



# Clinical Nutrition Approaches for GUT HEALTH OF ANIMALS

**An Advanced Short Course**  
**MARCH 16-25, 2017**

**Organized by:**

**ICAR NICHE AREA OF EXCELLENCE IN CLINICAL NUTRITION**  
**DIVISION OF ANIMAL NUTRITION**  
**ICAR-INDIAN VETERINARY RESEARCH INSTITUTE**  
**IZATNAGAR-243 122**

## **COURSE BACKGROUND**

The state of the gastrointestinal tract is of paramount importance for the health of an animal. Gut health is the outcome of the interaction between diet, mucosa and microbes.

The key to the gut health is its microbiota, which perform a large number of important roles that define the physiology of the host. It acts as a defending barrier against invading pathogens, aids in digestion and energy harvest from the diet, provides nutritional support for enterocytes, and stimulates the development of the immune system, besides modulating the intestinal response to epithelial cell injury.

Clinical & Pet Nutrition Lab, Division of Animal Nutrition at Indian Veterinary Research Institute has been doing pioneering work on nutrition and gut health interactions since last so many years. Recognizing the potential of this important area in the health and wellbeing of animals, ICAR has awarded the Division a Niche Area of Excellence (NAE) program on 'Clinical Nutrition and Gut Health'. The present short course is part of the HRD component of the NAE program.

## **COURSE DESCRIPTION**

This advanced course is designed for researchers and teachers of Animal Nutrition and related disciplines working in the National Agricultural Research System including state agricultural / veterinary universities and field diagnostic laboratories. The course is especially applicable to professionals involved in clinical nutrition research and teaching, with particular interest in gut health.

The course objectives will be achieved through a combination of presentations, practical exercises and group discussions. *More emphasis will be given to hands-on training involving latest biochemical, biotechnological and histological techniques relevant to the study of gut health.* It will particularly focus on the following aspects:

- Nutrition, microbiota and gut health
- Nutraceuticals for gut health
- Analytical techniques for studying gut health including assay of microbial metabolites, CMI and humoral immune response, mucin dynamics, cellularity of gut tissues, histological and immunohistochemical techniques, gene expression of antioxidants and mucin genes, etc.

## **COURSE LOCATION**

The course will be held at the Centre of Advanced Faculty Training (CAFT) in Animal Nutrition, Indian Veterinary Research Institute, Izatnagar. Established in 1921, the Animal Nutrition Division of the institute has been the torchbearer for scientific and human resource development in the areas of Animal Nutrition and feed science. In the process, it has evolved into a premier seat of learning and recognized as the Centre of Advanced Studies in Animal Nutrition by the Indian Council of Agricultural Research in 1995 with a mandate of human resource development in the frontier areas of Animal Nutrition to train scientists and teachers of the National Agricultural Research System, which has subsequently been rechristened as a CAFT since 2009. The division boasts of lecture theatre and committee room with modern teaching facilities besides an assortment of contemporary equipments facilitating cutting-edge research, teaching and training in the field of animal nutrition.

## **TRAVEL, BOARDING & LODGING**

No course fee will be charged for the course. The participants joining the course will be paid TA as per entitled class, but restricted to II AC Sleeper Class and DA for the journey period, provided they produce a certificate from the parent organization to the effect that they are not being paid any TA/DA. The participants will have to produce documentary evidence of traveling in the entitled class.

Lodging and boarding for all outstation participants will be arranged free of cost in one of the guest houses of the institute for the period of their stay during the course.

The weather in early March will be cool, temperature ranging from 10-30°C. Warm clothes are essential.

## **REACHING IVRI**

Indian Veterinary Research Institute, established way back in 1889, is the national institute of veterinary and animal sciences in India. It is located in Izatnagar, a satellite town of Bareilly city, 8 km North of Bareilly Junction, on Bareilly-Nainital highway. Bareilly is well-connected by road as well as rail with Delhi and Lucknow. One can reach IVRI from Bareilly railway station by auto rickshaw.

## **APPLICATION PROCEDURE**

The participants (not below the rank of Assistant Professor/ Scientist or equivalent positions) must send their applications in the prescribed format (*enclosed*) through proper channel to **Dr. A.K. Pattanaik, Principal Scientist & Course Coordinator, CAFT in Animal Nutrition, ICAR-Indian Veterinary Research Institute, Izatnagar - 243 122 (E-mail: [akpattanaik1@gmail.com](mailto:akpattanaik1@gmail.com)) latest by February 28, 2017.**

As the course will involve mainly lab work oriented training, only limited (10) participants would be selected on a first come-first served basis. Participants anticipating delays in forwarding their application through proper channel may send an advance copy directly, and bring no objection certificate at the time of joining the course. Applicants are advised not to bring their family members while coming for attending the course in view of accommodation problems.

### **CHIEF PATRON:**

**Dr. R.K. Singh**, Director, ICAR-IVRI

### **PATRON:**

**Dr. A.K. Verma**, Director, CAFT-AN

### **COURSE COORDINATOR:**

**Dr. A.K. Pattanaik**, Principal Scientist, CAFT-AN

### **CORE FACULTY:**

**Dr. Narayan Dutta**, Principal Scientist, CAFT-AN

**Dr. S.E. Jadhav**, Senior Scientist, CAFT-AN

**Dr. Monalisa Sahoo**, Scientist, Pathology Div.

## **CONTACT FOR FURTHER DETAILS:**

**Dr. A.K. Pattanaik**, Principal Scientist & PI, Niche Area of Excellence in Clinical Nutrition  
Course Coordinator, CAFT in Animal Nutrition, ICAR-Indian Veterinary Research Institute  
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**ICAR NICHE AREA OF EXCELLENCE IN CLINICAL NUTRITION  
DIVISION OF ANIMAL NUTRITION  
INDIAN VETERINARY RESEARCH INSTITUTE  
IZATNAGAR - 243122**

**APPLICATION FOR NAE SHORT COURSE ON CLINICAL NUTRITION APPROACHES FOR GUT HEALTH**

1. Full name (in block letters) :
2. Designation :
3. Present employer with address :
4. Address for correspondence :  
complete with telephone,  
fax and e-mail

5. Professional qualification : (*Give details of PhD, Masters and Graduation only*)

<i>Name of degree</i>	<i>University</i>	<i>Major subject offered</i>	<i>Year of passing</i>
PhD			
MVSc			
BVSc			

6. Present area of work :
7. Signature of applicant :
8. Date and place :
9. Certificate from employer :

The application of Dr/Mr/Ms \_\_\_\_\_ is hereby recommended for attending the course entitled *Clinical Nutrition Approaches for Gut Health of Animals* being organized by the Niche Area of Excellence at CAFT in Animal Nutrition, IVRI, Izatnagar from March 16 to 25, 2017. It is further certified that the information furnished by him/her has been verified and found correct.

10. Signature of recommending authority with designation and official seal