Cholesterol-Lowering Research on

Bitter Melon (Momordica charantia)

Xiao, X., et al. "Momordica charantia bioactive components: Hypoglycemic and hypolipidemic benefits through gut health modulation." J. Med. Food. 2024 Jul; 27(7): 589-600.

Innih, S., et al. "Evaluation of the haematinic, antioxidant and anti-atherosclerotic potential of *Momordica charantia* in cholesterol-fed experimental rats." *Toxicol. Rep.* 2022 Mar; 9: 611-618.

Zhang, F., et al. "The gut microbiota confers the lipid-lowering effect of bitter melon (*Momordica charantia* L.) In high-fat diet (HFD)-Induced hyperlipidemic mice." *Biomed. Pharmacother*. 2020 Nov; 131: 110667.

Kinoshita, H., et al. "Effect of bitter melon extracts on lipid levels in Japanese subjects: a randomized controlled study." *Evid. Based Complement. Alternat. Med.* 2018 Nov; 2018: 4915784.

He, Q., et al. "Hypolipidemic and antioxidant potential of bitter gourd (*Momordica charantia* L.) leaf in mice fed on a high-fat diet." *Pak J Pharm Sci.* 2018 Sep;31(5):1837-1843.

Mahwish, F., et al. "Hypoglycemic and hypolipidemic effects of different parts and formulations of bitter gourd (*Momordica charantia*)." *Lipids Health Dis.* 2017 Nov; 16(1): 211.

Saad, D., et al. "Effects of Karela (Bitter Melon; *Momordica charantia*) on genes of lipids and carbohydrates metabolism in experimental hypercholesterolemia: biochemical, molecular and histopathological study." *BMC Complement. Altern. Med.* 2017 Jun; 17(1): 319.

Su, J., et al. "Hypocholesterolaemic mechanism of bitter melon aqueous extracts via inhibition of pancreatic cholesterol esterase and reduction of cholesterol micellar solubility." *Int. J. Food Sci. Nutr.* 2016; 67(1): 20-8.

Wang, J., et al. "The effects of *Momordica charantia* on obesity and lipid profiles of mice fed a high-fat diet." *Nutr. Res. Pract.* 2015 Oct; 9(5): 489-95.

Dar, U., et al. "Biochemical analysis of the crude extract of *Momordica charantia* (L.)." *Pak. J. Pharm. Sci.* 2014 Nov; 27(6 Spec No.): 2237-40.

Matsui, S., et al. "The hypocholesterolemic activity of *Momordica charantia* fruit is mediated by the altered cholesterol- and bile acid-regulating gene expression in rat liver." *Nutr. Res.* 2013 Jul; 33(7): 580-5.

Senanayake, G., et al. "Mechanisms underlying decreased hepatic triacylglycerol and cholesterol by dietary bitter melon extract in the rat." *Lipids.* 2012 May; 47(5): 495-503.

Saha, S., et al. "Antioxidant and anti-inflammatory effect of conjugated linolenic acid isomers against streptozotocin-induced diabetes." *Br. J. Nutr.* 2012 Sep; 108(6): 974-83.

Saha, S., et al. "Comparative study of hypocholesterolemic and hypolipidemic effects of conjugated linolenic acid isomers against induced biochemical perturbations and aberration in erythrocyte membrane fluidity." *Eur. J. Nutr.* 2012 Jun; 51(4): 483-95.

Ching, R. "Supplementation of bitter melon to rats fed a high-fructose diet during gestation and lactation ameliorates fructose-induced dyslipidemia and hepatic oxidative stress in male offspring." *J. Nutr.* 2011 Sep; 141(9): 1664-72.

Sato, M., et al. "Dietary kakrol (*Momordica dioica* Roxb.) flesh inhibits triacylglycerol absorption and lowers the risk for development of fatty liver in rats." *Exp. Biol. Med.* (Maywood). 2011 Oct; 236(10): 1139-46.

Lin, K., et al. "Antioxidant constituents from the stems and fruits of *Momordica charantia*." Food Chem. 2011 Jul; 127(2): 609-14.

Nerurkar, P., et al. "Momordica charantia (bitter melon) attenuates high-fat diet-associated oxidative stress and neuroinflammation." J. Neuroinflammation. 2011 Jun 3; 8: 64.

Popovich, D., et al. "*Momordica charantia* seed extract reduces pre-adipocyte viability, affects lactate dehydrogenase release, and lipid accumulation in 3T3-L1 cells." *J. Med. Food.* 2011 Mar; 14(3): 201-8.

Kavitha, N., et al. "Influence of *Momordica charantia* on oxidative stress-induced perturbations in brain monoamines and plasma corticosterone in albino rats." *Indian J. Pharmacol.* 2011 Jul; 43(4): 424-8.

Chen, C., et al. "Cucurbitane triterpenoids from *Momordica charantia* and their cytoprotective activity in tert-butyl hydroperoxide-induced hepatotoxicity of HepG2 cells." *Chem. Pharm. Bull.* (Tokyo). 2010 Dec; 58(12): 1639-42.

Chaturvedi, P., et al. "*Momordica charantia* maintains normal glucose levels and lipid profiles and prevents oxidative stress in diabetic rats subjected to chronic sucrose load." *J. Med. Food.* 2010 Jun; 13(3): 520-7.

Chang, C., et al. "Octanorcucurbitane triterpenoids protect against tert-butyl hydroperoxide-induced hepatotoxicity from the stems of *Momordica charantia*." *Chem. Pharm. Bull.* (Tokyo). 2010 Feb; 58(2): 225-9.

Yama, O., et al. "Effect of methanolic seed extract of *Momordica charantia* on body weight and serum cholesterol level of male Sprague-Dawley rats." *Nig. Q. J. Hosp. Med.* 2010 Oct-Dec; 20(4): 209-13.

Chaturvedi, P. "Bitter melon protects against lipid peroxidation caused by immobilization stress in albino rats." *Int. J. Vitam. Nutr. Res.* 2009; 79(1): 48-56.

Nerurkar, P., et al. "Lipid lowering effects of *Momordica charantia* (Bitter Melon) in HIV-1-protease inhibitor-treated human hepatoma cells, HepG2." *Br. J. Pharmacol.* 2006 Aug; 148(8): 1156-64.

Chan, L., et al. "Reduced adiposity in bitter melon (*Momordica charantia*)-fed rats is associated with increased lipid oxidative enzyme activities and uncoupling protein expression." *J. Nutr.* 2005; 135(11): 2517-23.

Chen, Q., et al. "Reduced adiposity in bitter melon (*Momordica charantia*) fed rats is associated with lower tissue triglyceride and higher plasma catecholamines." *Br. J. Nutr.* 2005; 93(5): 747-

Hsieh, C., et al. "Inhibitory effect of some selected nutraceutic herbs on LDL glycation induced by glucose and glyoxal." *J. Ethnopharmacol.* 2005 Dec; 102(3): 357-63.

Chaturvedi, P. "Role of *Momordica charantia* in maintaining the normal levels of lipids and glucose in diabetic rats fed a high-fat and low-carbohydrate diet." *Br. J. Biomed. Sci.* 2005; 62(3): 124-6.

Sathishsekar, D., et al. "Antioxidant properties of *Momordica charantia* (bitter gourd) seeds on streptozotocin induced diabetic rats." *Asia Pac. J. Clin. Nutr.* 2005; 14(2): 153-8.

Ansari, N. M., et al. "Antioxidant activity of five vegetables traditionally consumed by South-Asian migrants in Bradford, Yorkshire, UK." *Phytother. Res.* 2005; 19(10): 907-11.

Senanayake, G.V. et al. "The effects of bitter melon (*Momordica charantia*) extracts on serum and liver lipid parameters in hamsters fed cholesterol-free and cholesterol-enriched diets." *J. Nutr. Sci. Vitaminol.* 2004 Aug; 50(4): 253-7.

Ahmed, I., et al. "Hypotriglyceridemic and hypocholesterolemic effects of anti-diabetic *Momordica charantia* (Karela) fruit extract in streptozotocin-induced diabetic rats." *Diabetes Res. Clin. Pract.* 2001; 51(3): 155-61.

Jayasooriya, A. P., et al. "Effects of *Momordica charantia* powder on serum glucose levels and various lipid parameters in rats fed with cholesterol-free and cholesterol-enriched diets." *J. Ethnopharmacol.* 2000; 72 (1-2): 331.

Return to the Rain-Tree <u>Tropical Plant Database File on Bitter Melon</u>

Copyrighted 2025 by <u>Leslie Taylor</u>. All rights reserved.