

[Berberine regulates type 2 diabetes mellitus related with insulin resistance].

[Article in Chinese]

Li C^{1,2}, He JZ^{1,2}, Zhou XD^{1,2}, Xu X^{1,2}.

Author information

1 State Key Laboratory of Oral Diseases, West China Hospital of Stomatology, Sichuan University, Chengdu 610041, China.

2 Department of Operative Dentistry and Endodontics, West China Hospital of Stomatology, Sichuan University, Chengdu 610041, China.

Abstract

Insulin resistance (IR) is defined as a series of clinical manifestations for diminished effectiveness of insulin in lowering blood sugar levels caused by decreased sensitivity to insulin of liver, muscle and adipose tissue. IR is the major contributor to the etiology and pathogenesis of type 2 diabetes mellitus (T2DM). Berberine, a traditional Chinese herb extract, has been shown to be safe and effective in lowering blood sugar, alleviating insulin resistance and moderating type 2 diabetes mellitus and its complications. The bioavailability of berberine is extremely low, suggesting that it may play a role in lowering blood sugar and lipid by regulating intestinal flora. Intestinal microbiota may serve as a new potential target for berberine treatment of type 2 diabetes mellitus.

KEYWORDS: berberine; insulin resistance; intestinal microbiota; type 2 diabetes mellitus

PMID: 28822177