



## The Important Role of Gut Microbiota Modulation through Animal Nutrition on Health, Production and Welfare

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### Message from the Guest Editors

A balanced gut microbiota is crucial for the host's health. The digestive tract does not only constitute the protective intestinal barrier, but also has the function of absorbing nutrients from feed, which has the strongest influence on animal health, welfare, and products. Given that the diet has a critical role in modifying the microbiome, therefore, nutritional strategies may be among the effective solutions to counteract intestinal damage caused by oxidative stress and other factors. Thus, due to the antioxidant, antibacterial, and anti-inflammatory effects of some dietary bioactive compounds, such as polyphenols, prebiotics, and fatty acids, they can influence microbial populations, restoring the balance of intestinal microflora. Therefore, the intestinal microbial composition, mechanism of action, and their effects in animals will be investigated to provide advances in research into newly discovered nutrient sources with health benefits.

The fields relevant to this Special Issue include, but are not limited to, agriculture, animal nutrition, and biotechnology. This Special Issue will comprise original research and reviews on the abovementioned research fields.





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## Message from the Editor-in-Chief

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