

CODEX ALIMENTARIUS COMMISSION



Food and Agriculture
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Organization

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Agenda Item 14

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Other Business

Project Document for Proposal for the Development of a Regional Standard for Traditional Dairy based Sweets

(Prepared by India)

1. The purpose of the standard

The purpose of this discussion paper is formulation of Traditional dairy based Sweets standards, also called *mithai* a significant element in Indian cuisines. The traditional dairy based sweets are integral part of Indian Heritage. Of great social, cultural and economic importance, these products have been developed over a long period. In addition to preservation of the precious milk solids for longer duration, manufacture of traditional dairy products adds value to milk.

2. The scope of the standard

Traditional Indian Dairy products are those products which are known in this country for ages. Milk and milk products formed the main food of Vedic Indians. Khoa sweets have been the item of choice for centuries in India. India has become the largest producer of milk in the world. Annual milk production for the year 2017-2018 was 176 million tons in India.

Nearly half of the milk produced in India (50-55%) is utilized for the manufacture of traditional dairy based sweets / products and approximately 45.7% is used as fluid milk. Only about 20% of the total milk produced is processed by the organized dairy sector. A large proportion of the milk is converted into indigenous dairy products such as khoa & khoa based sweets.

3. What are Traditional Dairy based Sweets?

Traditional Indian dairy sweets or Indian Indigenous milk products can be defined as all milk products which are native of India and which were evolved over ages utilizing locally available fuels and cooking ware. In India most sweets are based on milk products. Many Indian sweets are made with sugar, milk or condensed milk.

4. Classification of Traditional Dairy based Sweets

Indian indigenous milk products have different nomenclature in various regions because of the variation in the ingredients added and method of manufacture involved. For better understanding of the nature of the products, indigenous milk products can be conveniently classified as below:

a. Sweets made from Concentrated / partially desiccated products

In this class of products, milk is concentrated using heat energy. Moisture percent in milk gets reduced due to evaporation. Based on extent of heat treatment product characteristics such as smell, colour, aroma and texture imparted to the products.

- 1) Khoa based sweets- Khoa is an indigenous milk product prepared by concentration of milk and is widely used in India and in neighboring countries as a base material for preparation of numerous sweets like **peda, burfi, milk cake, gulabjamun** etc.
- 2) Basundi / Rabri / Kheer

b. Sweets made from heat & acid coagulated milk products- Coagulated products are obtained upon addition of acidulant(s) to heated milk and also extent of removal of moisture controls their texture. Products include Paneer and Chhana. Sweets made from chhana include *Rasgulla, Rasmalai* etc.

5. Its relevance and necessity to develop the standard

- Milk plays a significant role as a source of animal protein in the average Indian diet which is predominantly vegetarian. Because of higher ambient temperatures prevailing in Indian sub-continent, ancient Indians developed more stable products from milk for conservation of its nutritional goodness. So the ethnic dairy foods, commonly termed as traditional or Indian indigenous milk products, were developed over ages utilizing locally available equipment, utensils and manufacturing procedures. Traditional dairy based sweets based on khoa containing all the milk solids which is good in protein, minerals and energy giving fat and lactose.
- A wide range of Indian milk based sweets made in different parts of the country are very popular amongst all male and female, young and old population. No special event or a celebration is considered complete without serving and distributing the sweets to relatives and friends which are essentially made with the indigenous dairy products as a base.

6. Strength & Opportunity of Traditional Dairy Sweets Sector

Strength: Traditional dairy products enjoy at mass appeal. Manufacturing technologies is simple which are well established for small-scale operations, require low infrastructure and operational overheads costs. It is having lower cost of production and high profit margins and an optimistic demand profile-consumption likely to grow at an annual rate more than 20%.

Opportunity: Traditional dairy product sector offers vast scope for innovation, value addition and product diversification. Expanding consumer demand due to higher purchasing power of the newly emerging middle class.

7. Volume of production and consumption in India

Traditional products account for over 40% of all dairy products consumed in the country. Although authentic statistical data are not available, it is estimated that the value of Khoa and chhana based sweets if put together would be more than Rs.100, 000 million which is double the value of milk handled by the organized dairy sector. Approximate half of the milk produced in India (50-55%) is utilized for the manufacture of traditional dairy based Sweets.

Table1: Market size of traditional dairy products

Type of products	End products	Estimated market size (Rs. in billion)
<i>Chhana</i> - based sweets	<i>Rasogolla, rasmalai, cham-cham, chhana murki, rajbhog</i> etc.	520
<i>Concentrated Milk based/Khoa</i> -based sweets	<i>Burfi, peda, gulabjamun, kalakand, Milk cake, Kulfi, rabri, basundi</i> etc.	

A major market for Indian milk-based sweets is developing overseas. The Indian migration presents an exciting avenue for globalization of sweetmeats (Rao & Raju, 2003; Patil, 2011). In North America alone, this market is estimated at US \$ 500 million (Aneja, 2007).

8. Diversification of national legislations & potential barriers to international trade

Due to lack of uniformity commodity standards in the region, the regional trade of traditional dairy based sweets is affected to some extent, which makes it difficult to protect consumer's health and fair trade. The difference of processing and consuming habits leads to different classifications and quality requirements for traditional dairy based sweets in India. The regional standard for dairy based sweets should eliminate the quality problems of dairy based sweets, solve the safety concerns of consumers, and is expected to expand the trading opportunity of exporting countries.

9. Amenability of the commodity to standardization

Regional standard for dairy based sweets will play a positive role in guiding the healthy development of the industry and improving the quality of dairy based sweets. CAC has not established relevant standards for these products at present. The proposed regional standards for dairy based sweets will put forward specific requirements for raw materials of the products, ingredients, processing, quality parameters, sampling and analysis methods, temperature and environment for product storage and transportation, labelling, use of additives and other aspects.

10. Information on the relation between the proposal and other existing codex

Documents

The proposed standard will take into account existing applicable codex guideline documents such as:

- Inclusions of standards under Codex Committee on Milk and Milk Products (CCMMP)
- Code of Practice General Principle of Food Hygiene (CXC 1- 1969)
- General Standards for the labelling of Pre-packaged Foods (CXS 1- 1985)
- General Standards for Food Additives (CXS 192-1995)
- Recommended methods of Analysis and Sampling (CXS 234- 1999)

11. The proposed time-line for completion of the new work

Subject to consideration by CCASIA21 in 2019, proposal for standard development will be submitted for review and approval by CAC in 2020. As per proposed time schedule process will take approximately five years.