offered to the foot and any damage can occur as a result. A great concern is the possibility of picking up bacteria, fungal infections and viruses as a result of going barefoot. Possibilities include plantar warts, a viral infection that can often be found on dirty surfaces, or athlete's foot, a fungal infection that is commonly found in locker rooms and other wet surfaces. Another concern is the possibility of stepping on a piece of glass or a rusty nail that can lead to a tetanus infection. Furthermore, high risk patients such as people living with diabetes, rheumatoid arthritis, cancer, peripheral vascular disease, neuropathy, amongst others should never consider walk-

ing barefoot as this can lead to severe complications such as foot ulcerations and amputations. These patients should wear socks and comfortable wide fitting or therapeutic footwear at all times!!

The shoes you wear can impact your overall health. The debate continues -barefoot versus shod walking. More research is warranted to determine the pros and cons of walking barefoot and whether shoes are truly beneficial during gait and running. With so many questions remaining unanswered further research will be definitely illuminate this fascinating subject!

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