

Ninth International Conference on Fermented Foods organized at SMC College of Dairy Science, Anand



LUND
UNIVERSITY



www.fermented-foods.net



UNIVERSITY OF
COPENHAGEN



The ninth International Conference on “Fermented Foods, Health Status and Social Well-being” was organised during 13-14th December, 2019 by SASNET-FF (Swedish South Asian Network on Fermented Foods) at Anand Agricultural University Anand, Gujarat , INDIA in association with SASNET- Lund University; Sweden; Copenhagen University, Denmark, Probiotic Association of India; Gut Microbiota and Probiotic Science Foundation (India); Indian Dairy Association, Gujarat State Chapter (India); Dr. Verghese Kurien Centre of Excellence, IRMA, India.

Dr. Baboo M. Nair, Professor emeritus, Lund University, Sweden and Chairman of the network SASNET FF welcomed the honourable guests, invited speakers and the delegates.



“Honourable president of the meeting **Dr. RV Vyas** , Vice chancellor of the Anand Agricultural University, Honourable Chief Guest **Dr. Rameshwar Singh**, Vice Chancellor of Bihar University of Animal Sciences, Honourable Guests of Honour **Dr. DC Joshi**, Vice Chancellor of Kota Agricultural University, Rajasthan, **Dr. Rickard Öste** of the Royal Swedish Academy of Agriculture and Forestry, Sweden, **Dr K. B. Khathiriya**, Principal of the College of Food Processing Technology, Anand Agricultural University, invaluable members of the network SASNET Fermented Foods, **honourable Invited**

Guests, Registered and Non-registered Participants of the conference, it is a great pleasure for me to welcome you all to this Ninth International Conference on Fermented Foods Health Status and Social Wellbeing. The first one was organised in 2003. Since then we have organised a conference every second year. In 2017 it was organised at the National Food Research Centre, Cairo, Egypt reaching out to our friends and colleagues in Africa by way of extending our network.

It suits very well that we focus on probiotics and its production and applications during this conference here at Anand. Already in 1981 **Dr. JM Dave** the former Principal and Dean of Dairy Science of this University initiated research and development in Probiotics and it is being carried forward even today by his own student **Dr. JB Prajapati** who is the present Dean and Principal of Dairy Science. We have some very interesting scientific presentations to offer. **Dr. Richard Ipsen** from the University Of Copenhagen, Denmark is here with us to talk about Exopolysaccharides and their effect on the physicochemical properties like viscosity, texture and consistency of foods. **Dr. Mervat Foda**, from Egypt is here for the second time to speak on Novel functional fermented dairy products supplemented with ingredients of plant origin. **Dr. Olivia McAuliffe**, from Ireland is here with – Genomic Investigations of Flavour Formation in LAB Cultures. **Prof Kenji Fukuda**, from Japan is here to talk on - Beneficial lactobacillus strains isolated from traditional fermented milks produced in South and South East Asia. **Prof . Tita Roostila**, from Indonesia will talk on – the presence of yeast and there role in the Indonesian traditional fermented shrimp paste. **Dr Ben de Haan**, from Netherlands will speak on - Natural preservatives and their impact on probiotics in food products. **Dr Nagendra P Shah**, from Hong Kong University will speak on -Transcriptomic analysis of high exopolysaccharide-producing *Streptococcus thermophilus* ASCC 1275. Then we have our dear friend, constant supporter and long time collaborator **Dr. Rickard Öste**, who has become highly regarded for his research, innovation and entrepreneurship not only as a member of the Royal Swedish Academy of Agriculture and forestry but also as the founder of the fast growing Swedish Food Company Oatly AB. He is here to open a window for us towards “The technology and market potential for non-dairy milk products”.

We have seven technical sessions and about 40 oral presentations on various aspects of fermentation as a method of food preservation where you will meet also our home grown scientists of food science from various parts of India. We have an interesting Poster Session and an Exhibition of Fermented Foods based on the creativity of our own students. This is what we have to offer and choice is of course yours. Whatever you do, my request to you is that you may not leave this place without becoming a member of the network. Because, a network cannot exist without members!

Finally, do not forget to watch the cultural programme and to take some rhythmic steps of Gharba, the typical folkdance of Gujarat.

With these words I extend you a hearty welcome on behalf of the network and the organising committee of this conference. Thank you”

More than 400 delegates including academicians, scientists, researchers, students, dairy and food professionals and nutritionists from India and abroad attended the seminar. The seminar had speakers from Sweden, Egypt, Ireland, Hong Kong, Indonesia, Japan, Denmark and Netherlands. The Guest

of Honour, Dr. K. B. Kathiria, Principal, College of FPT & BE, AAU, Anand stated that India being an agrarian country, it is recommended to improvise on food & nutrition security in years to come. He highlighted that the Dairy & Non- Dairy fermented foods are an integral part of Indian cuisine, the need of which possibly arrived on grounds of preservation and flavour development. He added biotechnological interventions can add a new phase to fermented foods and products' having clinically proven health benefit is the need of hour. **Dr. D. C. Joshi**, Vice Chancellor, Agricultural University, Kota coined the fact that India's fermented foods have regional specificity and they offer broad range of health benefits. He stressed on the need for more scientific research and clinical studies in the area of fermented foods as the present scenario is witnessing incidence of more and more life style diseases which sometimes can be just treated by medication alone. He remarked that this international conference provides a suitable platform for technology transfer at international level.

The Guest of Honour, Prof. Dr. Rickard Oste, Member of Royal Swedish Academy of Agriculture



and Forestry, Emeritus Prof. Lund University recollected the efforts of Dr. Verghese Kurien, the 'Father of White Revolution' as futuristic and extremely inspiring. He emphasised on the growing role of non-dairy milks in day to day life at global level and suggested non-dairy fermented foods are substrates to new technology development. Dr. Rickard commented that as a scientific community we shall act as responsible stakeholders of agro-food industry to develop a sustainable solution to population growth & climate change. He also made references to the 'Global Burden of Disease (GBD)' which provides a tool to quantify health

loss from hundreds of diseases, injuries, and risk factors, so that health systems can be improved and disparities can be eliminated. He endorsed the view that with respect to reported benefits of dietary fibres, synbiotic foods and thereby fermented foods have a large role to play in well-being of society.

The Chief Guest Dr. Rameshwar Singh, Vice Chancellor, Bihar Animal Science University, Patna referred the conference as 'galaxy of food scientists' in Anand city. He stated that the research interests in probiotics, synbiotics has grown several fold since their introduction and the spectrum of benefits like combating depression; for treatment of migraine, heart diseases, ageing, obesity and at large addressing issues of malnutrition. He also referred to emerging concept like psychobiotics, which exert anxiolytic and antidepressant effects characterised by changes in emotional, cognitive, systemic, and neural indices through bacteria-brain communication channels. Dr. Singh urged the participants to define clarity on emerging range of products like probiotic shampoo, cleaning agents, toothpaste and its role in prevention of dental carries. He added that many questions with respect to probiotic foods namely their safety in immune compromised individuals, effect of probiotic in person undergoing antibiotic treatments, exact mechanism of action of probiotic starter, how long the product

need to be consumed to have health benefit, the matrix for delivering probiotic etc., need scientific explanation. He concluded by saying that regulatory body's approval of health claims, new fermented products with improved functional and nutritional benefits for the well-being of the society is required in this area.



In his Presidential Address, Dr. R.V. Vyas, Hon'ble Vice Chancellor, AAU, Anand mentioned the mythological implications of fermented foods in India which is evident from ancient Rigveda texts. He remarked that AAU has been working on fermented foods since 1980's and was first to carryout whole genome sequencing of *Lactobacillus helveticus*. He acknowledged the facilities available at AAU as Food Business Incubator, Bakery Shala, Anubhav Dairy & Vidya Dairy have a crucial role in new product development as first hand technology development and transfer.



Dr. J. B. Prajapati, Coordinator, SASNET-FF & Dean, Faculty of Dairy Science, AAU, Anand and Mr. Keyur Shah, Business development manager Hildur Functional Foods Private Ltd., were felicitated on this occasion for their outstanding contributions in the area of fermented foods. A souvenir related to research in fermented foods was released on this occasion.

The two day seminar had seven technical sessions including one industry forum. Total 24 lead papers, 7 industry presentations and 9 young scientists presentation were made on various issues related to fermented foods, probiotics and health status.



Dr. Olivia McAuliffe, from Ireland was there with – Genomic Investigations of Flavour Formation in LAB Cultures.

Prof Kenji Fukuda, from Japan was there to talk on - **Beneficial lactobacillus strains isolated from traditional fermented milks**



Dr. Richard Ipsen from the University Of Copenhagen, Denmark talked about **Exopolysaccharides and their effect on the physicochemical properties like viscosity, texture and consistency of foods**

Neerga Hajela from Gut microbiota and Probiotic Science Foundation talked about **Probiotics Regulation across countries and India.**



Dr Ben de Haan, from Netherlands will speak on - **Natural preservatives and their impact on probiotics in food products.**

The conference also provided a platform to young scientists and scholars to present their research work through poster presentations. Total 58 posters were presented in 3 sessions.



A fermented food and beverage recipe development contest and exhibition was organized, wherein total of 44 products were presented.





The Chief Guest of valedictory function Prof R. S. Dubey, Vice chancellor, Central University of Gujarat, indicated that fermented foods enjoyed prominent place in Indian Food since ancient times. India has a wide variety of fermented foods and beverages in its food baskets with regional diversities. He quoted WHO definition of health as ‘a state of complete physical, mental and social

wellbeing and not merely the absence of disease or infirmity’, ‘Wellbeing’ refers to a positive rather than neutral state, framing health as a positive aspiration’. And in reference to this definition of health he upheld that fermented foods have a pivotal role to play. He was of the view that more strains of bacteria are required for production of fermented foods in large scale and with proven health claims.

During the valedictory function the Chairmen of all the seven sessions presented the summary report of their session. During the prize distribution ceremony, outstanding oral and poster presentations were awarded. Also students were awarded with cash prizes for best fermented product recipe development. At the end, Dr. Subrota Hati, Organizing Secretary of the conference, proposed the vote of thanks.

