





Foundation Day of Probiotic Association of India (PAi)

8

National Dialogue

On

Potential of Probiotics in Health and Nutrition



08 December, 2022

Online Mode



Jointly Organized by

Department of Veterinary Pharmacology and Toxicology
College of Veterinary Science and Animal Husbandry
U.P. Pt. Deen Dayal Upadhyaya
Pashu Chikitsa Vigyan Vishwavidyalaya
Evam Go-Anusandhan Sansthan,
Mathura-281001 (Uttar Pradesh), India

&

Probiotic Association of India (PAi)



Platinum Jubilee Celebration College of Veterinary Science and Animal Husbandry 1947-2022

About Probiotic Association of India (PAi)

Probiotic Association of India (PAi), registered as a society w.e.f. December 08, 2010 is a scientific forum dedicated to promote the Probiotic science in India as well as to create consumer awareness about the health promoting attributes of probiotics.

PAi is dedicated to launch the probiotic movement in the country vigorously so that the purported health benefits associated with probiotics and probiotic foods reach to the Indian population effectively. PAi aims to ignite awareness amongst the consumers about remarkable health potentials of probiotics *vis a vis* to explore the nutraceuticals and functional food potential of beneficial microbes with proven efficacy for general health care and disease management.

Earlier, PAi has organized several International symposia on various thematic areas viz. Probiotics for Human Health-New Innovations and Emerging Trends (2012), Probiotics and MIcrobiome: Gut and Beyond (2014), Stress, Microbiome & Probiotics (2016), Probiotic Therapy: Translating to Health & Clinical Practice (2018), and Probiotics & Immunity: Way forward to Microbial Therapy (2020), International e-Symposium on Probiotics, Prebiotics & Gut Microbiome: Key Regulators For Human And Animal Health (2021) and 6th Biennial Conference of PAi and International Symposium on Psychobiotics and Gut: Potential on Neurological Disorders will be organized on 5-6 December, 2022. In addition, PAi supports Universities and Institutes across India to organize National seminars and workshops on various facets of probiotics.

About the Host University

U.P. Pandit Deen Dayal Upadhyaya Pashu Chiktsa Vigyan Vishwavidylaya Evam Go- Anusandhan Sansthan, Mathura, was established in 2001. College of Veterinary Science and Animal Husbandry, Mathura, established in 1947, is one of the premier Veterinary Institutes in the country and is recognized for its significant contributions in the field of animal health and production. This year College of Veterinary Science and Animal Husbandry is celebrating 75 years of its establishment.



About Department of Veterinary Pharmacology and Toxicology

Department of Veterinary Pharmacology and Toxicology, earlier Department of Materia Medica and subsequently the Department of Pharmacology, came into existence in 1949. Postgraduate education programme leading to award of MVSc degree in Veterinary Pharmacology was started in 1962 and PhD in 1970. Till date, more than 100 students have completed their MVSc degrees and 15 have awarded Doctorate from this Department.

Since its inception, Department has been actively involved in research on medicinal plants, characterization of receptors and ion channels and down-stream signaling pathways, pharmacokinetics and toxicodynamics of metals and agrochemicals, evaluation of ameliorative potential of plants against xenobiotics and therapeutic efficacy of certain drugs. For human resource development and capacity building, Department has established "state-of-art" research laboratories to ensure hands-on-training of students and teachers. During the last few years, Department has successfully organized and conducted five ICAR-sponsored hands-on-training programmes for students and faculty, one 21 days winter school, one 10 days short course programme on plants and nutraceuticals based research under ICAR-Niche Area of Excellence Project and SCSP of ICAR funded EVM project and several National and International Conferences and Symposia.

Department has the distinction of having successfully completed the ICAR Niche Area of Excellence Research Project and several industry sponsored projects. Presently, Department is running one ICAR funded Ethno-veterinary Medicine project and one project funded by INMAS, DRDO, Ministry of Defence, GOI. Research work of postgraduate students has been of high scholastic order evident by publications in the journals of International repute. Students have also been bestowed with ICAR-Jawahar Lal Nehru Award for best PhD thesis, Ram Lal Agarwal National Award for research on medicinal plants, ICAR-Netaji Subhash International Fellowship for doctoral programme in UK, and several young scientist awards of the Indian Society of Veterinary Pharmacology and Toxicology and other Societies.

National Dialogue

Probiotic is derived from Greek and it means "for life". History of probiotics began with consumption of fermented foods particularly milk and yogurt containing living microorganisms by Greeks and Romans.

Since predated, germs are synonyms to cause diseases in human and animals, albeit modern advancement in biomedical research ensues that human body is full of bacteria, both good and bad. Probiotics are often called "good" or "helpful" microbes as they help keep our gut healthy. Probiotics are live bacteria and yeasts that are good especially for digestive system and are intended to cause health benefits when consumed or applied to the body.

Some bacteria help digest foods, destroy disease-causing cells, or produce vitamins. Many of the microbes in probiotics are similar to natural inhabitants of our body. Probiotics may contain a variety of microorganisms. The most common are bacteria that belong to groups called *Lactobacillus* and *Bifidobacterium*, other bacteria may also be used as probiotics, and so may yeasts such as *Saccharomyces boulardii*. According to National Health Interview Survey (NHIS) of 2012, in the United States of America, about 4 million (1.6 percent) adults had used probiotics as the third most commonly used dietary supplement other than vitamins and minerals and 3,00,000 children aged between 4 to 17 (0.5 percent) had used probiotics.

Probiotics also target the neurons that control gut motility and helps to restore the milieu interior of beneficial microbial population in the body with potential effect on immune system. Probiotics have shown promise for a variety of health purposes, including prevention of antibiotic-associated diarrhea (including diarrhea caused by *Clostridium difficile*), inflammatory bowel disease (IBD) and prevention of necrotizing entero-colitis and sepsis in premature infants, treatment of infant colic, treatment of periodontal disease, and induction or maintenance of remission in ulcerative colitis. Beside gut health, probiotics have also been attributed for skin ailments such as eczema, urinary and vaginal health and oro-nasal health.

National Dialogue will help in mapping the normal bacteria that live in and on the healthy body, exploring the links between changes in the microbiome and various diseases, to explain the ways in which dietmicrobiome interacts with components of food in the digestive tract and current understanding of the mechanisms underlying probiotic effects leading to the production of substances with health benefits. The recommendations of the national dialogue will be important for several key reasons viz. conduct and increase the much-needed research on probiotics and relevance of probiotic concept; development of metabolic by-products, dead microorganisms, or other microbial-based novel entities with great health potential; identification and need to improve communication to the public and health-care professionals on the benefits of probiotics, which can be expected for the general population. Therefore, the scientific deliberation will help to come up with a "White Paper" on designing and developing new therapeutic approaches to modify the microbiome to treat disease and augment human and animal health and production.



Organizing Committee

Patron Prof. (Dr.) A. K. Srivastava

Vice Chancellor,

U.P. Pt. Deen Dayal Upadhyaya Pashu Chikitsa Vigyan Vishwavidyalaya Evam Go-Anusandhan Sansthan, (DUVASU)

Mathura (U.P.) India

Chairman Prof. P. K. Shukla

Dean.

College of Veterinary Science and A.H., U.P. Pt. Deen Dayal Upadhyaya Pashu Chikitsa Vigyan Vishwavidyalaya Evam Go-Anusandhan Sansthan, Mathura

Dr. Atul Prakash **Organizing Secretary**

Associate Professor.

Department of Veterinary Pharmacology & Toxicology, COVSc&AH, (DUVASU),

Mathura

Dr. Mukesh Srivastava Co-Organizing Secretaries

Assistant Professor, Department of

Veterinary Clinical Medicine,

COVSc&AH, (DUVASU), Mathura

Dr. Soumen Choudhury

Assistant Professor, Department of Veterinary Pharmacology & Toxicology,

COVSc&AH, (DUVASU), Mathura

Technical Secretaries Dr. Rajkumar Singh Yadav

> Assistant Professor, Department of Veterinary Pharmacology & Toxicology, COVSc&AH, (DUVASU), Mathura

Dr. Amit Shukla

Assistant Professor, Department of Veterinary Pharmacology & Toxicology, COVSc&AH, (DUVASU), Mathura

Kindly make your correspondence to:

Dr. Atul Prakash

Organizing Secretary (National Dialogue)

Associate Professor,

Department of Veterinary Pharmacology & Toxicology,

College of Veterinary Science and Animal Husbandry

U.P. Pt. Deen Dayal Upadhyaya Pashu Chikitsa Vigyan Vishwavidyalaya

Evam Go-Anusandhan Sansthan,

Mathura-281001 (U.P.), India

E-mail: dratul2510@rediffmail.com

Technical Programme

Time	Activity
10:30 AM	Welcome and Introduction by Organizing Secretary
10:40 AM	Flagging the issue by Prof. (Dr.) A. K. Srivastava, Hon'ble Vice Chancellor, U.P. Veterinary University, Mathura

Session on "Theme Lectures"

11:10 AM	Dr. Neerja Hajela , Head of Science and Regulatory Affairs, Yakult Danone India Pvt. Ltd.
11:40 AM	Prof. Geeta Shukla , Professor, Department of Microbiology, Punjab University, Chandigarh
12:10 PM	Dr. Rashmi H. M. , Senior Scientist, Dairy Microbiology, National Dairy Research Institute, Karnal, Haryana
12:40 PM	Dr. J. K. Kaushik , Principal Scientist, Animal Biotechnology Centre, National Dairy Research Institute, Karnal, Haryana

1:10 - 02:00 PM LUNCH BREAK

Panel Discussion (02:00 PM - 04:30 PM)

Chairman: Dr. Rameshwar Singh, Vice Chancellor, BASU, Patna

Co-Chairman: Dr. Sharad Kumar Yadav, Head, Veterinary Microbiology, COVSc, U.P. Veterinary University, Mathura

Moderator: Prof. (Dr.) A. K. Srivastava, Hon'ble Vice Chancellor Panelists'

Dr. J. B. Prajapati, Chairman, Verghese Kurien Centre of Excellence, Institute of Rural Management, Anand, Gujarat

Dr. Sesikeran B., Former Director, ICMR-National Institute of Nutrition, Hydrabad

Dr. A. K. Puniya, Head & Principal Scientist, Dairy Microbiology, National Dairy Research Institute, Karnal, Haryana

Dr. Gaurav Bhalla, Senior Medical Affairs Manager, Nestle Nutrition, Gurugram

Dr. A. K. Singh, Joint Director, National Dairy Research Institute, Karnal, Haryana

Dr. Neerja Hajela, Head of Science and Regulatory Affairs, Yakult Danone India Pvt. Ltd.

04:30 PM	Remarks by Dr. Rameshwar Singh , Vice Chancellor, BASU, Patna
04:55 PM	Concluding remarks by Prof. (Dr.) A. K. Srivastava, Hon'ble Vice Chancellor
05:10 PM	Vote of Thanks by Co-organizing Secretary