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The World at your Feet

Get in touch with the power of barefoot training.

BY STACEY LEI KRAUSS

In July of 2006, barefoot training was one of the hottest new trends emerging from the IDEA World Fitness Conference. But in fact, connecting with the earth energetically via direct contact with the skin has been a common concept in physical fitness and dance for many years.

Yoga practitioners never wore shoes and neither did anyone practicing the multitude of martial arts in the Far East, and the original Olympians wore absolutely nothing. These days though, there are as many specialized shoes as there are sports. The running-shoe industry has embedded itself into popular culture, pushing the idea that the foot must be protected against injury and that athletic performance is enhanced with the latest technological advances in cushioning and support. Nevertheless, there is a contingency of modern athletes whose barefoot training styles are worth examining.

Closer to Earth

In Northern Mexico, the Tarahumara Indians are known for their amazing long-distance running ability without shoes. The Indians compete, and often place, in ultramarathons without foot support or cushioning. In Africa, children are raised to run and play rugby, soccer and basketball barefoot.

Amadou Thiam, a 25-year-old from Senegal, has played organized sports barefoot his whole life. "When I played basketball, soccer, and competed in track and field, we were always barefoot—it felt better. I had good balance and I could grip the ground," says Thiam. Although he admits to suffering with cuts from rocks and glass, he claims that the scars made his skin tougher. "Barefoot on the playing field represented strength. Barefoot guys were always the most intimidating opponents."

In 1984, at the age of 17, Zola Budd-Pieterse, a runner from South Africa, set two world records for the women's 5,000-meter race, while running barefoot. She won the world cross-country championship twice, and in both of these races she was without footwear. She still holds two junior world records in the mile and 3,000-meter race.

Budd-Pieterse was not the first barefoot modern Olympian; in 1960, Abebe Bikila of Ethiopia won the Rome Olympics marathon in 2:15:16, running shoeless.

Mechanics of a Barefoot Stride

According to Nike research, unshod populations have a lower incidence of common acute and chronic running injuries. "Civilized" shoe-

wearing people suffer from athlete's foot, bunions, hammer toes, sprains, shin splits and plantar fasciitis, which are almost non-existent in the barefoot population.

The researchers found that when the foot hits the ground, sensory feedback from the sole activates a series of muscle contractions to dissipate the shock. Jumping and running generate impact forces, and when applied to muscle groups, it ultimately builds strength. A well-trained foot disperses pressure to a wider area, inducing adaptations, and functionally avoiding injuries. By insulating the sole from the ground with an athletic shoe, sensory feedback is diminished, and the natural function of the foot is impeded.

Barefoot runners are more aware of how they land on their feet, and their deceleration techniques are based on core strength. They constantly self-correct and micro-adjust their muscle activation patterns. Most barefoot runners land mid-sole as taught through the Chi Running Method, created by Danny Dreyer, enhancing the strength of the intrinsic muscle structure. Dr. Nicholas Romanov encourages runners to strengthen their feet with the Pose Method® of running by "working with the laws of nature." Gravity should be the primary force for movement instead of muscular energy. He believes that biomechanically, shoes affect the speed, acceleration and trajectory of foot transfer in space and time.

Deliberate use of heavy shoes specifically for strength development is fine but not for an extended period of time, and surely not permanently. "A thick sole and cushioning increases the possibility of pronation or supination, if the runner has a tendency to it. Hence, it leads to injuries," says Romanov.

Freedom of Movement

Barefoot training allows freedom of the toes, so that they can fully extend, flex and grip. This movement enhances stability in the joints of the foot, which is transferred

through the ankle, leg, knee and hip. Arthur Lydlard, coaching legend from New Zealand and proponent of Nike research, believes that with unrestricted use, the body gets stronger, but with support, it weakens. When we use those fine intrinsic muscles that may be lax and atrophied from shoe gear, we also articulate through the joints that have become stiff and immobile.

Theoretically, if you were to wear a neck brace for a full day, the brace could provide cushioning, stability and motion control (the way an athletic shoe does). But at the end of the day, the muscles in the neck would feel lax—you would feel like a bobblehead doll. This is an exaggeration of what we have been doing to our feet and ankles for decades.

Positive Pressure Points

There is evidence that stimulating acupressure points on the soles of the feet leads to significant physical and mental health benefits. In China, some people walk and dance barefoot on traditional cobblestone paths, embracing the theory of reflexology.

Researchers at the Oregon Research Institute studied the possible effects of the stone-walking practice by simulating the cobblestones on specially designed mats. More than 100 test volunteers walked shoeless on the mats for one hour, three times a week for 16 weeks. The study revealed that almost half of the test subjects showed marked improvement in balance and also significant drops in blood pressure, indicating that acupressure may be a viable method of preventive care.

Get Out of Your Head and Onto Your Feet

Lawrence Biscontini, international fitness expert, believes barefoot training never disappeared, it has simply become more popular now. He says proper biomechanics and training reduce injuries because of the removal of external, passive support and the focus instead on internal, active support. "Personal trainers



Bare Support

One of Nike's newest creations, the Free shoe, supports the barefoot philosophy and is engineered to simulate barefoot running by providing maximum movement and flexibility with minimal cushioning and motion control. The shoe can now be purchased with varying degrees of support, along with a bumpy insert to stimulate tactile sensory reflexes on the sole.

help individuals get out of their heads so they can get into their feet," says Biscontini.

Now that fitness professionals use functional training and recognize the practices of other cultures, historical trends and enhanced technology, athletes' performances are showing exciting improvements. The best application of functional training may be to return to our most primal state, and teach students and clients how to use their feet as nature intended, so they can walk gracefully into the future. **AF**

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For more information on alternative barefoot health and running, visit these Web sites www.nikefree.com, www.poseitach.com, www.chirunning.com, www.ori.org