Apple cider vinegar attenuates lipid profile in normal and diabetic rats.

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In this study, the effect of apple cider vinegar on Fasting Blood Glucose (FBG), glycated haemoglobin (HbA1c) and lipid profile in normal and diabetic rats was investigated. Diabetes was induced in male Wistar rats (300+/−30 g) by the intraperitoneal injection of streptozotocin (60 mg kg⁻¹ of body weight). Both normal and diabetic animals were fed with standard animal food containing apple cider vinegar (6% w/w) for 4 weeks. Fasting blood glucose did not change, while HbA1c significantly decreased by apple cider vinegar in diabetic group (p<0.05). In normal rats fed with vinegar, significant reduction of low density lipoprotein-cholesterol (LDL-c) (p<0.005) and significant increase of high density lipoprotein-cholesterol (HDL-c) levels (p<0.005) were observed. Apple cider vinegar also reduced serum triglyceride (TG) levels (p<0.005) and increased HDL-c (p<0.005) in diabetic animals. These results indicate that apple cider vinegar improved the serum lipid profile in normal and diabetic rats by decreasing serum TG, LDL-c and increasing serum HDL-c and may be of great value in managing the diabetic complications.

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