Anti-metabolic-syndrome effect of "Ashitaba Polyphenol CHALSAP"
Human Study

1. Purpose

To study an anti-metabolic-syndrome effect of Ashitaba polyphenol CHALSAP.

2. Method

The participants were divided into two groups, a CHALSAP-P8-administered group and a placebo-administered group. They were asked to take CHALSAP-P8 (total chalcone content: more than 8 %) for the treatment group and placebo for the control group after dinner every day for 8 consecutive weeks.

The study was conducted as a double-blind test.

Blood collection and physical observation (abdominal circumference and weight) were conducted at the pre-study period, 2nd week, 4th week and 8th week.

Moreover, visceral fat area measurement with CT scanning was conducted at the pre-study period and 8th week.

3. Subjects

Healthy 15 men (mean age: 38, mean BMI: 24±3.2);

Treatment group: 10 subjects

Control group : 5 subjects

4. Test Food

Treatment group: hard capsules containing CHALSAP-P8 (200mg/day)

Placebo group : hard capsules containing indigestible dextrin (200mg/day)

5. Results

5.1. Abdominal Circumference and Weight

The abdominal circumference and the weight are shown in the diagrams below (Figure 1).

The treatment group showed significant reductions both in the abdominal circumference and in the weight.

5.2. Visceral Fat

The average change in the visceral fat area is shown in the diagram (Figure 2A).

It shows a decline in the average visceral fat area of the treatment group.

In addition, the decline in the visceral fat is compared, using CT scan images (Figure 2B).

6. Conclusion

This study showed the statistically significant reductions in the abdominal circumference and the weight with the intake of Ashitaba Polyphenol CHALSAP. Furthermore it was found that the

reduction in the visceral fat was responsible for these declines. Yet, the participants who had had a large amount of the visceral fat showed a remarkable reduction, whereas the participants who had had a normal range of the visceral fat showed little reduction. Hence, the visceral fat did not decline too much. On the other hand, no adverse effect on the biochemical normal value of the blood and the participants' health was observed.

Figure 1. Change in Weight (A) & Change in Abdominal Circumference (B)

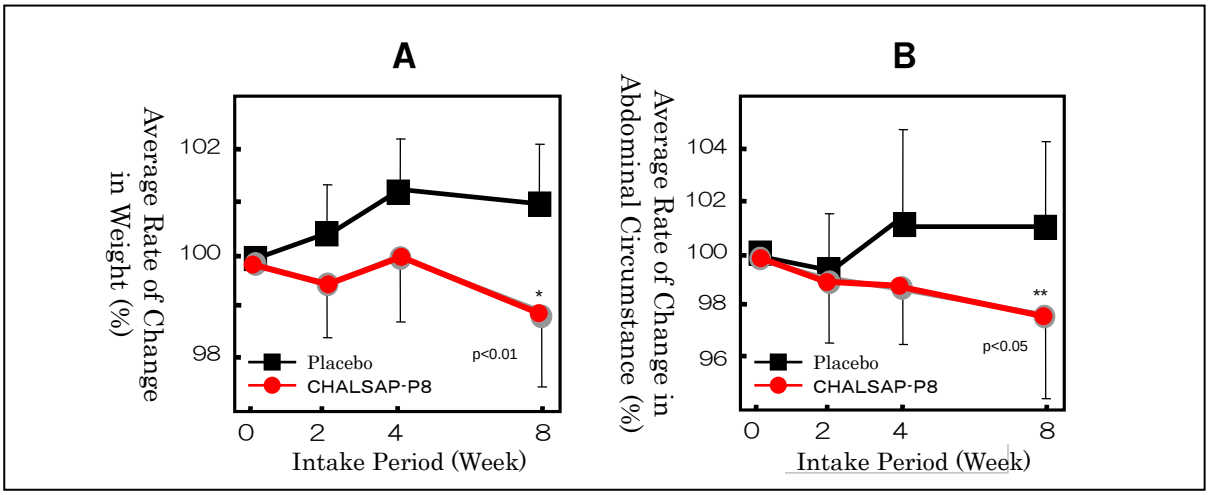
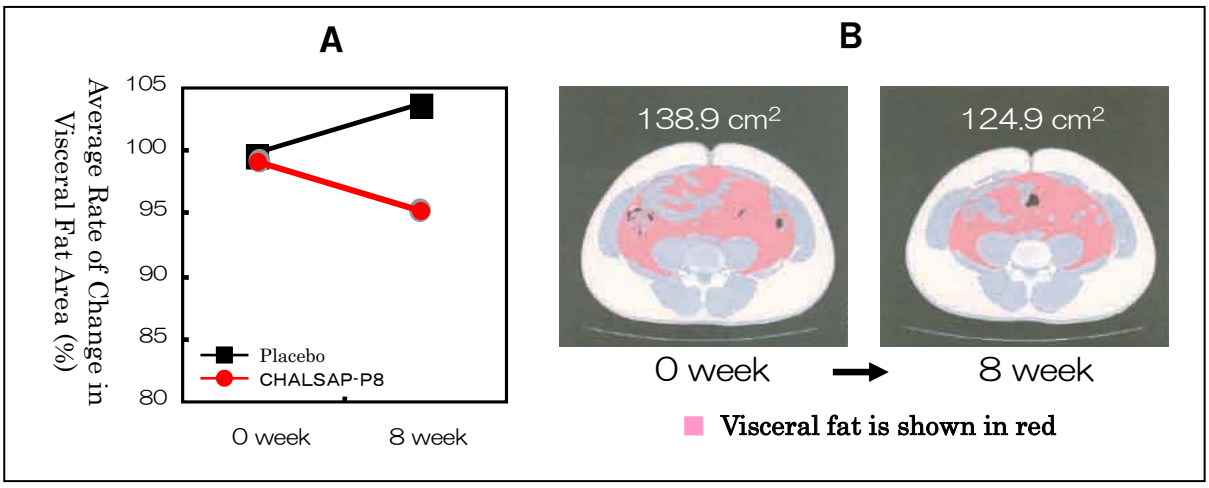


Figure 2. Change in Visceral Fat Area (A) & Comparison of CT Scan Images.



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