



---

Health Care Product Company

# GECKTOE GRIP



# GECKTOE GRIP vibration chip health starts with your steps



## What is **GECKTOE GRIP** vibration chip?

GECKTOE GRIP Chip is a device that converts personal kinetic energy into vibration energy without external power using small magnets and elastic plates inside.



# GECKTOE GRIP Vibration Chip

## Key Product features



### Powerless System

No charging required, just personal exercise/impact semi-permanently generates low-wavelength, human-beneficial vibrations



### Durability

It's made of a nylon case and Impact-resistant materials shockproof and flexible material long-term usable without breaking



### Product Applicability

With a small size of 4.4x5.25(cm) and a weight of 17 grams product applicability for sneakers, shoes, golf shoes, rackets, etc.



### Health Benefits

- Blood circulation
- Shock absorption
- Increased balance & gait

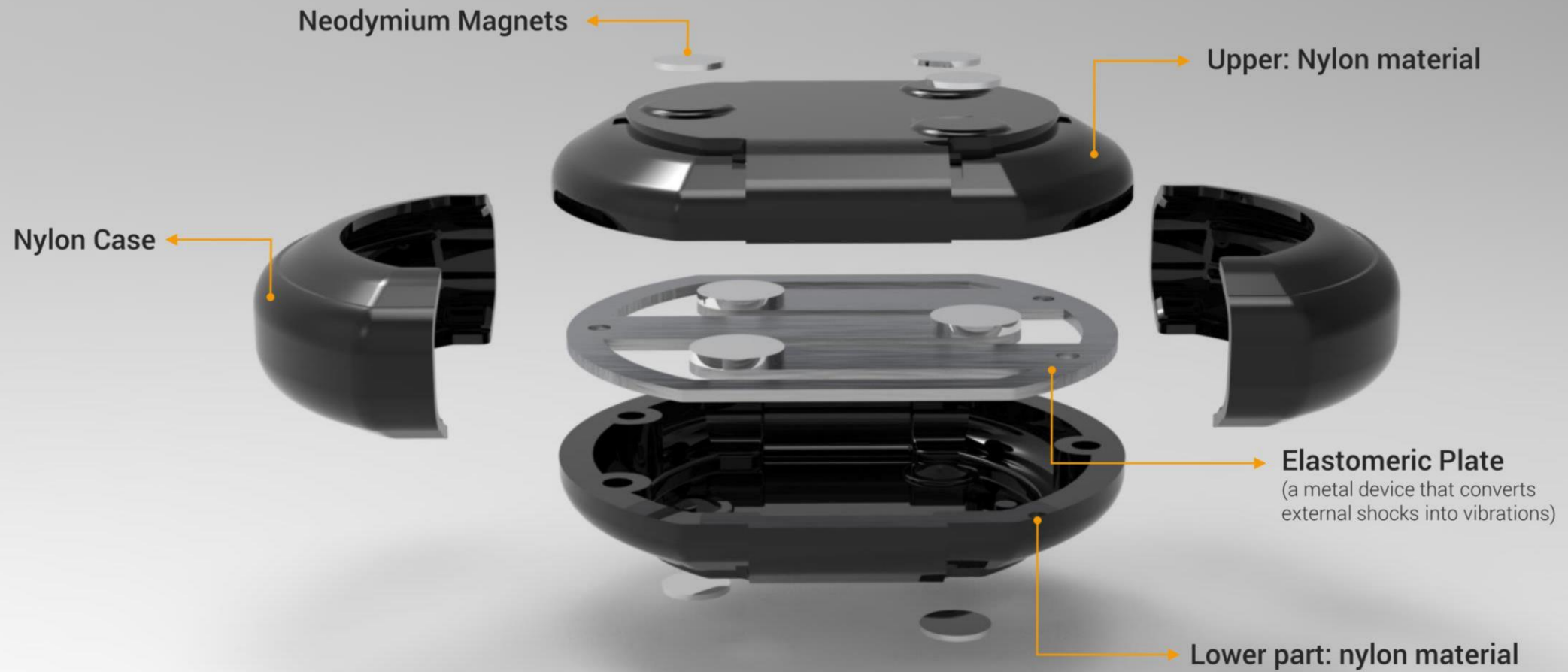


### Use materials that are harmless to humans

The vibration chip is made of nylon case, magnet, elastic plate that are harmless to the human body.



# GECKTOE GRIP Chip Structure



# Product Area of Applications

GECKTOE GRIP chip can be applied to Various sporting/health products For improving personal health

- **Sporting Goods**

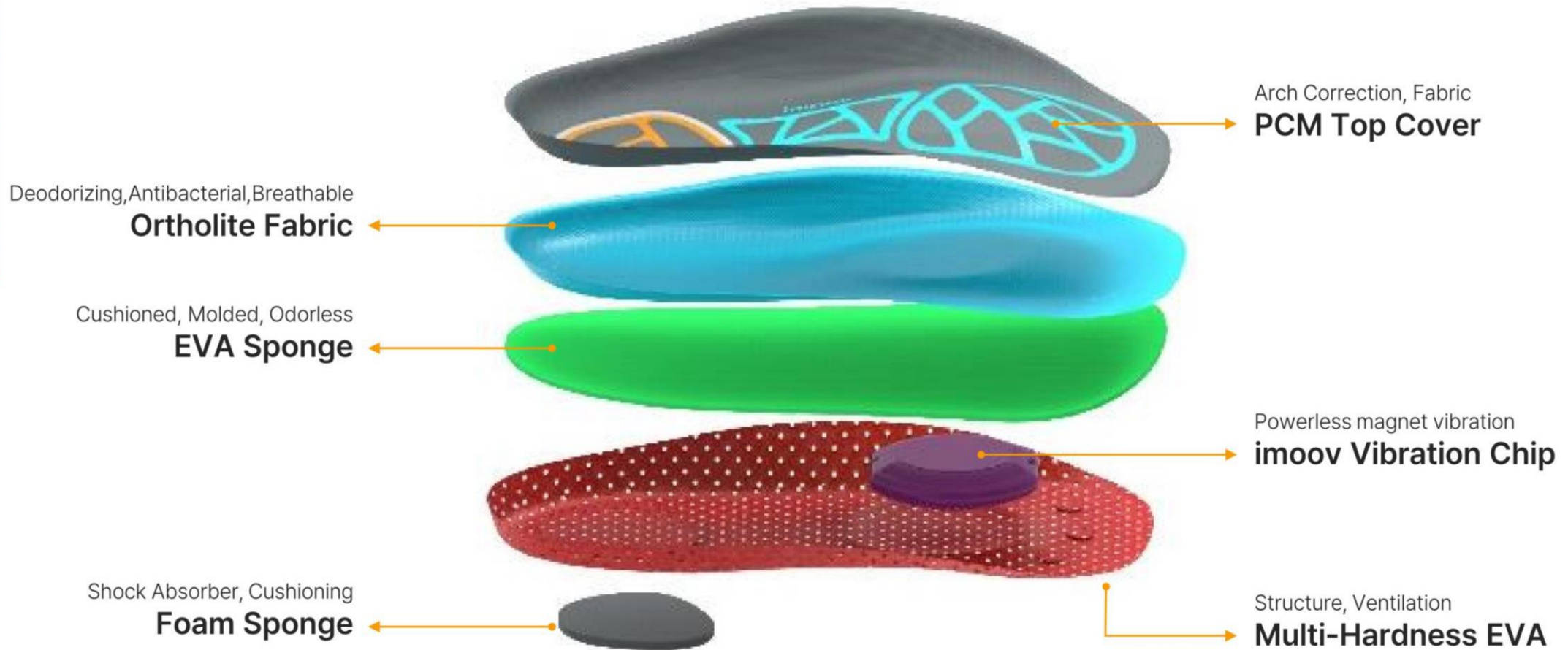
- Running shoes
- Casual/Working shoes
- Climbing shoes
- Health shoes for aged people

- **Personal Health Devices**

- Personal Health Devices
- Hand massager, Shoe Insole



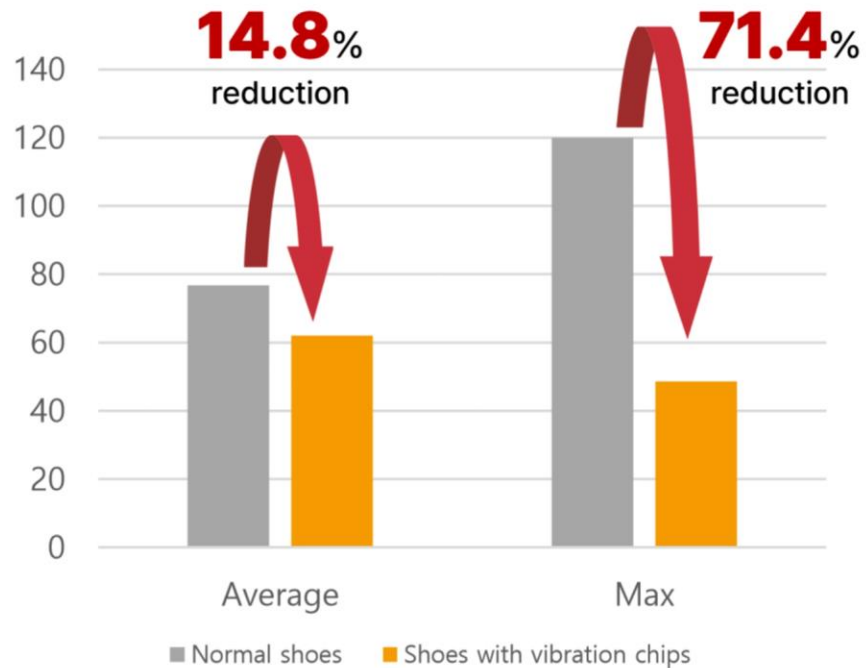
# Application example - Vibro Insole





# Improve blood circulation (II)

## Reduced peripheral circulation problems



After wearing vibrating shoes  
Average **14.8%** reduction / Max **71.4%** reduction

## Body fat mass decrease



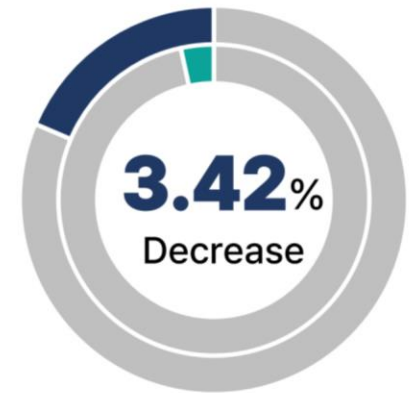
After wearing vibrating shoes  
Average **2.92%** decrease  
Max **12.17%** decrease

## Body mass decrease



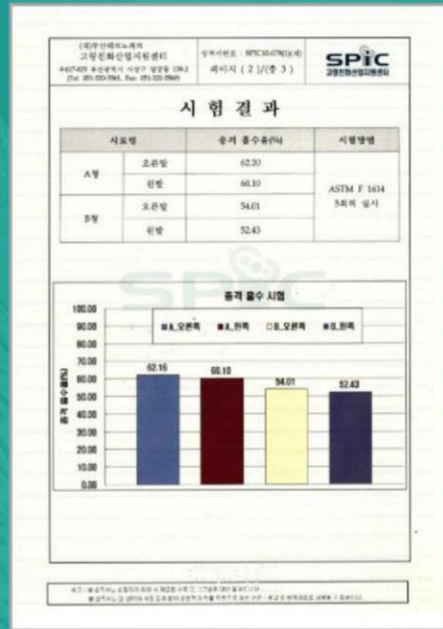
After wearing vibrating shoes  
Average **1.08%** decrease  
Max **6.08%** decrease

## Fat decrease



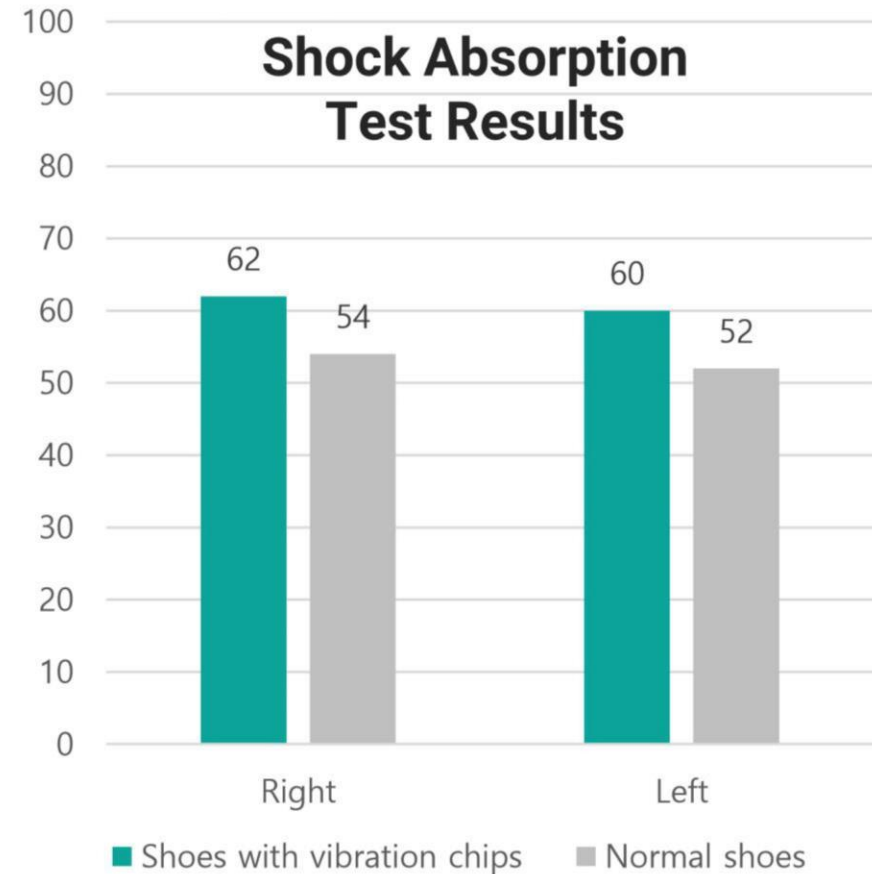
After wearing vibrating shoes  
Average **3.42%** decrease  
Max **18.60%** decrease

# Increased shock absorption



## Experimental results by Age-Friendly Industry Support Center Experiment (September 10 - September 13, 2010)

A three-day experiment conducted by AISC on the elderly showed that the shock absorption rate of shoes with vibration chips was 8% higher than the case of ordinary walking shoes.



# Improve balance and gait

## Balance-Restoring Insoles, a research by Wyss Institute, Harvard University.

(October 28, 2014)

Using the principle of stochastic resonance, vibrating insoles designed at the Wyss Institute use small piezoelectric actuators to deliver imperceptible mechanical vibrations to feet, enhancing detection of nerve signals. Insoles similar to these have been shown to reduce walking variability and improve balance in the elderly.

Credit: Harvard's Wyss Institute

## Potential applications:

- ✦ Improve balance in the elderly, further resulting in fewer falls, a more active lifestyle with greater independence, lower cost of care, improved quality of life
- ✦ Reduce the incidence of foot ulcers in diabetic patients
- ✦ Improve the mobility of stroke sufferers
- ✦ Accelerate rehabilitation
- ✦ Help children with cerebral palsy
- ✦ Improve performance of athletes (e.g., runners)
- ✦ Workplace safety (e.g., steel workers working on tall structures)

## Balance-Restoring Insoles

### Wearable shoe inserts that improve balance

Balance in humans relies on complex feedback from the senses that govern the body's mechanical stability. But with aging and diseases such as diabetes and stroke, sensory function can diminish. This can dull the feedback that normally keeps healthy people steady on their feet during standing and walking.



In the elderly, sensory loss as a result of normal aging is especially problematic. One in three people over the age of 65

fall every year. In 2009, elderly falls resulted in 2.2 million non-fatal injuries in the United States alone. By 2020, fall related health care costs in the United States are expected to reach \$55 billion annually. In addition to the cost, fall-related injuries impact elderly independence, mobility, and quality of life.

### The Wyss Institute Solution

Wyss Institute and Boston University researchers have discovered that random vibrations, too gentle to be felt, can improve the sensory feedback system and may restore stability through a mechanism known as "stochastic resonance". By incorporating vibrating elements in insoles and footwear, it has been shown that stochastic resonance improves balance and gait.

### How it works

Mechanical actuators, designed to be inserted into any type of footwear, are embedded into the insoles. A signal generator and a small battery are also integrated within the insole to provide sensory enhancement stimulation to the user's feet. A smart phone app controls the stimulation level and can inform the user of device status, such as stimulation and battery levels. When used by elderly individuals, this sensory enhancement insole could potentially improve their sense of balance and walking stability, which is understood clinically to be related to the risk of falling. For diabetics, who suffer from peripheral neuropathy, this kind of device may increase the sensitivity of their feet and might eventually decrease the risk of ulceration.

### Potential applications:

- Improve balance in the elderly, further resulting in fewer falls, a more active lifestyle with greater independence, lower cost of care, improved quality of life
- Reduce the incidence of foot ulcers in diabetic patients
- Improve the mobility of stroke sufferers
- Accelerate rehabilitation
- Help children with cerebral palsy
- Improve performance of athletes (e.g., runners)
- Workplace safety (e.g., steel workers working on tall structures)

# Production facilities



Company overview



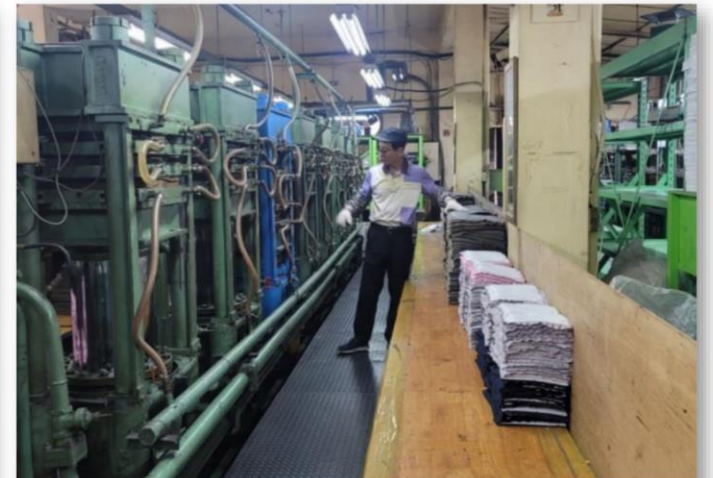
Insole Process Step #1



Insole Process Step #2



Quality Control #1



Quality Control #2



# GECKTOE GRIP Chip Product Specifications



Model	Thickness (cm)	Size (cm)	Weight
G GRIP 100	1.0	4.4 x 5.25	13g
G GRIP 200	1.1	4.1 x 4.4	10g
G GRIP 300	1.4	4.4 x 5.25	17g

- Vibration chips are available in thicknesses ranging from 9 to 14T and flexible sizing.
- It can be customized according to the client's application needs.



## Contact / Inquiry

# GECKTOE GRIP

#213, 1600, Chungjeol-ro, Byeongcheon-myeon,  
Dongnam-gu, Cheonan-si, Chungcheongam-do, Korea

Tel : 82-41-552-6539 Fax : 82-41-574-6530

Mobile : 82-10-8543-6539

E-mail : [gecktoe2015@naver.com](mailto:gecktoe2015@naver.com)