Dairy Microbiology Department, SMC College of Dairy Science organized

International Webinar on “Functional Fermented Foods-Current status and future prospects”

Dairy Microbiology Department, SMC College of Dairy Science, Anand Agricultural University in association with its Alumni Association, Gujarat State Biotechnology Mission (GSBTM) and SASNET-Fermented Foods organized an International Webinar on “Functional Fermented Foods-Current status and future prospects” on 15th December, 2020. The programme was aimed at knowledge exchange and knowledge dissemination in the area of Functional Fermented Foods for the benefits of all stakeholders. About 680 delegates registered for the webinar. Among them 65% was students, 30% was from academia, 3% was from industry, 2% was consultants. The program was made available to the stakeholders through Zoom and youtube platforms. Chief patron of this webinar was Hon. Vice Chancellor, Anand Agricultural University, Dr. R V Vyas. Patron, Dr. JB Upadhyay, Principal, SMC College of Dairy Science, in his welcome address briefed about the work carried out by Dairy Microbiology Department, SMC College of Dairy Science in the area of functional fermented dairy foods. This international webinar consisted of speeches of invited speakers and panel discussion by eminent panellists.

Expert speakers in the webinar included Dr. Nagendra P Shah, Professor of Food science, University of Hong Kong; Dr. Suja Senan, Associate Principal Scientist, Nutrition Division of Pepsico, Chicago, Dr. Anand Bhadalkar, Joint Director Business Development Gujarat State Biotechnology Mission, and Mr. Pravin Singh, Key account Manager, DSM Food Specialties Ltd. Moderator for the panel discussion was Dr. JB Prajapati, Coordinator of SASNET-FF. Eminent panellists were Dr. JP Tamang, Dean, School of life Sciences, Sikkim University, Sikkim; Dr. Sunita Grover, Former-Principal Scientist and Head, Dairy Microbiology Division, NDRI, Karnal; Dr. Neerja Hajela, Head of Science and Regulatory Affairs, Yakult Danone India Pvt. Ltd.; Dr. Atanu Jana, President, Alumni Association as well as Professor and Head, Dairy Processing Dept., SMC College of Dairy Science, and Dr. Prafulla Salunke, R&D and Technical Services Coordinator, Saputo Dairy, USA.
**Prof. NP Shah** threw light on the neutraceutical aspects of fermented foods. He particularly focused on the health benefitting aspects of whey proteins and gave an overview on the current trends in the functional fermented foods sector from different parts of the world.

**Dr. Suja Senan**, focused her talk on Recent advances in research of functional cultures and ingredients and elaborated on the various facets of fermented foods ranging from what is trending in the arena of food fermentation to need for consumer focused marketing to emerging need of psychobiotics and also the role of fermentation in biopreservation, solar foods, big data analysis and fermenting for flavours and functionality in foods.

**Dr. Anand Bhadalkar** talked about financial support to start-up systems, DST-GoG support across the value chain of innovation, commercialization and ecosystem components. He also discussed the human resource development through providing trainings to students, researchers, and entrepreneurs. Possibilities of supporting ideation, supporting research commercialization, Research support schemes by GSBTM, Biotechnopreneur programme were also touched upon during the speech.

**Mr. Pravin Singh**, based his talk on Consumer perspectives and Future prospects of fermented functional foods. He pointed out that the market of Fermented products continues to grow, among them Plain yogurt is the fastest growing segment. He also talked about the global trends in the Fermented Dairy market and emphasised that the main trends included Health & well-being, Premiumization, Snackification, Clean label & transparency as well as protection of the planet and Food chain efficiency.

As the moderator of panel discussion, **Dr. J B Prajapati** set the tone, pace and relevance of the discussions for the benefit of the delegates through a series of questions such as Is there a need for investigating diversity of traditional dairy based fermented foods from India? What kind of changes are expected in the regulatory aspects related to probiotic products to protect the consumers from false claims and products, What strategies should be applied to build the confidence of consumers in probiotic and synbiotic products, What is the
status of academic programs including fermented foods in schools and colleges in the country. How fermented foods can help to improve immunity? What is the status of Pro- and Pre- biotic cheese from industry and consumer point of view.

Among the panelists, Dr. Sunita Grover highlighted the need of a network project in India to study the microbiota of traditional fermented foods to develop a thoroughly characterized indigenous strain collections. Use of metagenomics tools for understanding the microbial diversity of traditional fermented foods. She also stressed upon the need to have a catalogue of traditional fermented foods from various parts of the country.

She also threw light on the immune enhancing aspects of fermented milk products.

Prof. J P Tamang highlighted the fact that our traditional food habits are based on health promotion and balanced foods and studies related to functional fermented foods are being included in the course curriculum and lots of research activities are being carried out in colleges and the students are being taught regarding the microorganisms associated with ethnic fermented foods of our country. He highlighted that University of Sikkim was one of the pioneers in including functional fermented foods in its course curriculum. Now IITs have also taken up courses in fermented foods.

Dr. Neerja Hajela, discussed the regulatory aspects related to probiotic products. She pointed out that FSSAI has clearly given the list of probiotic organisms and any probiotic product must contain at least $10^8$ CFU/serving per day to classify as probiotic. There are 28 species which can be used as probiotics. The probiotic food label should indicate the name of probiotic strain used in it.

Dr. Prafulla Salunke emphasized that better communication to the consumers related to health benefits of probiotic and prebiotic cheeses is very essential and that there is a growing trend towards prebiotic cheeses and cheeses made using bioengineered milks. He also highlighted that cheese as an ingredient in other foods is gaining momentum.

Dr. Atanu Jana pointed that there is a need to take functional fermented products to each and every corner of the India and that delivering probiotics through traditional food formats will be more
appealing to consumers. Tendency of middle class people to self-medicate can be an opportunity which should be captured for increasing market demand of functional fermented foods.

To Dr. JB Prajapati’s question regarding the demand of fermented dairy products, Mr. D R Shah, Managing Director, Vidya dairy told that they observed an increased demand for all fermented dairy products including cheese during this pandemic season. He also highlighted the need of fortified fermented dairy products.

Dr. Sreeja V., Assistant Professor & Head of Dairy Microbiology Department as well as Coordinator of this International Webinar proposed vote of thanks. Dr. Subrota Hati, Dr. Kunal Gawai and Ms. Mital Kathiriya, Assistant professors of Dairy Microbiology Department, SMC College of Dairy Science were the co-coordinators of this International webinar.

Glimpses of the International webinar