

Special Issue

Advances in Nutritional Modulation of Skeletal Development in Poultry

Message from the Guest Editor

Skeletal integrity is fundamental to poultry productivity, health, and welfare. Imbalances in nutrient supply, genetic selection for rapid growth/high egg output, and environmental stressors compromise bone development, strength, and mineralization, leading to welfare concerns and economic losses. While dietary calcium, phosphorus, and vitamin D remain central, feed additives, alternative ingredients, bioactive compounds, and their interaction with stressors also play critical roles in modulating bone physiology.

The Special Issue invites contributions expanding the understanding of how these factors influence bone growth, morphology, and resilience in poultry. We encourage studies beyond traditional performance/bone ash measures to incorporate novel methodologies (imaging, histomorphometry, mechanical testing, molecular/omics approaches) revealing skeletal adaptation mechanisms. Research may address nutrient optimization, feed processing effects, mineral bioavailability, or dietary strategies to mitigate skeletal disorders in broilers, turkeys, quail, ducks, and laying hens. Work linking bone biology with gut health, immune function, or systemic metabolism is particularly welcome.

Guest Editor

Dr. Ayodeji Aderibigbe

Department of Animal Sciences, The Ohio State University, Columbus, OH 43210, USA

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Animals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
animals@mdpi.com

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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.

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

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