

Special Issue

Advances in Genetic and Metabolic Pathways for Enhanced Milk Yield and Quality

Message from the Guest Editor

Milk, as an important source of nutrition for humans, plays a central role in global food security and the agricultural economy. How to sustainably increase milk production and optimize its nutritional components (such as protein, fat content, and functional ingredients, etc.) through scientific means has become a cutting-edge topic in the fields of animal husbandry science and biotechnology. In recent years, the rapid development of genetics, molecular biology, and systems metabolic engineering has provided unprecedented opportunities for deciphering the genetic basis of animal production traits, regulating metabolic networks, and formulating precise breeding strategies. This Special Issue focuses on the research progress in this field. It aims to integrate the research findings from different animals (including cattle, sheep, horses, etc.), reveal the key genetic and metabolic mechanisms (such as single nucleotide polymorphisms, microRNAs, etc., all of which are included) that drive milk production and quality, and gain a better understanding of the applications of dairy products.

Guest Editor

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About the Journal

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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