

## About NDRI

National Dairy Research Institute, NDRI is a premier institution of dairying and acclaimed for its contribution in generating quality human resource, carrying out excellent R&D work and assistance in promotion of Indian Dairy sector. The institute undertakes basic and applied research, teaching and extension activities towards dairy development, animal productivity enhancement, development of new products and processes for the benefit of millions of farmers and consumers.

Karnal is located on NH-1, equidistant (~125 Km) from New Delhi and Chandigarh. City is well connected by road and train. Buses for Karnal can be availed from ISBT Bus Stand, New Delhi.

### Objective:

To impart summer training, pertaining to the technology of plant and animal foods (like fruits, vegetables, cereals, milk, eggs, meat, etc).

### Eligible Disciplines:

Food Technology/ Dairy Technology/ Food Biotechnology/ Food Science and Technology/ Food Science and Nutrition and Allied Sciences of any Govt and Pvt. Organizations

### Selection:

30 students will be selected at a time, based on date of registration. The selection criteria will be First Come First Serve basis.

Please register at google form link:

<https://docs.google.com/forms/d/1SY4MX--R0DMby5s6FzGDQZsBfPLOrCmI6I3GoeBG3g/edit>

### Training Fee:

Fee of Rs. 15,000/- (plus 18% GST) per students will be charged. Participating students have to bring Demand Draft in favor of 'ICAR Unit, NDRI, Karnal'.

**NOTE:** No boarding and lodging arrangements will be provided by NDRI.



## Training Programme on

# Dairy and Food Technology

1<sup>st</sup> June - 30<sup>th</sup> June 2023



## Topics to be covered

- Visits to Model Dairy Plant, Referral Lab and Experimental Dairy Unit
- Oil extraction and its quality evaluation
- Preparation of Tofu and Soymilk
- Composite foods and Plant-based Dairy Analogue
- Oil seeds and Millet processing
- Blanching and Drying of vegetables
- Preparation of emulsion-based meat products
- Preparation of Jams, jellies and Marmalades
- Preparation of bakery and confectionary products
- Chemical Quality Analysis of milk and milk products
- Technology of fermented milk products (*Dahi*, *Yoghurt*, *Lassi*) and traditional Indian Milk Products (*Khoa*,
- Membrane Processing and spray drying
- Technology of Paneer, Cheese and *Channa*
- Preparation of Traditional Indian Dairy products
- Technology of Fat-rich dairy products
- Functioning of Dairy Equipment and Refrigeration
- Whey utilization for dairy product development
- Packaging and labelling requirements
- Sensory evaluation of dairy products

Website: [www.ndri.res.in](http://www.ndri.res.in)

## Agri-Business Incubation (ABI) Centre

Agri-Business Incubation Centre at NDRI is established under the aegis of National Agricultural Innovation Fund (NAIF) with the objective to promote dairy & food agribusiness entrepreneurs through enhancing their technical and business skills, commercialization of dairy & food technologies, provide services on marketing assistance, quality evaluation, research and development and assist small entrepreneurs for setting up of their business ventures.

## Contact Us

### Programme Directors

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### Coordinator

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## SCHEDULE

<b>01.06.2023 (Thursday)</b>		
0930-1030	Interaction with the students	Dr A K Singh, Dr D N Yadav, Dr P N Raju & Dr Heena Sharma
1030-1145	Overview of Dairy and Food Sector	Dr A K Singh/ Dr D N Yadav
1145-0100	FSSAI labelling regulations	Dr P N Raju
1400-1700	Oil seeds and Millet processing	Dr D N Yadav
<b>02.06.20123 (Friday)</b>		
0930-1300	Blanching and Drying of vegetables (Theory-cum-Practical)	Dr. P.N.Raju
1400-1700	Preparation of Drying curve (Theory-cum-Practical)	Dr. P.N.Raju
<b>05.06.2023 (Monday)</b>		
1000-1300	Visit to Referral lab and Experimental Dairy Unit, NDRI	Dr. P N Raju & Dr Heena Sharma
1400-1700	Visit to Model Dairy Plant	Dr. P N Raju & Dr Heena Sharma
<b>06.06.2023 (Tuesday)</b>		
0930-1300	Candling and grading of eggs (Theory-cum-Practical)	Dr Heena Sharma
1400-1700	Determination of functional properties of meat (Theory-cum-Practical)	Dr. Heena Sharma
<b>07.06.2023 (Wednesday)</b>		
0930-1300	Chemical quality analysis of Milk (Theory-cum-Practical)	Dr. Sumit Arora
1400-1700	Detection of adulterants and preservatives in milk and milk products (Theory-cum-Practical)	Dr. Kamal Gandhi

<b>08.06.2023 (Thursday)</b>		
0930-1300	Processing of Market Milk: Standardization, Cream separation, Homogenization, Pasteurization, In-Bottle Sterilization (Theory-cum-Practical)	Dr S A Hussain
1400-1700	Packaging of Dairy Products (Theory-cum-Practical)	Dr. P.N. Raju
<b>09.06.2023 (Friday)</b>		
0930-1300	Technology of Khoa, Burfi and Gulabjamun (Theory-cum-Practical)	Dr. Writdhama Prasad
1400-1530	Utility Management at Dairy Plant	Dr Priyanka Rangi
1530-1700	Cleaning and Sanitation in Dairy and Food Processing Industries	Dr. G. S. Meena
<b>12.06.2023 (Monday)</b>		
0930-1300	Composite foods	Dr. D N Yadav
1400-1700	Sensory Evaluation of Dairy Products (Theory-cum-Practical)	Dr. Kaushik Khamrui
<b>13.06.2023 (Tuesday)</b>		
0930-1030	Plant based Dairy Analogue	Dr D N Yadav
1030-1300	Preparation of Tofu (Theory-cum-Practical)	Dr. D N Yadav
1400-1700	Technology of Processed Cheese and Cheese Spreads (Theory-cum-Practical)	Dr Sangita Ganguly
<b>14.06.2023 (Wednesday)</b>		
0930-1300	Technology of Mozzarella cheese (Theory-cum-Practical)	Dr. Yogesh Khetra
1400-1700	Preparation of soymilk (Theory-cum-Practical)	Dr. D N Yadav
<b>15.06.2023 (Thursday)</b>		
0930-1300	Preparation of Channa, Rasogolla (Theory-cum-Practical)	Dr. Writdhama Prasad

1400-1700	Preparation of Kheer and Basundi (Theory-cum-Practical)	Dr. G. S. Meena
<b>16.06.2023 (Friday)</b>		
0930-1300	Oil extraction and its' quality evaluation (Theory-cum-Practical)	Dr D N Yadav
1400-1700	Technology of Fat Rich Dairy Products (Theory-cum-Practical)	Dr. Sangita Ganguly
<b>19.06.2023 (Monday)</b>		
0930-1300	Preparation of Ice Cream mix, Sugar-Free Ice cream mix and Rabri (Theory-cum-Practical)	Dr S A Hussain
1400-1700	Preparation of Ice Cream, Softy Ice cream, Sugar-Free Ice cream and Kulfi (Theory-cum-Practical)	Dr. S A Hussain
<b>20.06.2023 (Tuesday)</b>		
0930-1300	Functioning of Dairy Equipments and Refrigeration	Er Ankit Deep
1400-1700	Rheology of different samples (Theory-cum-practical)	Dr S A Hussain
<b>21.06.2018 (Wednesday)</b>		
0930-1300	Technology of Fermented milk (Dahi & Yogurt) (Theory - cum - Practical)	Dr. Yogesh Khetra
1400-1700	Technology of Fermented milk (Lassi, Chakka & Srikhand) (Theory - cum - Practical)	Dr Yogesh Khetra
<b>22.06.2023 (Thursday)</b>		
0930-1300	Technology of Paneer (Theory-cum-Practical)	Dr. Heena Sharma
1400-1700	Whey utilization for product development (Theory-cum-Practical)	Dr Ashish Kumar Singh
<b>23.06.2023 (Friday)</b>		
0930-1130	Food safety and quality regulations	Dr Raghu H V

1130-1300	Composite Foods	Dr D N Yadav
1400-1700	Estimation of water activity and colour values of different food samples (Theory-cum-practical)	Dr S A Hussain
<b>24.06.2023 (Friday)</b>		
1000-1700	Preparation of Spray Dried Milk Powder (Theory-cum-Practical)	Dr G S Meena
<b>26.06.2023 (Monday)</b>		
0930-1300	Preparation of Jam and Jelly (Theory-cum-Practical)	Dr Heena Sharma
0930-1700	Preparation of tomato based products (Theory-cum-Practical)	Dr. Heena Sharma
<b>27.06.2023 (Tuesday)</b>		
0930-1700	Preparation of Biscuits and Cookies	Dr. P N Raju
<b>28.06.2023 (Wednesday)</b>		
0930-1700	Application of statistical tools in food science	Dr. Ravinder Malhotra
<b>30.06.2023 (Friday)</b>		
0930-1130	Economics and Marketing strategies in Food sector	Dr A K Dixit
1130-1300	Extrusion technology	Dr P N Raju
1530-1700	Interaction of student with the faculty	Faculty involved in the lectures

**\*Note: I/C UG/PG lab to kindly facilitate practical classes in collaboration with ABI center.**