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Effect of Cinnamon (*Cinnamomum Cassia*) intervention on Blood Glucose of Middle Aged Adult Male with Non Insulin Dependent Diabetes Mellitus (NIDDM)

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ABSTRACT The present study was conducted to find out the effect of oral administration of cinnamon (*Cinnamomum cassia*) on non insulin dependent diabetes mellitus (NIDDM) patients of Udaipur city (Rajasthan). Thirty type 2 diabetics were divided into two groups (15 in each) experimental and control group. Experimental group was supplemented with 2g cinnamon powder filled in capsules (4capsules/day/person) for 40 days. Another group of 15 subjects served as control. Fasting and post prandial blood sugar were estimated at initial level (0 day), after 20 days and finally after 40 days. Diet of diabetics when compared with dietary modifications was found to be high in fat (131%), calcium (190.37%), thiamine (180.58%), vitamin C (117.40%) and niacin (110%) adequate in energy (103.82%), carbohydrates (80.35%), β carotene (96.14%) and riboflavin (90.86%). In addition diet was moderately low in protein (72.67%) and iron (54.73%) where as extremely low in fibre (15.94%).Data regarding blood glucose level showed that at initial level fasting blood glucose of experimental group was 148.73±3.69 mg/dl which reduced to 134.0±3.12 mg/dl after 20th day and further reduced to 120.66±4.70 mg/dl at the completion of the study and was statistically significant ($p>0.05$,$p>0.01$) . Post prandial blood sugar also reduced significantly ($p>0.05$, $p>0.01$) from 187.66±3.29 mg/dl (0 day) to 172.93±3.51 mg/dl (20th day) and again reduced to 163.6±5.09 mg/dl after 40 days of intervention in the experimental group. This was also statistically significant at both 5 percent and 1 percent level of significance. No significant reduction was observed in both fasting and post prandial blood sugar in control group. The study reveals that cinnamon is effective in controlling blood sugar of people with type 2 diabetes.