

**Faculty Talk: Insightful Seminar Series**  
**Faculty of Livestock, Fisheries, and Nutrition**  
**Wayamba University of Sri Lanka**

**Topic**

**Effects of early fibrous diet feeding on gastrointestinal environment in pre-weaned calves**

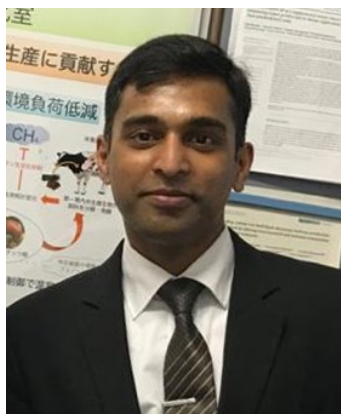
**Overview**

Calf health in the preweaning period is an important aspect for the future production of cattle. To ensure the healthy growth of neonatal animals, anatomical and functional development of the gastrointestinal tract is key not only for nutrient acquisition but also for preventing infectious diseases. Establishment of the gastrointestinal microbiota is vital for the development of gastrointestinal functions, such as feed digestion, provisioning of nutrients to the host, and developing the immune system. The supplementation of roughage to calves during the pre-weaning period shows beneficial effects, such as improvement in feed intake, growth performance, rumination, and rumen environment. In my master's study, it was confirmed that oral administration of a fibrous diet from 3 days of age improves the body weight and fecal microbiota (i.e., higher abundance of *Lactobacillus* spp. and *Prevotella* spp.; lower abundance of *Clostridium perfringens*) of calves within the first 3 weeks of life. This study aims to further assess the effects of oral fiber administration on hindgut microbiota and investigate the impacts on rumen microbiota.

**Speaker**

**Dr. Heshan Kodithuwakku, Senior Lecturer**

Department of Livestock and Avian Sciences, Faculty of Livestock, Fisheries, and Nutrition  
Wayamba University of Sri Lanka



Dr. Heshan Kodithuwakku graduated from the Faculty of Agriculture, University of Peradeniya in 2012, earning a B.Sc. Special Degree in Agricultural Technology and Management, with a specialization in Animal Science and Technology. He later pursued his postgraduate studies at the Graduate School of Agriculture, Hokkaido University, Japan, where he obtained both his MSc (2019) and PhD (2022) degrees, working with the Laboratory of Animal Function and Nutrition.

Dr. Kodithuwakku's research focuses on ruminant nutrition, the rumen and gut microbiota, and the development of feed for ruminants using locally available underutilized resources.

**Moderator**

**Dr. W.A. Harindra Champa, Chairman, Research Development and Publication Committee, Faculty of Livestock, Fisheries and Nutrition**

**Date & Time**

**11:30 AM - 12:00 Noon on 11<sup>th</sup> December, 2024**

**Venue**

**Aquaculture & Fisheries Lecture Room, Faculty of Livestock, Fisheries and Nutrition**

**Contact**

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