

Review on Antidiabetic Effect of Bitter Gourd (*Momordica Charantia*)

Meghraj A. Patil, Sanjay K. Bais, Tejashri B. Navale

Fabtech College of Pharmacy, Sangola, Maharashtra, India
navaletejashribhimrao@gmail.com

Abstract: *One of the most prevalent illnesses in both developed and developing nations, diabetes, is also spreading quickly throughout the globe. It is estimated that one-third of diabetics take some form of medication, including supplements. The potential of this plant, also called bitter Gourd or bitter Gourd (*Momordica charantia*), to prevent diabetes has drawn a lot of interest. The fruits of this plant are also used by people in different countries like East Africa, Asia, South America, and India to treat conditions like diabetes. Numerous preclinical studies have confirmed that Bitter melon exerts hypoglycemic and antidiabetic effects through various putative mechanisms. However, data from human clinical trials are limited and biased due to inadequate study design and low statistical power. To help comprehend the possible therapeutic effects of bitter gourd on diabetes, this review highlights the plant's antidiabetic activity along with phytochemical and pharmacological findings. He is also in favor of carrying out clinical trials with more caution*

Keywords: Mother-disease *Charantia* hypoglycemic medications, Diabetes Insulin, glucose metabolism, bitter melon, medicinal plant, and bioactive compounds

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