

International E-Conference on

NUTRITION AND FOOD SCIENCE

December 09-10, 2020 | Virtual Webinar

Functional ingredients for the restriction in the use of antibiotics in animals

Luciana Rossi

Department of Health, Animal Science and Food Safety, Università degli Studi di Milano, Milano, Italy

Antibiotic resistance became a major global threat which has led the major international organizations to develop holistic strategies focused on the prudent use of antibiotic in humans and in animals. Antimicrobial resistance is included as a priority in the One Health operational framework and interventions that restrict antibiotic use in food-producing animals are associated with a reduction of antibiotic-resistant bacteria. Even if the precise quantity of antimicrobials used in food production globally is difficult to estimate, evidences suggest that antibiotics consumed by animals worldwide is almost double that used by humans. For these reasons integrated strategy in food-producing animals replacing the antibiotics with novel functional additives and ingredients is urgently needed. In our studies several dietary additives and compounds with functional properties were in vivo evaluated as alternative to antibiotics on weaned piglets. Interesting results were obtained on the improvement of immune system and animal performance, on the modulation of the intestinal microbiota and the reduction of incidence of diarrhea. Obtained data suggested that many ingredients could be considered a valuable feed additive for weaned piglets. Even if no one alternative will replace all uses of antibiotics, health promotion and disease primary prevention is the best strategy for the reduction of antibiotics.

Keywords: Alternatives To Antibiotics, Animals, Antibiotic Resistance, Functional Ingredients, Diet

Biography:

Luciana Rossi is a Associate professor at the Department of Health, Animal Science and Food Safety "Carlo Cantoni" (VESPA), University of Milan. Professor of Animal nutrition at Veterinary Medicine Faculty and Designated Veterinarian at the University of Milan.