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Effects of *Allium hookeri* on lipid metabolism in type II diabetic mice

Sunghyen Lee, Seon-Hye Lee, Hwanhee Jang, Jungbong Kim, Haengran Kim, Jeongsook Choe and **Hyun Lillehoi**[1]
Functional Food & Nutrition Division, South Korea
[1]Animal Biosciences and Biotechnology Laboratory, USA

Allium hookeri is a plant species native to India, Sri Lanka, Myanmar, and China. The plant is widely cultivated in Korea lately as a medicinal food item. This study was conducted to evaluate the effects of *Allium hookeri* (*A. hookeri*) on lipid metabolism in Type II diabetic mice (n=8/group, 5 groups). High fat diets with dextrin as a positive control (Dex), leaf (AL), root (AR), and fermented root (FAR) at 3% of diet were fed to all experimental mice, respectively for 8 weeks. Body weight gain, liver, and epididymal fat weights, and excreted fecal lipid levels were measured. Serum and hepatic lipid profiles were analyzed, and fat accumulation in liver was evaluated. In this study, body weight gain and epididymal fat weight were lower in the FAR group, while serum HDL-cholesterol level and excreted fecal total lipid and triglyceride levels were higher in AL or FAR groups. These results suggest that *A. hookeri*, specially fermented root can be a useful food item to control lipid metabolism in diabetic mice.

Biography

Sunghyen Lee has completed her PhD at the age of 34 years from Seoul National University and postdoctoral studies from ARS-USDA. She is the scientist of RDA, a national research institute in Korea. She has published more than 125 papers in reputed journals and has been serving as an editorial board member of many nutrition and immunology sosieties.

lshin@korea.kr

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