



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ





شبكة المعلومات الجامعية



شبكة المعلومات الجامعية

التوثيق الالكتروني والميكرو فيلم

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون أية 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 %



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بعض الوثائق الأصلية تالفة



شبكة المعلومات الجامعية



بالرسالة صفحات
لم ترد بالأصل

**BIOCHEMICAL STUDIES ON
SOME EGYPTIAN FOODS**

BY
ASMAA AHMED MAHMOUD ALI
B.Sc. Agric. Sc(Biochemistry) Cairo University, 1997.

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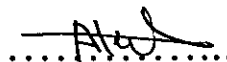
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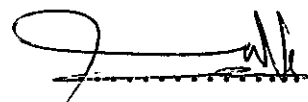
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ABSTRACT

This study reveals the effect of common legumes (fababean and lentil as whole and dehulled seeds) in Egypt on normal and hypercholesterolemic rats .The chemical composition of these seeds before and after processing methods (soaking, germination and cooking) to remove most of the antinutritional factors and improve the protein quality. The protein and amino acids content were higher in the dehulled seeds than the whole seeds particularly in dehulled fababean, while dehulled lentil was higher in carbohydrate content than dehulled fababean. Crude fiber was higher in whole seeds than dehulled seeds chiefly in whole fababean. It was observed that there was a reduction in protein and fiber content and an increase in amino acids and carbohydrates contents after processing. Feeding normal and hypercholesterolemic male albino rats on diet supplemented with these processed legumes showed a reduction in the body weight, serum and liver total cholesterol, LDL-cholesterol, risk factor (Total / HDL-cholesterol) , serum and liver triglyceride, blood glucose , total protein , albumin , urea and creatinine but an increase in the levels of HDL-cholesterol and Hb in normal groups . Also, the hypercholesterolemic groups showed an improve in HDL-cholesterol and Hb levels but a reduction of elevation of other item levels occurred. No changes were observed in AP and transaminases activity. Finally, it was concluded that the consumption of these legumes especially its whole seeds had a protective effect on healthy male albino rats as well as a therapeutic diet for hypercholesterolemia.

Asmaa AA

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INTRODUCTION

INTRODUCTION

Legumes play an important role in the traditional diets of most Mediterranean countries. In contrast in western countries beans tend to play only a minor dietary role despite the fact that they are low in fat and are excellent sources of carbohydrate, protein, dietary fiber and a variety of micronutrient (*Messina, 1999*).

These seeds contain substances referred to as antinutritional factors (ANF), because they can interfere with metabolic processes and reduce nutrient availability. There are more process traditionally used in the home to remove ANF such as soaking and then boiling.

In Egypt, the common legumes used are faba bean and lentil as whole or dehulled seeds. The observation that diets high in legumes are beneficial for health has recently become a topic of scientific interest. There is growing evidence that legumes play important roles in the prevention of chronic diseases (*Kushi et al., 1999*).

There has been a rapid increase in coronary heart disease (CHD), it is a major health problem that increases in the proportion of deaths. That proportion of death ranges from 25 to 45% (*WHO, 1993*) in the Eastern Mediterranean regions such as Egypt and Iran.

Coronary heart disease (CHD) is the leading cause death. CHD is caused by a narrowing of the coronary arteries that supply blood to the heart, and often results in a heart attack.

Hypercholesterolemia has been identified as a major risk factor of coronary artery disease. Thus, reductions in concentrations of total serum and