

Special Issue

Protein and Amino Acid Digestion, Metabolism, and Utilization in Ruminants

Message from the Guest Editors

Protein is often the first limiting nutrient when formulating diets for beef and dairy cattle. Protein is the major nitrogenous macronutrient of the diet and has structural, signaling and physiological functions. Models to estimate protein requirements for beef and dairy cattle, also called the metabolizable protein system, separate the requirements of ruminal microorganisms for nitrogenous components from the protein requirements of the host animal. Adequate characterization of rumen degradable protein, rumen undegradable protein and microbial protein, as well as the correct estimates of animal requirements for amino acids during different physiological stages (e.g., growth, gestation, lactation) is essential to improve nitrogen utilization in ruminants. This Special Issue aims to publish original research papers and literature reviews on protein and amino acid digestion, metabolism and utilization in ruminants, including the environmental aspects associated with nitrogen losses from beef and dairy production systems.

Guest Editors

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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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