

Efficacy and Safety of Ashitaba(*Angelica keiskei*)on the Patients and Candidates with Metabolic Syndrome:A Pilot Study

(メタボリックシンドローム該当者及び予備群における明日葉の有効性及び安全性評価
:パイロット試験)

Objective:“*Ashitaba*” (*Angelica keiskei*) is a traditional vegetable unique to Japan. *Ashitaba* contains an abundance of vitamins, dietary fiber and polyphenols such as chalcones. We previously reported anti-diabetic behavior of chalcones from *Ashitaba*. In this study, we evaluated the efficacy and safety of *Ashitaba* on patients and candidates with MetS.

Methods: Nine adult subjects defined as patients and candidates with MetS ingested *Ashitaba* green juice (6.2 g/day of granulated powder containing 12.3 mg chalcones)for 8 weeks. For evaluation of efficacy, abdominal fat area, body weight, body fat and blood parameters were measured. For evaluation of safety, blood chemistry analysis, hematological analysis and urinalysis were conducted.

Result: Ingestion of *Ashitaba* green juice for 8 weeks significantly decreased visceral fat area, body weight, BMI and body fat, respectively. There were no adverse clinical changes in blood analysis and urinary analysis, and no serious symptom was observed.

Conclusion: These results indicate that it is possible that *Ashitaba* is a useful and safe food-stuff for the prevention of MetS.