



Get More Out of Your Daily-Recommended “10,000 Steps”

New Clinical Study in to Earth Footwear Has Found That Elevated Health and Wellness Benefits Can Results From Making the Proper Footwear Selection .

As part of a growing consumer consciousness around healthier lifestyles and choices, and in-line with the recent government initiative to encourage regular exercise , many health care providers and practitioners have rallied behind the “10,000 Steps” walking program – recently conceived in Japan and popularized globally.

The “10,000 Steps” doctrine puts forth that, as part of one’s overall healthy regime that includes a healthy diet and sufficient sleep, people should aim to record ten thousand steps (or roughly 4 miles) of walking in some form each day.

A leading biomechanist and founder of the Restorative Exercise Institute™, as well as an advocate of the “10,000 Steps” program, Katy Santiago sought to take the daily recommendation one step further and research: *“what effect might one’s footwear choice have on these 10,000 steps? Might it be possible to see even more palpable results from wearing footwear designed to optimize the walking experience?”*

A long-time proponent of proper walking mechanics and footwear choices in creating a healthy lifestyle and optimizing body wellness, Santiago conceived and directed a study to uniquely examine the implications of wearing inclined sole footwear as part of a 10,000 steps daily regimen - specifically, Earth® footwear with Kalsø Negative Heel® Technology™.

The Study:

Santiago conducted a conventional “before/after” study – designed to measure a comprehensive list of variables along standard physiological health and wellness indicators:

- *Body Fat Percentage*
- *Body Mass (Gain/Loss)*
- *Total Body Oxygen Consumption/Endurance*

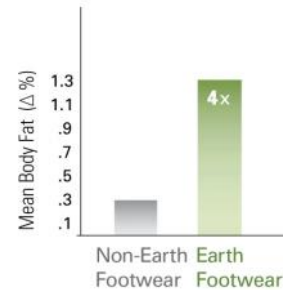
Santiago compiled a group of thirty-one healthy women between 25-45 years old who were then divided randomly into two smaller groups: those who were instructed to walk in Earth footwear (Earth footwear group), and those who were instructed to walk in a conventional heeled alternative (non-Earth footwear group). Both groups were directed to walk a distance of 10,000 steps – three times per week for four weeks - and were wired with a digital distant pedometer to monitor total distance walked. The participants in the study were instructed that all walking was to take place on “standard terrain” to simulate movements that would be part of a daily casual lifestyle routine. Participants in the Earth footwear group were provided with two pairs of Earth footwear - one performance style and one casual style - and were instructed to only wear Earth footwear during their weekly walks. All subjects were also advised to avoid initiating any other diet or exercise program during the duration of the study (outside of their normal dietary or exercise habits) in order to keep these external variables constant.

The Results:

Several interesting observations emerged from the study highlighted by three noteworthy results:

1. Fat-Burning Benefits of Earth footwear*:

The average body fat percentage of the Earth footwear group *decreased 4 times* more than the decrease experienced by the non-Earth footwear group over the course of the study. While both groups experienced fat-burning benefits from the exercise regimen, the rate of fat-burning from the Earth footwear group outpaced the non-treatment group by 4 times. Much of this difference can be attributed to the enhanced muscle recruitment of Earth footwear, particularly in the calves and thighs, but also in core trunk muscles



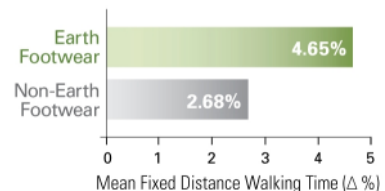
2. Body Mass Reduction & Muscle Recruitment Benefits of Earth footwear*:

In addition to the fat-burning percentage decrease, the Earth footwear group also realized a mean body mass reduction of .33kg (approximately one pound) during the course of the study. The Earth footwear group experienced a notably higher rate of body fat percentage decrease relative to body mass reduction – an indication of greater muscle recruitment and higher lean body mass (LBM). A higher lean body mass percentage is widely held to correlate with an increased rate of caloric expenditure, even when the body is at rest (a residual effect).



3. Enhanced Breathing and Endurance with Earth footwear*:

Relative to the non-Earth footwear group at 2.68%, the Earth footwear group increased their fastest walking time for a fixed distance walk by an average of 4.65%, or 24.6 seconds, during the study. The faster time underscores a cumulative whole-body effect as corroborated by a higher level of V02 max, or maximal oxygen consumption, thereby enhancing aerobic capabilities and endurance.



Santiago's Comments

Santiago, who holds a Masters of Science in the field of Biomechanics¹ commented on the results, "Clearly, the prevailing wisdom in health and wellness circles advocates the benefits of daily exercise and engaging in a '10,000 Steps' program as part of one's standard regimen. The results of the study support an additional positive aspect – not typically factored into the body health and wellness equation – which is the benefit that appropriate footwear can have on enhancing a '10,000 Steps' program."

¹ the application of mechanics and physics to a biological system such as the human body :

Santiago further states; 'The Restorative Exercise Institute was founded on the premise that the human body as a machine is optimized and most healthy when properly aligned and balanced. The results of the study are compelling in emphasizing the importance of proper footwear, and in supporting the idea that wearing footwear with an inclined sole, such as Earth footwear with Kalsø Negative Heel® Technology™, can actually improve one's personal fitness capability.'

For some time Earth has received unsolicited evidence, testimonials, and third party research studies that have collectively supported and reinforced the benefits of its Earth footwear, and specifically the merits of Kalsø Negative Heel® Technology™. Previous studies from Benedictine University (2006) and the School of Human Kinetics at the University of Ottawa (published in the November 2007 American Podiatric Medical Association Journal) have supported similar findings to this study.

What has long created such external interest in Earth is the healthy orientation of its footwear as underscored by the incorporation of proprietary Kalsø Negative Heel® Technology™ in each shoe. The technology effectively positions the wearers' toes slightly higher than their heels - at a 3.7° degree incline. In many consumer testimonials, the experience is likened to the dynamic of 'walking on a n inclined treadmill'.



'We're very excited about the results of the study. It proves what we have long contended and have been told about our footwear – that there's something palpable about the whole-body health and wellness benefits, and the capacity for the wearer to actually **burn more calories with every step**', comments Dave Aznavorian, Vice

President, Marketing, Earth, Inc. “When someone like Katy Santiago, a leading expert in the field of biomechanics, conducts a clinical such challenge and tests the healthy proposition of your product, it’s great when the results are measurable, meaningful, and favorable. We’re hopeful that the experience within a more scientific context will translate to consumers in an everyday context, and that everyone seeking something more out of their healthy lifestyles and will look to Earth footwear as a stylish, comfortable, and healthy choice that shares these values.”

Looking Forward – The Implications

In exploring the data, Earth has correlated the research findings to conventional specifications of the average woman in order to relate and project the potential effects of wearing Earth footwear as part of a “10,000 Steps” program. According to the National Center of Health Statistics², the average female has 30% body fat, weighs 163 lbs, and is 63.8” in height. In line with the results of the study, what can be deduced is that the average female – who wears Earth footwear as part of a 10,000 Steps program - could lose one additional pound over the course of four weeks, and could see a body fat percentage decrease from 30% to 28.7% (approximately 2.4 pounds of fat). In addition, she could experience the added benefit of increased lean body mass (LBM), increased body efficiency, and breathing - all of which could effectively help to **burn more calories with every step.**

