

Quality of khoa sold in Washim district

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ABSTRACT

The present investigation was carried out in Department of Animal Husbandry and Dairying, Dr. PDKV, Akola during year 2009-2011. The objectives of present investigation were to study the chemical, sensory quality and to find out the adulteration of starch of khoa sold in Washim district. The market khoa samples were collected from three sources *i.e.* Washim khoa produced and marketed in Washim city, Karanja (Dist. Washim) and Risod (Dist. Washim). It was found that Washim, Karanja and Risod khoa samples content on an average moisture 27.20, 30.10 and 30.08 per cent, fat 27.70, 22.50 and 23.29 per cent protein 18.89, 18.67 and 17.26 per cent, lactose 21.74, 19.20 and 21.10 per cent, ash 3.91, 4.06 and 3.47 per cent, total solids 72.80, 69.89 and 69.92 per cent, solids-not-fat 44.90, 47.56 and 46.63 per cent, titratable acidity 0.597, 0.692 and 0.690 per cent and free fat acids 0.629, 0.736 and 0.774 per cent, respectively. It indicated that the khoa produced and marketed as Washim had better chemical quality than the Karanja and Risod khoa. It was also observed that khoa produced and marketed in Washim has good sensory quality than the Karanja and Risod khoa. Adulteration of starch was found in Karanja and Risod khoa.

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Key Words : Khoa, Risod market, Washim market, Karanja market, Chemical composition, Sensory evaluation, Adulteration

INTRODUCTION

Khoa is a concentrated milk product. It is very rich in total solids and hence highly nutritious food in the diet of human beings. According to Indian Standard Institute, khoa shall not contain moisture less than 28 per cent and fat not less than 26 per cent on dry matter basis. Khoa is a major intermediate base product for a variety of sweets. Naturally, there is a considerable demand for this product in big cities but unfortunately, the manner in which this product is prepared, packed and transported is very unhygienic.

The demand for milk and milk products of Washim district is high and day by day, it is increasing rapidly. In the district, some wholesalers, Halwai, hoteliers etc. prepared khoa by purchasing milk from milk men of surrounding villages or areas. While others purchase ready made khoa from khoa producers of surrounding villages or areas of Washim district.

By considering the nutritional significance and economical importance of khoa, it becomes essential to find out and check sensory and organoleptic qualities of khoa. The results obtained during the investigation depend upon the represented samples of khoa of a particular

time or period, time to time, batch to batch and lot to lot variation is found. Hence, results can be changed lot to lot and condition to condition *i.e.* availability of khoa.

METHODOLOGY

The research work was undertaken in the Department of Animal Husbandry and Dairying, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola during the year 2010-11. The procedure adopted for experimentation in the present study are given below.

Evaluation of market samples:

Collection of samples:

In Washim district, three markets namely Washim, Risod and Karanja were selected. From each source, 30 samples were analyzed during three fortnight, so ten samples of each source were analyzed for each fortnight. These total 90 khoa samples were selected by stratified random sampling method. The samples were collected with care to avoid contamination.

Sensory evaluation:

Khoa samples from Washim district was subjected