







شبكة المعلومـــات الجامعية التوثيق الالكتروني والميكروفيا.



جامعة عين شمس

التوثيق الالكتروني والميكروفيلم



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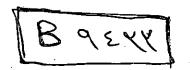
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Effect of Guar Gum On Lipid Metabolism, Plasma Glucose and Plasma Urea In Experimental Animals

Thesis

Submitted for Ph.D. of Science in Biochemistry and Nutrition

By

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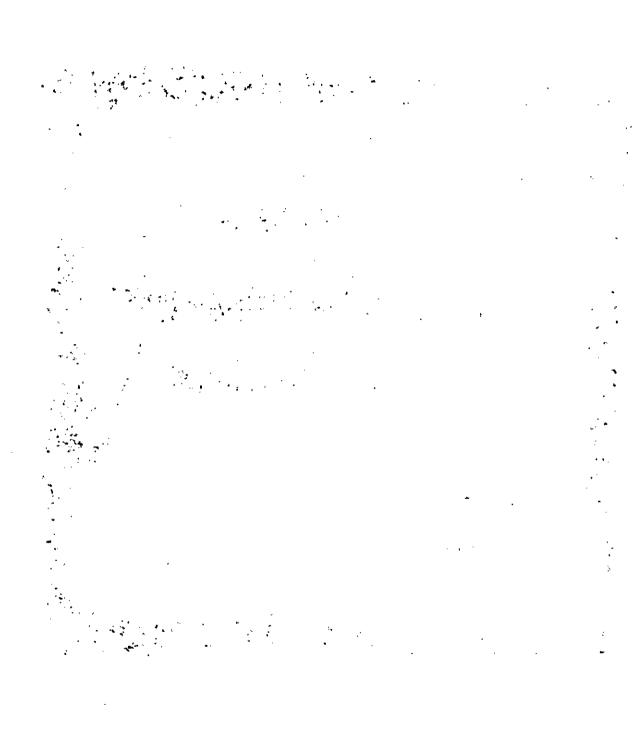
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> Women's College Ain Shams University . 2001



بسم الله الرحمن الرحيم

"قالوا سبحانك لاعلم لنا إلا ماعلمتنا

إنكأنت العليم الحكيم"

صدق الله العظيم

سورة البقرة الآية (٣٢)

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ABSTRACT

Eman Aly Sedeek Fadl Allah.

Effect of guar gum on lipid metabolism, plasma glucose and plasma urea in experimental animals.

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Sixty-four male albino rats were studied. They included eight groups of eight rats each. Rats were fed the different experimental diets, which had the same composition except for the fibre source, concentration and cholesterol content for a period of 4 weeks.

All rats were subjected to determination of food intake, feed efficiency ratio, body weight gain, relative weights of organs, plasma total cholesterol and its different types, hepatic cholesterol, plasma triacylglycerol, plasma total protein, plasma glucose, plasma urea nitrogen, HDL-cholesterol- total cholesterol ratio and total cholesterol- protein ratio.

The results indicated that:

- There were no significant differences in food intake, feed efficiency ratio and body weight gain between groups 1 and 3; 2 and 4; 3 and 4; 5 and 6; 7 and 8; 3,5 and 7 and 4,6 and 8.
- There were no significant differences in relative weights of liver, kidney and spleen between groups 1 and 3;2 and 4 (except for liver); 3 and 4; 5 and 6; 7 and 8; 3,5 and 7 and 4,6 and 8.
- There was a significant difference in relative weight of liver between groups 2 and 4.
- There was a highly significant reduction in plasma cholesterol in group 3 when compared to the control group (group 1).
- There was no significant difference in plasma cholesterol between groups 2 and 4.
- There was a highly significant increase in plasma cholesterol in groups 4,6 and 8 when compared to groups 3,5 and 7 respectively.
- There was a highly significant difference in plasma cholesterol between groups 3,5 and 7 and also between groups 4,6 and 8.