



Ain Shames University
Faculty of Specific Education
Home Economic Department.

**STUDY THE EFFECT OF SOME DIFFERENT
DOSES OF EGYPTIAN HONEY BEE AND ROYAL
JELLY ON BLOOD GLUCOSE LEVEL OF
DIABETIC RATS**

THESIS

Submitted to Nutrition and Food Science Dept.
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BY

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ABSTRACT

Effect of some different doses of Egyptian honey bee and royal jelly on blood glucose level of diabetic experimental rats.

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This study was sixty male rats albino of (spargue dawley strain) weighting an average (110 ± 10 g). The rats were divided into two main groups. The first main group (6rats) fed on basal diet as a (control negative group). The second main group (54 rats) was injected subcutaneous with recrystallized alloxane (150mg/kg body weight), then divided into four subgroups as follow: The first subgroup (6rats) fed on basal diet as a (control positive group), the second subgroup (18 rats) was randomly divided into three groups (6 rats each)

Fed on basal diet containing (2.5%, 5% and 7.5%) honey bee from EL-fayoum.

Fed on basal diet containing (2.5%, 5% and 7.5%) honey bee from Upper Egypt (Bany swief).

The fourth subgroups: (18 rats) was randomly divided into three groups (6 rats each).

Fed on basal diet containing (0.025%, 0.05% and 0.075%) royal jelly.

The results revealed that honey bee only from EL-fayoum or Upper Egypt (Bany swief), especially at medium and high concentration improved the blood glucose level, total cholesterol, triglycerides, high density lipoprotein cholesterol, very low density lipoprotein cholesterol, low density lipoprotein cholesterol, urea nitrogen, uric acid, AST, ALT, food intake, body weight gain, and the organ weights of kidney, heart and liver compared to the positive control group (fed on casein diet).

Key words: Honey bee, Royal jelly, Diabetes or diabetic, chronic liver diseases, kidney or renal diseases, cholesterol, triglycerides, LDL-C, VLDL-C, HDL-C, uric acid. Urea nitrogen, AST and ALT.