EFFECT OF SOME MEDICINAL HERBS ON THE QUALITY AND SHELF LIFE OF KAREISH CHEESE

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Abstract

This present study supplemented the kareish cheese by some medicinal plants such as mint, rosemary, cumin and marjoram. These medicinal plants have distinctive tastes that are preferred by many persons. Kareish cheese is one of the most popular cheeses in Egypt. The chemical composition, microbiological contamination of these plants and sensory evaluation were studied. The results show that, slight differences were noticed among kareish cheeses in titratable acidity, pH values and total protein content. Generally, the addition of medicinal plants increased some minerals such as Fe, Zn and Ca when compared with control. The herbs decreased the total bacterial count, mould and yeasts during the storage period till 30 days. It improved the flavours when compared with control after 30 days of storage period. Also, the addition of different medicinal plants (0.5%) gave the highest scores for overall acceptability.

INTRODUCTION

Kareish cheese is among soft cheeses which are most popular in Egypt and Arabian countries owing to its high protein, low fat and reasonable price. It is an acid coagulated fresh cheese, made from skim milk with soft composition, white curd and slightly salty. Kareish cheese is considered one of the most food products rich in calcium and phosphorus. These elements are essential for bones and teeth formation. It is also rich in sodium and potassium, which play an important role in the formation of body liquids and muscles (Francois et al., 2004).

The exploration of naturally-occurring antimicrobials for food preservation receives increasing attention due to consumer awareness of natural food products and a growing concern of microbial resistance toward conventional preservation Gachkar et al., (2007).

Many plants and plant-derived antimicrobial components are used in folklore therapeutics for the treatment of periodontal disorders and for the purpose of oral hygiene (Tsai et al., 2007). Researchers have been interested in biologically active compounds isolated from plant species for the elimination of pathogenic microorganism because of the resistance that microorganism have built against antibiotics Gachkar et al., (2007). To prolong the shelf-life of fruits and vegetables, the growth of microbial populations must be controlled several post-harvest processes,