Faculty Development Programme on Technology-enabled Teaching and Learning in Food Science and Nutrition

A five-day Faculty Development Programme on 'Technology-enabled Teaching and Learning in Food Science and Nutrition' was organised by the Association of Indian Universities (AIU) New Delhi—Academic and Administrative Development Centre (AADC) and Amity University Haryana, Gurugram in association with the Department of Dietetics and Applied Nutrition, AMS and Amity Academic Staff College during July 24-28, 2023.

The opening address was delivered by Dr. Sanjna Vij, Deputy Director, Amity Academic Staff College and Head, Centre of Excellence for Innovation in Education, Amity University Haryana. Dr. Vij gave a brief introduction to the topic and summarized the need for technology-based teaching and learning in the field of food science and nutrition and highlighted that Food Science and Nutrition remain at the forefront of addressing contemporary challenges related to health, sustainability, and food security in the technology-driven world. The pandemic showed us how important food science and nutrition are in today's tech-driven world. By using technology in this field, we can meet the growing need for healthier, sustainable food systems, tackle public health issues, and ensure food security worldwide. Dr. Luxita Sharma, Director, AMS and Head, Department of Dietetics and Applied Nutrition welcomed all the dignitaries and participants. She also briefed the topic of the FDP and shared some of her life experiences in the field of clinical nutrition and academics without technology throwing light on the benefits of digitalization in the nutrition field. She also welcomed Dr. Amarendra Pani, Joint Director and Director (I/C), Research Division, AIU. Dr. Pani congratulated the organisers of the FDP and motivated them to continue with such informative and unprecedented topics for the FDP in the future. Dr. Pani stressed the significance of integrating technology into the teaching and learning of Food Science and Nutrition, acknowledging the potential advantages of leveraging modern tools and methods in this field of study. The session was continued with Dr. Gaurav Bhardwaj, Head, Department of Optometry, AMS who applauded the programme organizing team with wholeheartedness.

The whole session was enlightened with the presence of the Guest of Honor, Ms. Sandhya Pandey, Chief Dietician, Medanta-The Medicity Hospital, Gurugram. In her session on 'Use of Digital Technology in Clinical Nutrition and its Application in Hospitals', Ms. Sandhya emphasized the benefits like personalized nutrition, improved patient monitoring, improved communication, and collaboration. She gave in-depth knowledge about the use of software-assisted delivery of nutrition, nutritional risk screening, and food service delivery through digital menu planning like EMR. The digital form of NRS 2002 can be used for research purposes by the faculty and our research scholars.

Dr. Vijay Kumar, Associate Professor, Department of ASLP, AMS, AUH delivered his lecture on 'Application of Technology in the Teaching and Learning Process'. Dr Kumar introduced the topic and provided practical aspects of digitalization in teaching teaching-learning process. After every session, the speakers helped the participants to clear their doubts. At the end of the session, Feedback forms and assignments were provided to participants.

Dr Geeta Bisla, Associate Professor, Department of Food Science and Nutrition, Banasthali Vidyapith, Rajasthan. The Session was on 'Role of ICT in the Enhancement of Nutrition-based Skills among Learners'. Dr Bisla explained the importance of ICT in the field of Teaching for the students as well as faculty based on the nutrition skills. She also discussed the search engine for scientific research. She nicely explained the different online courses available since COVID-19 such as Swayam, Coursera, and MOOCS. She took a Q&A session where participants got the opportunity to clear their doubts. The feedback was received from the participants.

Dr. Deepti Verma, Nutrition Head in VLCC spoke on 'New Approaches for Teaching in Food Science and Nutrition'. She discussed online tools regarding diet planning. Participants learned many key points of digitalization and also gained practical knowledge about being healthy and staying fit. She also emphasized how eating apples a day keeps the doctor away. She explained the apple contains more than 9000 phytochemicals, and also explained the effective use of magnesium and calcium in fat loss. She also discussed her life motto, '30 minutes walk is better than 30 minutes talk' over the phone. After her lecture, there was an interactive discussion session, where participants got the opportunity to clear their doubts and discussed their queries. The feedback was received for her session. The session was enriching practical knowledge of new approaches to teaching in the field of Food Science and Nutrition.

The Next Session was on 'Innovation in Technological Learning: Food Science and Nutrition'. Dr. Mehak Sharma, Associate Professor, Department of Nutrition and Dietetics, Manav Rachna International Institute of Research and Studies delivered her speech on 'Insight on Current Advances in Food Science and Nutrition'. She thoroughly discussed the utility of various advanced statistical tools and techniques like 'SPSS' and 'R'- Software in conducting various statistically significant research. She also talked about the significance of various qualitative and quantitative tests in the analysis of the research data. She gave a demonstration of an Excel sheet for clearing the various doubts of participants on using statistical software. The question-answer session was taken up after the lecture of Dr. Sharma and the feedback was received from the participants.

Dr. Puneeta Ajmera, Associate Professor, Head, School of Allied Sciences, Delhi Pharmaceutical Sciences and Research University, Govt. of NCT, New Delhi was welcomed by Dr. Luxita Sharma, HOI, Dietetics and Applied Nutrition, Amity Medical School, Haryana. Dr. Puneeta delivered her speech on 'National Programme for Technology Enhanced Learning for the Students of Food Science and Nutrition'. She delivered a very detailed speech on various government and private programmes running currently in the Nation for enhancing the technological learning of the people. The session was closed with a Vote of Thanks proposed by Dr Luxita Sharma and participants submitted their feedback forms.

Dr. Renu Shrestha spoke during the session on 'Different Domains of ICT Enabled Effective Nutrition Learning'. She delivered her speech on 'Innovative Technologies in Food Product Development'. She thoroughly discussed several current innovations taking place in the respective domains of food science and nutrition across the globe. She cleared the doubts of participants with real-life examples and by citing relevant research studies. The question-answer session was taken up after an enlightening and detailed lecture by Dr. Renu Shrestha and the participants were requested to give their feedback for the event.

Thereafter, the session continued with the lecture of the next Speaker, Dr. Soumya Gupta, School of Health Sciences and Technology, UPES, Dehradun. She delivered her speech on 'National Programme for Technology Enhanced Learning for the Students of Food Science and Nutrition'. She delivered a detailed speech on various e-learning platforms such as SWYAM, and NPTEL to uplift the learning process in today's era. She thoroughly talked about various courses offered by these e-platforms which can be of great significance for participants belonging to multiple disciplines. Finally, the session was closed with a Vote of Thanks proposed by Dr Luxita Sharma and participants submitted their feedback.

Dr Shilpa Thakur, Senior Consultant Dietitian, Asian Hospital and General Secretary, IDA and IAPEN, Delhi Chapter delivered the lecture on the 'Role of AI in Clinical Nutrition'. Dr Thakur discussed the different AI tools used in the field of Clinical Nutrition. She talked about the different mobile applications available for the management of different disease conditions like weight loss, diabetes, and Gastrointestinal. She also insights into the features of current popular smartwatches relevant to clinical nutrition care. After her lecture, there was an interactive

discussion session, where participants got the opportunity to clear their doubts and discussed their queries. The participants gave the feedback for their session.

Dr. Gaurav Kumar Bhardwaj, Associate Professor and Head, Department of Optometry and Vision Sciences, Amity Medical School, Amity University Haryana gave his valuable thoughts on 'Technological Advancement of the Learning Process: Opportunities and Obstacles'. He elaborated on the topic with various mobile and computer applications used currently by professionals. He showed demo videos of the applications for easy understanding of the participants. He not only briefed about the benefits of technological advancements but also showed the negative points of technology application.

Dr. Alka Joshi, Scientist, Food Technology Division of Food Science and Postharvest Technology, ICAR-Indian Agricultural Research Institute (ICAR-IARI) gave a lecture on 'Food Technology: Innovative Value-addition Technologies for Horticultural Produce'. She elaborated on all the technological advancements in the field of nutrition and horticultural produce to eliminate hidden hunger prevalent in the country. She showcased technically sophisticated machinery and processing methodology by using which nutritionally superior food products have been formulated in the laboratories.

Dr. Sanjna Vij also thanked eminent speaker Dr. Alka Joshi for delivering such an insightful lecture. She also congratulated Dr. Luxita Sharma and the whole team for organizing a systematic and well-arranged programme. Dr Vij also thanked participants for attending the session patiently and for giving feedback. At last, Dr. Luxita Sharma proposed the Vote of Thanks to each, and every member associated with the programme and congratulated the whole team for the successful completion of the event.