

Technological Studies on Microbial Changes occurred during Storage of Soy Paneer

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Objective

To study the Microbial changes in *Soy Paneer* during storage.

Methodology

The buffalo milk was standardized to 6.0 per cent fat and 9.0% MSNF. The paneer was made as suggested by and subsequently modified by Sachdeva (1983). The standardized buffalo milk was heated to 100°C for 5 min and then cooled to 80°C. Citric acid (1%) was added to milk at 80°C. The curd was left for 5-10 minutes in the whey without agitation. The whey was then drained through muslin cloth and the coagulated mass was pressed in a hoof by applying pressure of 2 kg/cm². It was then dipped in chilled water for 2 hour and packaged in butter paper packs and stored at room temperature (28-30°C) and refrigerated temperature (5±2°C).

Result and Discussion

The effect of temperature on microbiological characteristics of paneer during storage was recorded below.

Standard Plate Count

Storage interval and temperature and their interaction had significant effect ($P \leq 0.05$) on standard plate count of the product during storage at room temperature (28-30°C) and refrigerated temperature (5±2°C). On 10th day of storage mean standard plate count of *Paneer* increased from 2.08×10^3 to 4.86×10^4 . It indicated that the growth of SPC was increased with increase in the storage intervals under room temperature (28-30°C) and refrigerated temperature (5±2°C).

Yeast and Moulds Count

On 10th day of storage mean yeast and moulds count of *Paneer* increased from 1.44×10^1 to 4.70×10^2 . The product was unacceptable after 2nd and 6 days at room and refrigerated temperature respectively.

Conclusion

With the enhancement of storage period SPC and Yeast and mould increased steadily and gradually at every storage interval and temperature. The *Paneer* becomes mouldy after 2 days and 6 days of storage at room temperature and refrigerated temperature respectively. The shelf life of *Paneer* at room temperature (28±2°C) was only 24 hours and spoiled after 48 hours of storage. *Paneer* could be stored for 6 days at refrigeration temperature (5±2°C) without much deterioration in the quality but the freshness of the product was lost after 3 to 4 days of storage.

