Thaumatococcus daniellii Seed Improves Lipid Profile in Male Wistar Rats

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Abstract

Thaumatococcus daniellii (Benn.) Benth, a rainforest berry of West Africa produces fruits containing a black, hard, impervious seed surrounded by a jelly coat. The seeds are reported to have some therapeutic effects. This study examined the effect of ethanolic seed extract of T. daniellii on lipid profile in male Wistar rats. Ethanolic extract of T. daniellii seeds was prepared and graded concentrations were administered orally to the rats for 14 days. Blood, heart, brain and testes were excised and lipid parameters were assayed. Result were statistically analysed using one way analysis of variance (ANOVA) supplemented with Duncan multiple range test (DMRT). There was a significant (p<0.05) decrease in cholesterol and triglyceride concentration and a significant increase (p<0.05) in HDL-cholesterol concentration compared to the normal and positive control. There was no significant (p<0.05) difference in animal weight, organ weight and LDL-cholesterol concentration. The hypolipidemic potential of the seed extract can be exploited for the management and prevention of cardiovascular disease.

We recommend

Fruit Extract of Thaumatococcus daniellii Reduces Oxidative Stress in Rats
Franklyn N. Iheagwam et al., FASEB J, 2017

Effect of Caseolamina (Cassia nomame) associated with Phaseolamine (Phaseolus vulgaris) supplementation in glicemia and body weight in Wistar rats
Amanda Figueiredo et al., FASEB J, 2015

Hypolipidemic Effects of High Hydrostatic Pressure Extract of Ginger in Rats Fed a High-fat Diet
Hye-yeon Son et al., FASEB J, 2016

Pumpkin Seed Oil Supplementation improves HDL and LDL cholesterol in Post-Menopausal Women: A Random Double-Blind Pilot Study
Coretha Dionne Hyde et al., FASEB J, 2010

Hypolipidaemic effects of Methanol Extract of Vernonia amygdalina Del in male Wistar albino rats fed High fat diet
Ifeoma Ijeh et al., FASEB J, 2015

Four Plant Extracts Discovered For Possible Weight Loss
Medical News Today, 2012

Effects of synbiotic on anthropometry, lipid profile and oxidative stress in obese children.
N Ipar et al., Beneficial Microbes, 2015

AB0092 Sideritis Scardica Extract Prevents Bone Loss in Ovariectomized Rats
I. Jeremic et al., Ann Rheum Dis, 2015

360 AGE-RELATED CHANGES IN SPLENIC NEUROTROPHIN CONTENT: A POSSIBLE CAUSE FOR DECLINING SYMPATHETIC INNERVATION IN OLD RATS
K. Bassett et al., J Investig Med, 2005

Ethanol modulates apolipoprotein B mRNA editing in the rat.
P P Lau et al., The Journal of Lipid Research, 1995