



Trace elements (minerals and vitamins) in non-ruminant livestock nutrition

Guest Editor:

Dr. Danyel Bueno Dalto

Sherbrooke Research & Development Centre, Agriculture and Agri-Food Canada, Sherbrooke, QC J1M 0C8, Canada

Deadline for manuscript submissions:
closed (31 January 2020)

Message from the Guest Editor

Trace minerals may become the next limiting factors for the expansion of livestock farming. It has also to be considered that some micro-minerals, such as zinc and copper, are used in supra-nutritional levels as an alternative to the prophylactic use of antibiotics in some species because of their intestinal bacteriostatic properties. Although efficient, over the last decades, evidence has suggested that this practice may increase the appearance of genes related to bacterial resistance to antibiotics and even of genes related to bacterial resistance to these minerals.

For vitamins, heterogeneous recommendations can be found in the animal nutrition industry, and empiricism is still present mostly because of the limited scientific information on their overall metabolic fate. Research on the use of vitamins in animal nutrition has moved from prevention of deficiencies to maximization of growth and reproductive performance since the middle of the 20th century.

The rise of new technologies together with the use of multidisciplinary approaches will help to fill the gaps of knowledge that are more apparent in the study of trace elements than in any other area of nutrition.





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

mdpi.com/journal/animals
animals@mdpi.com
[X@Animals_MDPI](#)