

Adult male rabbits were used to evaluate the effects of supplementation with fenugreek seeds on Body Weight (BW), plasma glucose and serum levels of cholesterol and insulin in alloxan-induced diabetic and in non-diabetic rabbits. Diabetic and non-diabetic groups of rabbits supplemented with fenugreek showed a slight increase in BW. Supplementation with fenugreek resulted in a significant decrease in glucose level of diabetic group of rabbits and a slight effect in non-diabetic rabbits. Diabetic groups of rabbits had significantly higher serum cholesterol levels compared to non-diabetic groups. Supplementation with fenugreek lowered the cholesterol level slightly in diabetic groups. The alloxan-treated groups of rabbits maintained significantly lower serum insulin level compared to the respective values obtained for the non-diabetic groups. Supplementation with fenugreek slightly increased serum insulin level in diabetic rabbits. The findings demonstrate the antidiabetic and insulin mimetic effects of fenugreek seeds in rabbits.