

Studies on keeping quality of Shrikhand prepared from buffalo milk blended with soymilk

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ABSTRACT

The investigation was undertaken in Department of Animal Husbandry and Dairying, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola. The overall acceptability for fresh Shrikhand under treatment T₁ (Shrikhand prepared with 100% buffalo milk), T₂ (Shrikhand prepared with 90% buffalo milk + 10% soymilk), T₃ (Shrikhand prepared with 80% buffalo milk + 20% soymilk) and T₄ (Shrikhand prepared with 70% buffalo milk + 30% soymilk) at room temperature and refrigeration temperature storage were same *i.e.* 92.53, 93.80, 91.91 and 90.93, respectively. While on 15th day of storage, mean score of overall acceptability of Shrikhand T₁, T₂, T₃ and T₄ were 58.12, 58.10, 53.71 and 49.43 for room temperature and 67.16, 69.82, 65.57 and 60.28 for refrigeration temperature, respectively. The overall acceptability was high in T₂ than T₁, T₃ and T₄. So, it can be concluded that Shrikhand made from buffalo milk and made from buffalo milk blended with soymilk can be stored at refrigeration temperature for at least 15 days.

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Key Words : Buffalo milk, Soymilk, Blending, Shrikhand, Chemical composition, Sensory evaluation, Cost of production

INTRODUCTION

Milk has been used as a human food since the time in memorable. Shrikhand is a fermented and sweetened product popular in western part, especially in Maharashtra, Gujarat and Karnataka. This indigenous fermented milk product contains high percentage of casein and large amount of sugar therefore; it is a heavy dish for digestion. One of the most useful aspects of the fermented milk products is their strong therapeutic potentials, which are mainly due to the antagonistic *i.e.* anti microbial properties of the starter organisms.

Soymilk proteins are alkaline in nature and increase alkalinity of the blood which is very important from the health point of view. Soybean contains about 30-40 per cent protein, 18-20 per cent fat, 5 per cent minerals and 4 per cent fibre. It is good source of phosphorus and lecithin thus, it can be used for cure of nerve diseases. The soybean oil is rich in unsaturated fatty acids, which is best for diabetic patients, due to alkaline nature, it reduces the activity in blood (Gupta and Patel, 1984).

During the summer season, a fairly large quantity of Shrikhand is manufactured by the dairies and in restaurants by conventional process (Upadhyay and Dave, 1977). With the reality that the short supply of milk and

widespread protein malnutrition in Indian population, it becomes necessary to use vegetable protein to supplement the available milk in the country to meet the nutritional requirement of the people. It is the basic need to make increase supply of milk at reasonable rate. In China and Manchuria, soymilk is being used commonly as a substitute of buffalo milk. Soybean has been utilized in the preparation of milk substitute and a variety of fermented product. This indicate that there is tremendous scope for milk product prepared from soybean which increases the nutritive value of product of cheaper rate.

Milk and milk products are highly perishable one but they can be stored for more period at refrigeration temperature than room temperature, hence we can store the milk products made from addition of soymilk for increasing the therapeutic value of milk products. The addition of soymilk in milk products will be new era for milk product industries.

METHODOLOGY

The present investigation was undertaken in the Department of Animal Husbandry and Dairying, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola during the year 2010 -2011. The procedures adopted for