



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

**Effect Of Soy Flour, Packaging Material And Conditions On
The Quality Characteristics Of Chicken Frankfurters
During Refrigerated Storage**

By

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

سُبْحَانَكَ

لَا إِلَهَ إِلَّا أَنْتَ عَلَيْنَا أُنِمْتُ أَنْتَ الْعَلِيمُ الْحَكِيمُ

صَبَّحُكَ اللَّهُ الْعَلِيمُ

Approval Sheet

Effect Of Soy Flour, Packaging Materials And Condition On
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Introduction

1- Introduction

Protein content in soybeans is exceptionally high at 35 -38% . Its quality is equal to that of meat and milk products . Soy protein isolates are a highly digestible source of amino acids. Amino acids are the building blocks of protein, essential for human growth and maintenance . Of the 20 amino acids human require, 11 are produced by our bodies. The remaining nine amino acids must come from the foods we eat . Soy protein provides all nine amino acids , making it a complete protein . Isoflavones are components of soybeans that are known to help prevent breast cancer and other estrogen responsive cancers . In addition , ingestion of these compounds may substitute for hormone (estrogen) replacement therapy in postmenopausal women at as low a dose as 40- 50 mg per day . They help to prevent heart attacks and stroke by "thinning" the blood . Moreover , they may prevent heart or slow the growth of prostate cancer growth in men and block the growth of blood vessels in turmours (i.e. they are antiantiogenesis factors); and , by acting as antioxidants , they help to prevent DNA damage leading to mutation . Isoflavones resemble estrogens in structure , competing strongly with true estrogens for estrogen receptor sites (**Anon 1999**).

In recent years , much attention has been given to introduce the production of meat from chicken due to their ability to adapt themselves in most areas of the world , their low economic value per unit . Their short generation time as it could produce economic amounts of meat in just eight weeks in addition to the high regard of their nutritional value (**George and Moutney ,1976 and Barbut et al., 1984**).

Poultry industry in Egypt faced with large numbers of spent laying hens which are usually difficult to be marketed at a

reasonable return . Therefor , new uses for such tough chickens meat must be found through further processing with this aim in view , several companies are exploring the feasibility of chicken meat in some of the same ways that the red meats are used , in sausage or emulsion products .Especially , chicken meat has a higher water holding capacity than red meats . Therefore , it was found to be more suitable for processing sausages and some other products as reported by **Kako and Ando (1966)** .

The use of various plant protein in meat products as functional ingredients has been long under study (**Bird,1974**). Soy and other plant proteins have been used widely as meat extenders in recent years (**Maga, 1973 ; Pearson, 1973 and Goltry *et al.*, 1976**)This popularity can be attributed to lower cost per unit protein (compared to meat) ready availability throughout the world and throughout all seasons ., nutritional adequacy and unique functional Properties (**Wilding, 1971**) .

The use of soy protein in lean ground meat might be of significant value in improving meat products quality , increased cooking yield as well as lowering cholesterol levels in the final products (**Berry and Leddy , 1984 and Liu *et al.*, 1991**) .Besides cholesterol content of raw or cooked ground meat products were found to decrease as textured soy protein was incorporated in such products (**Rhee *et al.*, 1987**) . Many new packaging materials or combination of materials have been used in food packaging in recent years. The main driving force has been to increased the barrier properties of the packaging and thereby the protection of food products with more complex materials .

A single polymer is often unable to provide all the properties necessary to create suitable barrier characteristics . This has generated a need for multilayer structure and techniques such as lamination and coaxtrusion is simply competitive to lamination and modified atmosphere