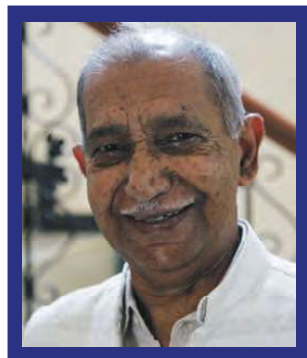


Obituary

Dr. Bishnu Deo Tiwari



1943-2024

The Indian Dairy Association (IDA) expresses profound sorrow at the loss of Dr. Bishnu Deo Tiwari, Principal Scientist at the ICAR-National Dairy Research Institute (NDRI), Karnal, who sadly passed away on March 22, 2024. He was a Life Member of the IDA.

Born in Gaya (Bihar) in 1943, Dr. Tiwari received Indian Dairy Diploma from NDRI, Bengaluru in 1968. He joined the Dairy Technology Division at NDRI Karnal as Research Assistant, and simultaneously continued his education journey, and attained M.Sc. in Dairy Technology in 1975 wherein he wrote his thesis on "Standardization of the Method of Production of Chhana powder" under the supervision of Dr. Sukumar De. He subsequently enrolled as a Ph.D. candidate. His 1984 Ph.D. thesis was on "Manufacturing Technique for Cheddar Type Cheese from Cow Milk Using

Microbial Rennet" under the guidance of Dr. B.K. Chakraborty, which was published as an article in Indian Journal of Dairy Science. This was a significant contribution to the cheese-making process in a country with a large vegetarian population, as it paved the way for making cheese without rennet derived from animal sources. He also visited and worked with world renowned food scientist Prof. J.M. deMan at the University of Guelph, Canada as a part of UNDP.

Dr. Tiwari's career focused on the development of cheese technology resulting in products such as low fat cheddar type cheese, cheese spread, cottage cheese with improved shelf life, cottage cheese from buffalo skim milk, and low fat cream cheese. These were significant contributions as cheese was still in early stages of adoption in India. His research expanded to other areas of product development such as utilization of whey in the form of fermented beverage, reconstituted milk from frozen plastic cream and skim milk, cheese powder, lassi powder, mango-shake powder, and Chhana spread. He developed a mechanization technique for kneading Chhana and an optimised technique for cream cheese making. The thesis of his Doctoral student Dr. D.K. Sharma earned a patent for the process for manufacture of spray dried cheddar flavour base concentrate, which can be used as an additive flavour to various products such as cheese poori. His later works include standardization of techniques for manufacturing of popular Indian dairy products like Lassi, Gulab Jamun, Rasogolla, Bhappa Dohi, Phirni, Ada, and Palada Payasam. Dr. Tiwari authored/co-authored more than 100 research papers, technical/popular articles, as well as teaching material in the form of booklets for IGNOU and NCERT. Some of his works earned prestigious awards including the Best Paper Awards.

Dr. Tiwari concluded his dynamic 37-year tenure at the National Dairy Research Institute in various roles, retiring as Principal Scientist and Head of the Dairy Technology Section at the Southern Regional Station (SRS) located in NDRI, Bengaluru.

He possessed a deep passion for academia, teaching, and research, excelling in each role. He embodied inspiration and strength for numerous graduates, postgraduates, and doctoral students that he taught and supervised. He fostered a deep connection with his students, earning their respect and admiration in return.

Dr. Bishnu Deo Tiwari's colleagues and students fondly remember him as an approachable, down to earth and soft-spoken person. His deep knowledge of dairy science and impactful teaching will be sorely missed by those who knew him best. The Association expresses its condolences on the passing of Dr. Bishnu Deo Tiwari, praying for heavenly peace for the departed soul and strength for the family to cope with this profound loss.