

# Up-regulation of energy metabolism by Glavonoid

## -The effect of Glavonoid on rising temperatures of body skin-

### ■ Objectives

To investigate the correlation of Glavonoid's fat-burning effect and its effects to alleviate cold sensitivity.

### ■ Method-Study Design

**Subjects:** 9 young women who has a cold constitution (18-22 y.o.)

**Dose:** 0 (Placebo), 600 mg (Glavonoid) **Ingestion method:** Single oral ingestion

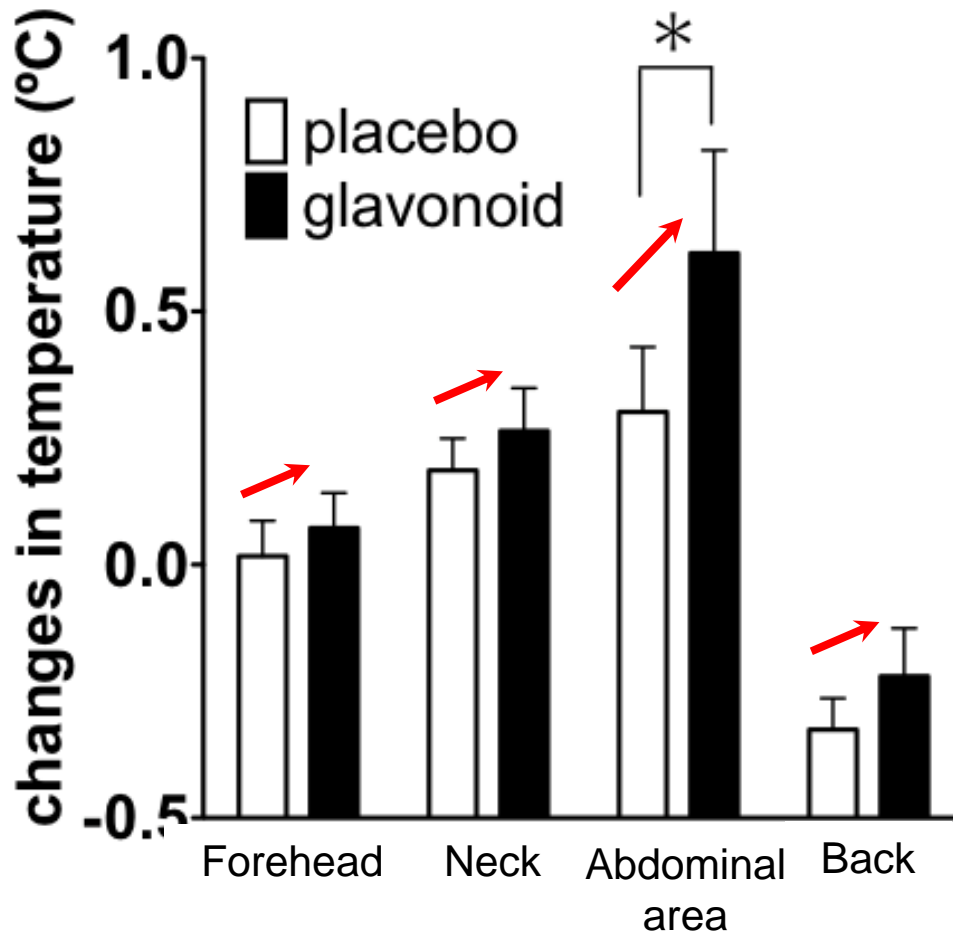
**Test methods:** Skin surface temperature on forehead, abdominal area and back was measured with temperature sensors for 94 min in a temperature-controlled room at 22°C. (Open-label, crossover study)

### ■ Results

1. Under the condition of the coldness load test, intake of Glavonoid suppressed lowering the temperatures of body surface areas of the trunk (such as stomach) or accelerated the rise of the temperatures.
2. Cold sensitivity was significantly alleviated by single dose of Glavonoid in the evaluation by VAS (visual analog scale).
3. The result indicated the effect of Glavonoid on accelerating energy metabolism.

## 【Results 1】

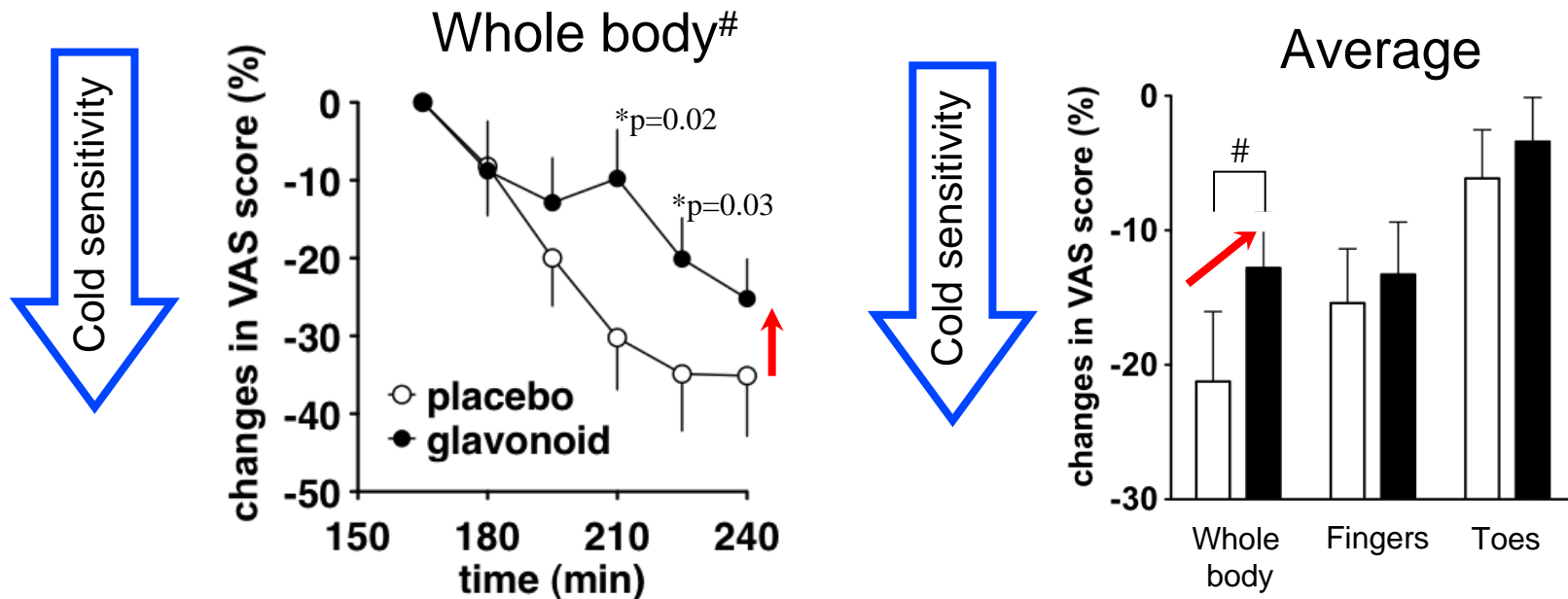
Glavonoid suppressed lowering the temperatures of body surface areas of the trunk (such as stomach) or accelerated the rise of the temperatures.



means  $\pm$  SEM, n = 7-8  
\*  $p < 0.05$  by paired  $t$  test

## 【Results 2】

Feeling of coldness was significantly alleviated by single dose of Glavonoid in the evaluation by VAS (visual analog scale).



means  $\pm$  SEM, n = 9

#p < 0.05 by two way repeated measures ANOVA

\*p < 0.05 by Paired t-test between placebo and Glavonoid group