Introduction of “ASIPITA”

In recent years, designers of footwear have shifted their focus to creating more fashionable shoes which place a burden on the feet and interfere with their normal functioning. Moreover, this also places an enormous burden on the entire body. The economy class syndrome as well as flat feet from a very young age are becoming significant issues in our society. ASIPITA was inspired by an old Japanese type of footwear called “waraji”or”geta” (straw sandals) and it was developed as a support for toes using a brand new concept. 400years ago in Japan, people would wear the waraji to walk the road 550km and the journey would take 3 weeks. Whether this is true or not is highly questionable, however, the function of these waraji hides a very important hint, more precisely, the “sandal thong” effect. ASIPITA was developed based on the medical clinical data by Dr Yukihiro Matsuyama Associate Professor of Medical and the Ergonomics data by Dr Kazunori Hase Associate Professor of Robotic at the Nagoya University School. ASIPITA is an innovative and revolutionary support for toes which is completely different from any traditional foot supports and exhibits the unprecedented “sandal thong effect of the waraji or geta”. The basic premise is that the “ASIPITA applies stimulation between the first toe and the fifth toe thanks to the ‘sandal thong’ effect and stimulates the natural movement of the toes”, which helps to uniformly distribute the entire body weight which is applied to the bottom of the feet.

Verified at the University of Nagoya, the home of a succession of Nobel Prize Winner.

Doctor
Yukihiro Matsuyama
Professor
at Nagoya
University Hospital

Verified from the medical perspective

The oxygen saturation of the gastrocnemius muscle and your feet rises.

Blood circulation of the lower extremities peripheral circulation improves.

Announced at a medical conference.

Im provement of the lower extremities peripheral circulation by exercising your toes.The state of oxygen in legs was monitored by near-infrared spectroscopy

NIRSとは

NIRS uses the light absorbency characteristics of hemoglobin and myoglobin at the specified wave length of the near-infrared rays to measure changes in the oxygen concentration of tissue.

Verified at the University of Nagoya, the home of a succession of Nobel Prize Winners.

Motion dynamics analysis of the impact of foot gear made to simulate strawsandals on body motion.

Doctor Hase Kazunori Associate Professor of Mechanical Science and Engineering, Graduate School of Engineering, Nagoya University Verification from the perspective of motion dynamics

Reduces the gap between toes and improves kicking power while walk

encourages motion of the feet

Announced at a conference in Italy

Experiment

(1) Walking experiment

(1)Basic factors Walking speed,sliding length(pace),walking cycle
(2)Foot shape Foot atch angle,toe gap
(3)Kiching force Maximun floor reaction power forward andperpendicular
(4)Smoothness Knee joint angle,foot joint angle jerk,foot pressure center locus length
(5)Muscle activity Muscle activity at 8 locations including the gastronemius muscle

Location the marker is worn