

**STUDY OF EFFECT OF GUAR GUM THERAPY ON BLOOD  
SUGAR GLYGOSYLATED HEMOGLOBIN (Hb A1) INSULIN,  
G-PEPTIDE AND GLUGAGON LEVELS IN CASE OF  
DIABETES MELLITUS**

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Abstract—Sixteen patients of Diabetes Mellitus (12 Non-insulin dependent and 4 insulin dependent) were studied. They were given guar gum in a Single daily dose of 5 grms., for 8 weeks. A statistically significant reduction in fasting and post Glucose Blood Sugar values and Glycosylated Hemoglobin (Hb A1) was noted after Gaur gum therapy in both types of diabetes.

C-peptide concentration was increased from  $1.6 \pm 0.05$  mg/ml to  $1.95 \pm 0.12$  ng/ml ( $P = Z.0.05$ ) in Insulin dependent and from  $1.98 \pm 0.06$  ng/ml to  $2.43 \pm 0.09$  ng/ml ( $=Z.O 001$ ) in non-insulin dependent diabetics after the Guar Therapy. However Immunoreactive insulin (IRI) and serum Glucagon levels did not fluctuate much with guar gum therapy.

It can be concluded that guar gum in a dose of 5 gms. per day may prove an effective adjunct to the therapy of Diabetes mellitus and its effect appears to be mediated through increase pancreatic B-cells secretion and insulin sensitivity in addition to its high fiber content.