

Dairy/ Food Tech

A process for the preparation of low cholesterol ghee

Institute: ICAR-National Dairy Research Institute (NDRI)

- Low cholesterol ghee meets the standard physicochemical parameters as specified for ghee under FSSAI, 2011 and AGMARK rules.
- The process has been developed in such a way that the final product is prepared by heat clarification method and has a flavor comparable to that of regular desi ghee.
- Low cholesterol ghee may have good market potential at domestic as well as global level.
- <https://tinyurl.com/4kkpthku>



Dairy/ Food Tech

Extended shelf life functional paneer

Institute: ICAR-National Dairy Research Institute (NDRI)



- Good storage stability (Four months at refrigeration temperature).
- Higher yield and consistent quality. Superior nutritional value due to added dietary fiber, calcium and phytosterol.
- Energy efficient process. The potential for adoption by organized dairy industry.
- <https://tinyurl.com/bbz9pbfk>

Dairy/ Food Tech

Technology for preparation of improved texture Dahi

Institute: ICAR-National Dairy Research Institute (NDRI)

- The product showed reduced whey syneresis during storage. The product was acceptable up to 25 days at 4°C storage.
- The better-textured product can be prepared with low milk solids. A cost-effective technology to make longer shelf life dahi with low milk solids.
- The technology consists of an easily adaptable processing steps, hence adaptation does not require any additional resources for an existing dahi manufacturing unit.
- <https://tinyurl.com/9mv2fsyj>

Dairy/ Food Tech

Anionic Mineral Mixture for reducing post-partum problems in cattle and buffaloes

Institute: ICAR-National Dairy Research Institute (NDRI)

- Supplementation of diet of animal with special kind of mineral mixture is effective for the prevention of hypocalcaemia, minimizing the occurrence of milk fever and the many metabolic disorders that accompany this condition.
- Apart from manipulation of cation anion balance, vitamin E is additionally added to the mineral mixture.
- It is well established that transition animals experience extensive oxidative stress which is a contributing factor to increased susceptibility to a variety of disorders and poor reproductive performance. The supplementation of vitamin E can be useful against oxidative stress in per parturient dairy cows.
- <https://tinyurl.com/583huv5c>

Dairy/ Food Tech

Technology of Sour Dahi Using Prolific Acidifying Lactic Cultures

Institute: ICAR-National Dairy Research Institute (NDRI)

- The invention is related to production of sour dahi/curd using high acidifying lactic cultures.
- Two defined high acidity and exopolysaccharides producing cultures are incorporated in such a way that the resultant dahi is firm and highly acidic.
- While the production of high acidity ensures production of sourness, the exopolysaccharides additionally improves sensory attributes of dahi.
- <https://tinyurl.com/825n3zp4>

Dairy/ Food Tech

Misti Doi With Fast Acidifying High Sugar Tolerating Lactic Culture(s)

Institute: ICAR-National Dairy Research Institute (NDRI)

- The invention is related in production of improved quality Misti Doi using fast acidifying high sugar tolerating lactic culture(s).
- Standardized protocol for preparation of milk-sugar- caramel mixture for improved quality Misti Doi.
- Intervention through use of defined strain of well characterized lactic culture(s).
- Yields a curd with improved body and texture free from wheying off. Free from post acidification during storage. Shelf life of developed Misti Doi is 18-20 days under refrigeration conditions.
- <https://tinyurl.com/c3wzanp8>

Dairy/ Food Tech

Process Technology for Palada Payasam Mix Preparation by Dry Crystallization Method in A Mechanical Unit

Institute: ICAR-National Dairy Research Institute (NDRI)

- Palada Payasam is a milk based sweet delicacy popular in Kerala, prepared by cooking ada (steam rice batter) flakes in milk and sugar till the product achieves its desirable characteristics, such as, a pleasant light brown colour and cooked flavor and texture.
- Palada Payasam using a standardised dry crystallization process as well as the design of a batch mode mechanical unit developed to prepare the mix of uniform quality.
- The mix, which has a shelf life of 3 months at room temperature, can be easily reconstituted to a ready to-serve Palada Payasam of quality attributes similar to the traditional product by cooking in milk for 10-12 min.
- <https://tinyurl.com/5yts9sat>

Dairy/ Food Tech

Arjuna herbal ghee

Institute: ICAR-National Dairy Research Institute (NDRI)

- The technology is about method of preparation of Ghee with incorporation of medicinal properties of Arjuna terminalia.
- The method requires less energy compared to the traditional process. The process can be adopted for large scale production.
- The product thus prepared has colour, flavour and taste similar to the market ghee including the goodness of Arjuna Herb.
- Less energy requirement than the traditional process.
- Process can be adopted for large scale production.
- <https://tinyurl.com/74h3d989>

Dairy/ Food Tech

Technology for preparation of shelf stable, nutritionally rich smoothies using dairy and non-dairy ingredients

Institute: ICAR-National Dairy Research Institute (NDRI)

- The formulated smoothies would provide a nutritious and convenient 'grab-and-go' beverage.
- It provides a delicious, cost-effective balanced nutrition option to all segments of the society.
- This product is shelf-stable, at ambient temperature product can be stored for two months.
- Product can be packed in glass or PP bottles.
- <https://tinyurl.com/vk8x4jk8>

Dairy/ Food Tech

Whey Jaljeera Drink

Institute: ICAR-National Dairy Research Institute (NDRI)

- Whey Jaljeera Drink is a thirst-quenching beverage which is based on whey, unique blend of spices, sugar and acidifying agents.
- The technology can be adapted to any level of production and does not require installation of any extra equipment in existing milk processing unit.
- It is highly refreshing drink which is rich in calorie and antioxidants.
- <https://tinyurl.com/28rt7juz>

Dairy/ Food Tech

Ready to Reconstitute Rasmalai Mix

Institute: ICAR-National Dairy Research Institute (NDRI)

- Ready to reconstitute Rasmalai Mix is a consumer convenient and time-saving recipe for preparation of milk based sweetmeat Rasmalai.
- Unlike the conventional product having shorter shelf-life, this dry mix is shelf-stable for more than 4 months at ambient temperature which offers the advantage of long distance marketing.
- This product is a cost effective technology with good export potential and can be easily adopted by organized dairy industry.
- <https://tinyurl.com/26u2rzjt>

Dairy/ Food Tech

Technology for Preparation of Milk Based Spray Dried Nanoencapsulated Curcumin Formulation

Institute: ICAR-National Dairy Research Institute (NDRI)

- Nanoencapsulated curcumin containing 0.8-1.0% curcumin and 34-37% milk protein.
- The physicochemical properties of the powder are similar to skim milk powder except the colour.
- The powdered formulation is highly dispersible in water and stable under various food-processing conditions like pH, ionic strength and heating.
- This formulation is prepared with food grade additives and minimal processing and shelf stable at ambient temperature.
- <https://tinyurl.com/debnsc8e>

Dairy/ Food Tech

Cashew Apple Crunch

Institute: ICAR-Central Coastal Agricultural Research Institute (CCARI)

- The crunch is a sugar treated chewing, crunchy bites.
- It is prepared by utilizing the wasted cashew apples and then treating the same in a various sugar concentration and then made in the form of chewing bytes.
- <https://tinyurl.com/3c3s6ffr>



Dairy/ Food Tech

Functional Noodles from Sweet Potato/Cassava (Resistant Starch, Fibre, Gluten-Free)

Institute: ICAR-Central Tuber Crops Research Institute (CTCRI)



**Banana starch fortified
noodles**



Cassava starch fortified noodles



**Green gram starch
fortified noodles**



**Annealed Cassava Starch
fortified noodles**

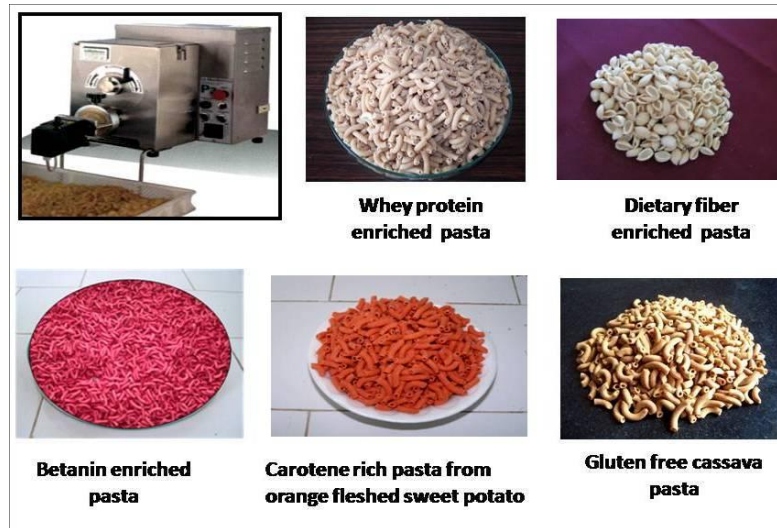
Functional noodles were prepared from sweet potato/ cassava starch by fortifying following ingredients, Resistant starch – low glycaemic index; Prevention of colonic cancer, hypoglycaemic action, reduction in gall stone formation, hypocholesterolemic effect, control of obesity etc.,

<https://tinyurl.com/4jtxvzan>

Dairy/ Food Tech

Functional Pasta from Cassava (Carotene and Betanin Enrichment; or Low Glycemic)

Institute: ICAR-Central Tuber Crops Research Institute (CTCRI)



High digestive tolerance, low glycemic index (< 25) and good stability to high temperature process Carotene can prevent chronic diseases such as cancer, age-related problems and cardiovascular diseases, Whey protein can provide 10% - 30% additional protein.

<https://tinyurl.com/yr2yj3bw>

Dairy/ Food Tech

Mobile Starch Extraction Plant for Sweet Potato and Cassava

Institute: ICAR-Central Tuber Crops Research Institute (CTCRI)



The produce will also ensure the promotion of cottage and small-scale industries besides ensuring food security by incorporating starch to a certain extent in various food preparations. Portable, cost effective and less labour requirement, Easy to fabricate, operate and maintain at farmers' place.

<https://tinyurl.com/4j8cuawe>

Dairy/ Food Tech

Orange Fleshed Sweet Potato Pasta

Institute: ICAR-Central Tuber Crops Research Institute (CTCRI)



Orange-fleshed sweet potato is rich in β Carotene, a precursor of Vitamin A. Pasta made from Orange Fleshed sweet potato has a high swelling index on cooking, very high lysine content (compared to wheat pasta), and high biological value coupled with a high content of resistant (undigested) starch.

<https://tinyurl.com/vawv4az6>

Dairy/ Food Tech

Rice Riche products

Institute: ICAR-Indian Institute of Rice Research (IIRR)



Rice Riche Face Scrub

<https://tinyurl.com/4jnwft22>



Rice Riche Moisturizing Lotion

<https://tinyurl.com/mjtzcvxv>



Rice Riche Pain Relieving Gel

<https://tinyurl.com/93ftkw6b>

Dairy/ Food Tech

Microbial method for production of protein isolate/concentrate from oilseed cakes/meals Fleshed Sweet Potato Pasta

Institute: ICAR-Central Institute of Post-Harvest Engineering (CIPHET)

- The invention gives a solution to strong acid used during the course of protein isolate production.
- The invention consists a microbial process in which microbes' produces mild acids through natural fermentation utilizing the extracted substrate (sugars and minerals or added nutrients) of the supernatant.
- <https://tinyurl.com/56tu3d4c>

Dairy/ Food Tech

Processes for formulation of donkey-milk based cosmetic products – bathing soap, body butter, lip balm

Institute: ICAR-National Research Centre on Equines (NRCE)

- The soaps were made by HP and CP methods utilizing the benefits of olive oil, coconut oil, castor oil and essential oils along with other key ingredients.
- Fresh frozen donkey milk and freeze-dried donkey milk was used for making the formulations and soaps have been tested for organoleptic properties, cleansing, and lathering properties.
- The body butter was made by using freeze-dried donkey milk, beeswax, coconut oil, clarified butteroil, Shea butter, vitamin E and aloe vera gel along with essential oils and lip balms were made by using freeze-dried donkey milk, coconut oil, clarified butteroil, shea butter, vitamin E and sweet almond oil along with essential oils.

- <https://tinyurl.com/p7zd23x4>



Dairy/ Food Tech

Process for the production of freeze dried sugarcane juice

Institute: Sugarcane Breeding Institute (SBI)

- This granulated product can be produced as per the requirement; however, a 0.5 to 3.0 mm spheroid diameter may be preferred for regular sweetener or instant juice use.
- Has low hygroscopicity, low lump formation, good flow ability and better shelf life. The dry product can be stored about six months under ambient conditions and about two years if stored under refrigerated conditions.
- This product can be used for preparation of instant sugarcane juice or as a regular sweetener. This dry sugarcane juice product is also useful as flavor enhancer of food, beverages, sweets, confectioneries, bakery items, dairy products, weaning food, novel value added foods and medicinal / pharmaceutical preparations.
- <https://tinyurl.com/yr9bd5z5>

Dairy/ Food Tech

Cane Jam Production from Sugarcane Juice

Institute: Sugarcane Breeding Institute (SBI)

- This product is unique and is not available in the market.
- A novel process for production of jam wholly from sugarcane juice.
- The process and methodology has been standardized for various processing parameters such as juice filtration, arresting the anti-browning effect by the addition of anti-browning agents, temperature controlled boiling of juice, dissolution of thickening agents in acidified medium, fixing the juice Brix and boiling temperature for addition of thickening agents and final setting point of jam.
- For flavored variants of cane jam, any permitted natural flavoring agent can be added to the product.
- <https://tinyurl.com/4f8uxpea>

Dairy/ Food Tech

CISH Herbal Chew

Institute: ICAR-Central Institute for Subtropical Horticulture (CISH)

- ICAR-CISH have developed a herbal chew formulation including dill, aonla and other Indian herbs having established nutraceutical and medicinal value having taste resembling Gutka /pan masala.
- The product has been found acceptable in taste and effective as a healthy alternative to pan masala.
- <https://tinyurl.com/y3achw64>

