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[\[PDF \(650K\)\]](#) [\[References\]](#)**Anti-hyperglycemic effects of plum in a rat model of obesity and type 2 diabetes, Wistar fatty rat**Hirotohi UTSUNOMIYA¹⁾, Tadashi YAMAKAWA²⁾, Junzo KAMEI³⁾, Kazuaki KADONOSONO⁴⁾ and Shun-Ichi TANAKA⁵⁾

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ABSTRACT

Dried plums, considered a healthy food in the West and used as medicine in India, contain phenolic compounds with protective actions against age-related diseases. Effects of oral plum ekisu (concentrated juice) on lipid and glucose tolerance were assessed in insulin-resistant obese Wistar fatty rats. Plum ingestion decreased blood glucose ($P < 0.05$) and plasma triglyceride concentrations ($P < 0.01$) compared with controls. Plum treatment for 2 weeks reduced areas under the curve (AUCs) for glucose and insulin during a glucose tolerance test. In db/db mice, plum decreased these AUCs, and also blood glucose during an insulin tolerance test. Plum treatment significantly increased plasma adiponectin concentrations and PPAR γ mRNA expression in adipose tissue from Wistar fatty rats. Plum thus may increase insulin sensitivity in these rats via adiponectin-related mechanisms.

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