CONCLUSIONS AND RECOMMENDATIONS.
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MILK

1. Fat and protein contents of milk sold in Courtallam area were less than those reported for milk from other areas in the region.

2. Among the minerals present in milk, calcium and phosphorus were much lower and other minerals such as sodium, potassium and iron were higher in Courtallam area.

3. The bacterial population was in the range of 10,00,000 to 50,00,000 cfu per milliliter. Based on the microbiological quality, the milk sold in Courtallam area may be classified as 'fair' as per ISI specifications. However, no coliform should be present in raw milk in 1/100 dilution. The values were more than the recommended levels indicated in ISI specification.

4. On the basis of overall assessment of biochemical and microbiological qualities of milk sold in Courtallam area it may be classified as 'poor'.

5. Biochemical and microbiological qualities of seven brands of commercial brands of packaged milk available in Courtallam area showed that the brand G was superior in terms of its biochemical quality.

6. The microbial quality of brand G was much inferior which might have led to poor keeping quality. Health authorities must take stringent measures against companies or individuals selling poor microbial quality milk.

7. Consumer awareness must be created regarding the microbiological quality of milk.
BUTTER

1. There was no significant difference in the biochemical quality of butter obtained from various sources and places.

2. Microbial population of butter was increased after 30 days of storage at 4±1°C. However, there was no significant difference between various sources and places. There was a deterioration in the quality of this product due to the rise in bacterial population after 30 days.

3. The butter samples from this area were grossly contaminated with coliform. Therefore, precautionary measures must be taken and buying of such poor microbiological quality product must be discouraged.

DAHI

1. Biochemical and microbial evaluation of dahi samples showed conspicuous variation between sources but not with places. The biochemical constituents present in dahi sold in Courtallam area were comparable to the literature values.

2. Coliform counts also were higher than the ISI specifications.

3. Hence, buying such poor quality dahi should not be encouraged. Punitive measures must be taken by the health authorities against individuals marketing poor quality dahi.
KHOA

1. Biochemical evaluation of khoa showed no significant variation between sources and places.

2. Bacterial population, coliform and yeast and mold counts were much higher in khoa sample sold in this area than the prescribed legal standards and ISI specifications. Hence, health authorities of this area must curtail the sale of poor quality khoa.

ICE CREAM

1. Analysis of seven brands of ice cream showed that the highest amount of fat and protein contents in brand G followed by A.

2. Poor biochemical quality was seen with brand D.

3. Microbial quality of brand D was also poor.

4. Coliforms were observed in all brands of ice creams. However, brand D showed highest coliform count. Hence, the sale of poor quality ice cream like brand D must be banned.
RECOMMENDATIONS

1. Biochemical and microbiological qualities of milk and milk products sold in and around Courtallam were poor. Therefore, strict quality control measures must be taken by the health authorities to maintain the legal standards prescribed for milk and milk products.

2. Coliform counts of milk, butter, dahi, khoa and ice cream exceeded the ISI specifications. This may be due to poor techniques of manufacture, ineffective pasteurization or contamination of the product from wash water, equipment and other sources during the processing of milk and milk products. Hence, hygienic practices must be taught to the persons involved in handling and processing of these products.

3. Generally, the microbiological quality of milk and milk products sold in this area were poor, therefore, consumer awareness must be created regarding the quality of these products.