

[BY DESIGN]

The Anti-shoe Revolution

It's a burgeoning trend to go back to basics. One by one we're abandoning modern conveniences (from processed foods to SUVs) to return to simplicity, save our planet, and live longer lives. But could the shoes you wear every day (and we're not talking high-heeled Manolo Blahniks) be costing you your health?

Companies including Masai Barefoot Technology (MBT), Newton, Vibram, and Earth have latched onto the theory that modern footwear is making our feet weaker, causing poor posture, joint pain, and injury. *The Journal of Archaeological Science* supports this claim. "A shoeless lifestyle promotes stronger little toes," says Washington University researcher and physical anthropologist Erik Trinkaus, "because when you walk barefoot, you grip the ground with your toes as a natural reflex." Professor Trinkaus believes that shoes appeared around 30,000 years ago (pre-Neanderthal), and our feet have never been the same.

Even today in many parts of the world, it's not unusual to see population segments, such as the Masai tribes of East Africa, without footwear. It was Swiss engineer Karl Muller who studied the nomadic Masai and found that while they were constantly on their feet traversing uneven, rugged terrain, they didn't have the neck and back problems of most Europeans and Americans.

Muller studied the biomechanics of the Masai and found that they utilize muscles and bones of the foot to correct their gait over Africa's soft, natural surfaces. The key discovery for Muller: active stabilization versus passive support.

Seeking to duplicate barefoot walking, MBT designers developed a patented sole structure that included a cushy wedge (the sensor) sitting between the midsole and the outsole to mimic a shoeless stroll on the beach. This unstable pseudo-sand-walking activated lazy muscle groups that rushed in to aid balance. The negative heel angle of an MBT shoe—evident at first sight—aligned the bones of the ankle, knee, and hip as it guided the foot into the step.

But why not just go barefoot à la South African Olympian Zola Budd Pieterse? Yes, the idea is unconventional, but so are MBTs. "I think people love their footwear because it reflects on their lifestyle," says Alois Badegruber, head of product marketing for MBT, "but their shoes also need to protect their feet. MBT gives people the opportunity to protect their whole body."

MBT works because of the instability it creates, but as a model for shoe technology, it's as stable as ever: The company now boasts more than 1 million in sales. www.theantishoe.com

Other Barefoot-Science Aficionados

Newton. If you're looking for life in the fast lane, Newton builds shoes for speed. Created by runners for runners, Newton's sole focus is to make the wearer faster by retraining the runner's form. By forcing the runner onto the ball of the foot, the shoes mimic barefoot running. When you run barefoot, you strike with your forefoot first and naturally avoid pronation and supination, inward and outward foot rotation. Newton's Active Membrane Technology pushes runners onto their toes and propels them forward for the most efficient gait. Like MBT, Newton promises that the once-lazy muscles of the foot and the calf will spring into action. www.newtonrunning.com

Vibram. Perhaps the closest you can get to protected barefoot running is with Vibram FiveFingers technology. Vibram, known for the sticky outsoles it manufactures for hiking boots and trail-running shoes, created FiveFingers to allow each toe its independence in a sock-like rubber slipper. With limited support, the toes work to maintain the runner's balance, and the entire foot gets a workout. Like Newton, Vibram FiveFingers are made for performance, to make you faster and stronger by forcing your body to maximize its natural bio-mechanical movements. www.vibramfivefingers.com

Earth. Après run or walk, you can head into the office in a pair of Earth shoes. Yes, these are the same shoes some of us will admit to wearing in the 1970s. They were hip, cool, suede, and thick soled. Now, using Kalso Negative Heel Technology, Earth promises a full-body workout by engaging all the core muscles of the body. Plus, they've moved out of the seventies to offer more modern and stylish selections. www.earth.us

