



40. Paneer from reconstituted milk

Type: Dairy product
Date:
Patent: NA

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Description of Technology

Paneer is a highly popular product throughout the country, having many uses starting from its consumption in raw form to the preparation of sweet meals and several varieties of culinary dishes and snacks. Greatest nutritional advantage of paneer is its high protein content and digestibility. Paneer is a valuable source of fats, vitamins (A and B complex) and minerals (calcium and phosphorus). Dried milk is abundantly available in fairly good quantities at competitive prices irrespective of the time or season. Use of dried milk powder, can provide an alternative means of paneer production during lean periods. Using high solid reconstituted milk for paneer making can reduce the bulk handling of milk thereby reducing the amount of coagulant, water, energy, time and labour. Due to the effective cost of dried milk powder, low cost of storage, excellent shelf stability and ease of availability, handling and transportation, it can be used for the manufacture of paneer when there is an acute shortage of production in relation to demand or consumption in certain regions or due to blockade of national highways by landslides and heavy snowfall for days together and sometimes for weeks. In order to overcome these issues, whole milk powder was used as an alternative for production of paneer. The results revealed that the paneer with desirable characteristics can be made using 1:5 and 1:6 reconstitution levels of whole milk powder. The body and textural defects in paneer made from reconstitution levels of whole milk powder of higher TS content such as 1:2 could be mitigated with the incorporation of calcium phosphate at the rate of 1-1.5% raw milk level. The use of citric acid and tartaric acid as coagulating agents both at 2-3% could be used for the manufacture of reconstituted milk paneer with more desirable characteristics. Additionally malic acid at 2% concentration can also be utilized for the production of acceptable quality paneer from reconstituted milk.



Impact

- Reduce the bulk handling of milk thereby reducing the amount of coagulant, water, energy, time and labour.
- Efficient utilization of seasonal and regional surplus milk.
- Product availability during lean periods.

Commercial Applicability

- Reduced dependence of fresh product on imports.
- Availability of products during harsh climate.

Transferable technologies for enhanced farm income