

Dedication

I dedicate this study

To my father soul

To my mother

To my brother and sisters

To my husband

And to all whom I love.....

Acknowledgement

Praise is due to Allah who gave me the strength and patience to conduct and complete this study. I wish to express my deepest appreciation to my supervisor Dr Omer Ibrahim Ahmed Hamid who has given throughout the progress of this work with patience and enthusiasm.

And also extended thanks to my colleagues and staff members of Dairy laboratory, College of Science and Technology of Animal Production of Sudan University of Science and Technology.

My sincere love to my parents, brother, sisters and my husband for their continuous encouragement, help and advice

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Abstract

The experiment was conducted at the laboratory of Dairy Science and Technology Department, College of Animal production Science and Technology, Sudan University of Science and Technology during the period 2010 to find out the effect of storage period and spices types on the chemical composition and sensory characteristics of white soft cheese. 60 pounds of goat's milk purchased from the local market. Four treatments were carried out in this study as follows: First treatment is the control in which the curd of the cheese had no additive. In the second, third and fourth treatments fenugreek, cinnamon and cardamom powder (0.02%) were added to the curd after coagulation, respectively. The obtained cheese were stored in refrigerator at 5c° for thirty days then samples of each treatment was analyzed after zero,10, 20 and 30 days of storage for chemical composition and sensory properties.

Statistical analysis of the results showed that acidity, fat, total solid of the cheese in different treatments had no significant differences ($p \leq 0.05$). Protein content in the control cheese was lower in comparison with fenugreek, cinnamon and cardamom cheeses. The cheese treated with cardamom had lowest value in ash content, while Fenugreek cheese had the highest value of

ash than other treatments. On the other hand cheeses with spices reduced acidity development especially cheese with cardamom when compared with control.

Statistical analysis of sensory evaluation showed that the addition of fenugreek, cinnamon and cardamom to the cheese improved the quality of white soft cheese and they act as good natural preservatives.

ملخص البحث

أجرى هذا البحث في الفترة خلال العام 2010 بمعامل كلية علوم وتكنولوجيا الانتاج الحيواني جامعة السودان للعلوم والتكنولوجيا لدراسة تاثير كل من فترة التخزين ونوع المنكهات (حلبه - قرفه - حبهن) علي كل من التركيب الكيميائي، والصفات الحسيه لجبنة لبن الماعز البيضاء.

تم شراء 60 رطل ماعز لاجراء التجربه، أجريت أربعة معاملات في هذا البحث. في المعاملة الأولى وهى الشاهد دون إضافة توابل ثم إضافة نسب ثابتة (0.02%) من كل من القرفه - الحلبه - الحبهن، تم تخزين الجبن في درجة حراره 5م° في الثلجه. خزنت عينات الجبن مدة 0,10,20,30 يوم. اجري التحليل الكيميائي والتقييم الحسى لعينات الجبن المختلفة لفترات التخزين المختلفة

أظهرت نتائج الاختبارات المعملية والتحليل الاحصائي عدم وجود فروق معنويه في متوسط نسبة الدهن، المواد الصلبه الكليه والحموضه. بينما رصت فروقت معنويه في متوسط نسب البروتين والرماد لكل انواع الجبن

كما أظهرت نتائج التقييم الحسى انه بلاضافه للنكهه والرائحه فقد حسنت الاضافات من جودة جبن . الماعز، فقد قلت من تطور الحموضه خاصة الهبهن الذى اظهر نتائج جيدة في الحموضه

