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جامعة عين شمس

التوثيق الالكتروني والميكروفيلم



نقسم بللله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأفلام قد اعدت دون آية تغيرات



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15-20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of 15 – 25c and relative humidity 20-40 %



ثبكة المعلومات الجامعية





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Ain Shams University
Faculty of Specific Education
Home Economics Dept.

Biological And Chemical Study On Some Legumes And Nuts

By Ebtesam Fath Mahmoud Omar

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Thesis

Submitted To Faculty of Specific Education, Ain Shams Univ. In Partial Fulfillment of the Requirement for the Doctor Philosophy Degree in Home Economics (Nutrition and Food Science)

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2005

BNYTI



السلاح المال

﴿ قَالُواْ سُبُكَانَكَ لَا عَلَمَ لَنَا إِلَّا مَا غَلَمُتَنَا إِنَّكَ أَنْتُ اَلْعَلِيمُ ٱلْكَثِيمُ ﴾ اَلْعَلِيمُ ٱلْكَثِيمُ ﴾

العظريما

الآية (٣٢) البقرة



APPROVAL SHEET

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BIOLOGICAL AND CHEMICAL STUDY ON SOME LEGUMES AND NUTS

By

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ABSTRACT

The main target of the present investigation is to study the effect of whole and dehulled cooked raw and germinated faba bean, peanuts and almonds seeds as well as their extracted oil as hypocholesterolemic agents. The rats were divided in to 2 main groups, the first group (6 rats) fed on basal diet as a negative control. The second group (78 rats) fed two weeks on basal diet containing cholesterol (1%) and bile salts (0.25%) to induce hypercholesterolemia. The hypercholesterolemic animals were divided randomly into 13 sub groups (n = 6) according to the following scheme.

Group (1) Fed on basal diet + 1% cholesterol + 0.25% bile salts (positive control). Groups (2-5) Fed on hyper-cholesterolemic diet containing whole and dehulled, cooked (raw and germinated fabe bean), respectively. Groups (6-9) fed on hypercholesterolemic diet containing peanut seeds that is providing the diet 5% and 10% oil, in addition to 5% and 10% peanuts oil respectively. Groups (10-13) fed on hypercholesterolemic diet containing almond seeds that is providing the diet with 5% and 10% almonds oil in addition to 5% and 10% almonds oil respectively.

The obtainned results revealed that: whole and dehulled cooked (raw and germinated) faba bean, peanuts, peanut oil, almonds and almond oil improved the levels of serum lipid fractions in hypercholesterolemic rats. On the other hand, using 5% or 10% almonds oil resulted in the best hypocholesterolemic effects.

Key Words: Faba bean, germinated faba bean, peanuts, almonds peanut oil, almonds oil, lipid fraction, kidney function, liver function, thyroid hormones, hypercholesterolemia and rats.