Special Issue

Gastrointestinal Physiology and Livestock Nutrition: Impact on Health and Productivity

Message from the Guest Editors

The application of basic biomedical techniques has substantially contributed to the identification of physiological functions of the gastrointestinal tract in ruminants, pigs, and poultry. These techniques include approaches to characterize both basic functional properties as well as the molecular structures of a huge variety of epithelial parameters. In addition, the availability of state-of-the-art sequencing techniques, including bioinformatics, has provided deep insight into the physiological microbial community of the gastrointestinal tract. Profound new regulatory principles of many gastrointestinal parameters have been identified, upgrading many classical concepts of gastrointestinal regulation, with special emphasis on livestock nutrition. This also represents a link between basic gastrointestinal physiology and pathophysiology, as well as a link with qualitative and quantitative aspects of nutrition. The knowledge about these previously only poorly assessable associations helps to identify the criteria relevant to the health and productivity of livestock. This Special Issue aims to present data on these interrelations in the relevant livestock species.

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Message from the Editor-in-Chief

Animals is an on-line open access journal that was first published in 2011. Animals adheres to rigorous peerreview and editorial processes and publishes only high quality manuscripts that address important issues in the many varied disciplines that involve animals, with a focus on animal science, animal welfare and animal ethics. Animals is covered in the Science Citation Index Expanded (SCIE) in Web of Science, with the latest Impact Factor: 2.7 (2024, ranks 15/86 (Q1) in 'Agriculture, Dairy & Animal Science'; 21/170 (Q1) in 'Veterinary Sciences'), 5-Year Impact Factor: 3.2.

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