



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

جامعة عين شمس

شبكة المعلومات الجامعية

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شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

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شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم

EFFECT OF FIBER ON LEVEL OF BLOOD GLUCOSE

By

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

سُبْحَانَكَ لَا إِلَهَ إِلَّا مَا عَلَّمْنَا بِكَ
أَنْتَ الْعَلِيمُ الْحَكِيمُ

الآية ٣٣

سورة البقرة

ABSTRACT

Effect of fibers on level of blood glucose

Ayman EL- Sayed EL - Adawy Ph D Thesis (1997)

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This study was undertaken to study the effect of different sources and levels of fiber on carbohydrate and lipid metabolism , hemoglobin , hematocrit , uric acid and creatinine .

Adult male albino rats , wister strain 180- 200 g (60) were divided into 10 groups , 6 rats each . Nine of them were diabetic and the 10th group was positive control , the diets were 16 % protein level , with add 5% and 10% of different sources of fiber at the expense of starch as the following : casein (negative control) ; 5% and 10 % broad bean fiber ; 5% and 10% lupine fiber , 5% and 10% tomato fiber ; 5% and 10% lettuce fiber . At the end of the experimental period all groups of rats were sacrificed and blood samples were subjected to determine HB & HCT ; serum glucose ; total lipid , total cholesterol , L D L & HDL cholesterol , triglycerides , phospholipids , uric acid and serum creatinine . The results revealed that groups of rats received lettuce fiber at both levels showed a significantly higher food intake ($P < 0.01$) than other groups . Final body weight decreased ($P < 0.01$) in rats group received 5% tomato fiber . HB & HCT & serum glucose were significantly higher ($P < 0.01$) in rats group received both levels of broad bean and lupine than negative control . Triglycerids and phospholipids were significantly decreased ($P < 0.01$) in rats group received both levels of broad bean fiber . L D L and H D L were significantly lower ($P < 0.01$) in rats group received both levels of tomato fiber . Total cholesterol was significantly lower in rats group received both levels of tomato and broad bean ($P < 0.01$) than negative control , while relative weight of liver and kidney were lower ($P < 0.01$) in broad bean and tomato fiber at both levels than negative control while relative spleen was lower in broad bean group.



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