



*animals*



an Open Access Journal by MDPI

## In Vitro and In Vivo Digestibility Studies in Ruminants

Guest Editors:

### **Dr. Idoia Goiri**

Campus Agroalimentario de  
Arkaute s/n, NEIKER-Basque  
Institute for Agricultural Research  
and Development, Basque  
Research and Technology  
Alliance (BRTA), 01192 Vitoria-  
Gasteiz, Spain

### **Dr. Aser García-Rodríguez**

Campus Agroalimentario de  
Arkaute s/n, NEIKER-Basque  
Institute for Agricultural Research  
and Development, Basque  
Research and Technology  
Alliance (BRTA), 01192 Vitoria-  
Gasteiz, Spain

Deadline for manuscript  
submissions:

**closed (10 June 2024)**

### **Message from the Guest Editors**

Digestion and metabolism of nutrients in ruminants are key aspects of feeding systems, since digestibility and rumen degradability are the main sources of variation of protein and energy value of feeds. Reliable and appropriate biological data can be obtained using in vitro, in situ or in vivo techniques.

In vivo methods are the most reliable ones and are considered usually as a reference. However, they are expensive, time consuming, limited to a small number of feeds evaluated at the same time and need an elevated number of animals to obtain reliable results. Moreover, new demands of reducing the use of research animals have created interest in in vitro techniques. In vitro techniques for feed evaluation are important methodologies for studying the fermentative and digestive characteristics of feed. They represent biological models that properly simulate the digestion process in animals, but their results are limited, since these in vitro techniques cannot mimic all the metabolic processes that occur in a live animal.

Studies investigating new feedstuff or by-products, or the effect of feed additives on digestibility and enteric methane production will be welcome.



[mdpi.com/si/169005](https://mdpi.com/si/169005)

# Special Issue



an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Clive J. C. Phillips

1. Institute of Veterinary Medicine  
and Animal Sciences, Estonian  
University of Life Sciences,  
Kreutzwaldi 1, 51014 Tartu,  
Estonia  
2. Curtin University Sustainability  
Policy (CUSP) Institute, Kent St.,  
Bentley 6102, Australia

## 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 (2023, ranks 10/80 (Q1) in ‘Agriculture, Dairy & Animal Science’; 16/167 (Q1) in ‘Veterinary Sciences’), 5-Year Impact Factor: 3.0.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, PubAg, AGRIS, Animal Science Database, CAB Abstracts, and other databases.

**Journal Rank:** JCR - Q1 (Veterinary Sciences) / CiteScore - Q1 (General Veterinary)

## Contact Us

*Animals* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/animals](http://mdpi.com/journal/animals)  
[animals@mdpi.com](mailto:animals@mdpi.com)  
[X@Animals\\_MDPI](https://twitter.com/Animals_MDPI)