



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

TECHNOLOGICAL STUDIES ON SURFACE RIPENED CHEESES

BY

EHAB ABD EL-BAKY YOUSSEF ESAWY

B. Sc. Agric. (Food Sci.), Zagazig University (Moshtohor) 1986

M.Sc. Agric. (Dairy Sci.), Zagazig University, 1996

A thesis submitted in partial fulfillment
of

the requirements for the degree of

DOCTOR OF PHILOSOPHY

In

Agricultural Science

(Dairy Science)

Food Science Department

Faculty of Agriculture

Zagazig University

2002

BAVAZ



Approval sheet

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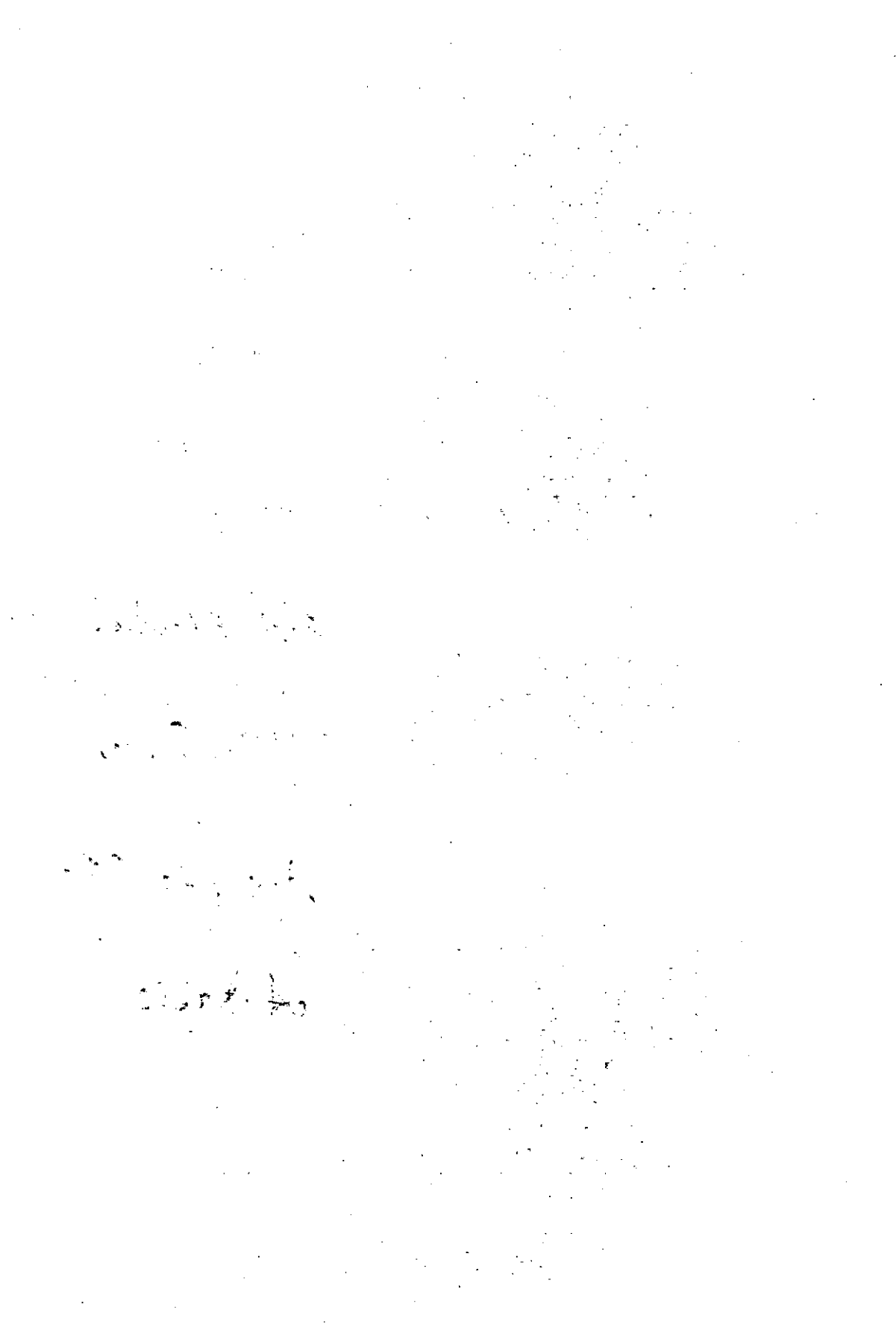
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Data of Examination: 4/9/2002



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Name / Ehab Abd El-Baky Youssef Esawy

Degree / Doctor of Philosophy

Title / Technological Studies on Surface Ripened Cheeses

ABSTRACT

The aim of this study is to study the characteristic and properties of market Brie cheese, the possibility of making Brie cheese from different milk types. The effect of refrigerated and frozen storage of the different milk types on Brie cheese quality and ripening and the quality of Brie cheese made from different milk types as effected by added lipase or *P. caseicoulm* hydrolyzed milk. This study was divided into parts as follows:

Part I: Gross chemical composition and ripening of market Brie cheese:

The work in this part was carried out to information on the characteristics of imported Brie cheese with different levels of quality. For this purpose twelve samples of Brie cheese were collected from the local market. The samples were examined for their organoleptic properties and categorised to good, medium and fair. Good quality Brie cheese samples were characterized by thin white mould growth on the surface soft consistence delicate mushroom flavour.

Part II: The suitability of producing Brie cheese made from different milk types:

This part was concerned with comparing the quality and ripening of Brie cheese made from cow's, goat's and buffaloe's milks also mixture of goat's milk with cow's or buffaloe's milk (1:1). Goat's milk cheese should have higher levels of total volatile fatty acid, total carbonyl compounds and free fatty acid

(volatile). Goat's milk cheese should the highest penetration. Goat's milk cheese showed more flavour intensity and better body & texture characteristics than that cow's or buffaloe's milk cheese. Mixing goat's milk with buffaloe's milk enhanced cheese flavour and textured properties of mixed milk cheeses.

Part III: The quality ripening of Brie cheeses as effected by cold storage of milk.

In this part, the effect of refrigerated and frozen storage of the different types on Brie cheese quality and ripening. Storage of milk at 5 °C without the addition of lactic culture for 5 days caused significant increase in total volatile fatty acids total carbonyl compound and free fatty made from milk stored at 5 °C without added starter no organoleptic problem could be detected in such cheese during the total period of ripening.

Part IV: Quality and ripening of Brie cheese made from different milk types as affected by certain additives.

In this part an attempt has been made to enhance flavour development and textured changes by using a commercial lipase preparation (001%) or *P. caseicolum* hydrolysed milk (2%). Proteolysis and lipolysis were enhanced by the addition of lipase or *P. caseicolum* hydrolysed milk. The use of *P. caseicolum* hydrolysed milk was more effective in enhancing proteolysis and lipolysis in Brie cheese made from each milk types. Addition of lipase or *P. caseicolum* hydrolysed milk enhanced flavour development improved textural properties. The microstructure of Brie cheese affected by additives so that casein particles highly affected whereas homogenous chains dispersed in separated micelles which had a loose external surface also globules fat dispersed in texture more than cheese species.

ACKNOWLEDGEMENT

*First Thanks "ALLAH" Who Made Me Able To
Accomplish This Work.*

I would like to express my deep thanks and gratitude's to **Prof. Dr. M. M. A. Omar** Professor of Dairy Science and Technology. Of Food Science Department, Faculty of Agriculture, Zagazig University, **Prof. Dr. A. A. Abd-EL-Baky** professor of Dairy Science and Technology and Head of Food Science Department, Faculty of Agriculture, Zagazig University and **Prof. Dr. Sh. G. Osman** Professor of Dairy and Head of Dairy Department, Food Technology Research Institute, Agriculture Research Center, Ministry of Agriculture for kind supervision throughout the course of this study and kind encouragement and guidance during the preparation of the these is.

I'm highly thankful to all staff members of Food Science Department, Faculty of Agriculture, Zagazig University for their kind help throughout the study.

Thanks also should be sent to all staff members of Dairy Department, Food Technology Research Institute, Agriculture Research Center for their kind help throughout the study.

