

عنوان مقاله:

The effect of external and internal stabilizers on the quality characteristics of low-fat yogurt during storage

محل انتشار:

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خلاصه مقاله:

Yogurt is one of the most popular dairy products which is consumed widely all over the world. Considering its high nutritional values and containing valuable bacterias, it's widely popular. However today it has been concluded that increasing fat consumption in nutrition regime brings about vulnerability to many diseases. So in this study different kinds of internal stabilizers including arabic gum, karaginan, carboxylic methyl cellulose and also external stabilizers such as alginat sodium, corn starch, and karaginan with concentration of 0.5 percent of its weight, - added to low fat milk yogurt - were taken into consideration. And in the course of the experiment samples of low fat yogurt obtained, were evaluated in terms of their chemical and sensory properties and senses of color, taste and odor. In this study, the samples were tested for 21 days and once every seven days, for their hydration, firmness, pH, acidity, free fatty acid and also sensory properties. Considering obtained results, effect differences among different internal and external stabilizers on the qualitative and sensory properties of low fat yogurt samples were significant ($p < 0.05$) furthermore, the results .. during the storage time period -21 days - showed that amount of hydration .. and tissue firmness, in samples of low fat yogurt had been rising and has reached its highest level on 21th day of storage. However results also showed stabilizing effects on the acidity level, pH, and amount of free fatty acids of yogurt were not significant ($p > 0.05$). The results of stabilizer's effect on sensory properties of low fat yogurt samples did not show to be significant. In general on the basis of physico chemical results obtained yogurt sample containing carboxy methyl cellulose (T5) was introduced as the best treatment.

کلمات کلیدی:

Acidity, Stabilizers, Carboxy methyl cellulose, Yogurt firmness

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