POSTBIOTICS AS EMERGING ALTERNATIVES FOR GUT HEALTH AND PERFORMANCE IN MONOGASTRICS

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Abstract

In recent years, the gut microbiome has become one of the most studied topics in both human and veterinary medicine, particularly in light of the need to reduce the excessive use of antibiotics and combat antimicrobial resistance. The family of "biotics", which includes prebiotics, probiotics, synbiotics, and, more recently, postbiotics, offers promising alternatives for maintaining animal health and preventing dysbiosis. In this context, a new category, postbiotics, defined as "non-viable products or microbial metabolites with a beneficial effect on the host" has attracted increasing interest. Studies conducted to date show significant beneficial effects in monogastric animals. In pigs, postbiotics reduce post-weaning diarrhea and improve growth performance; in poultry, they optimise feed conversion, reduce pathogen colonisation, and support intestinal health; and in companion animals, emerging data suggest benefits for digestive health, including allergy control.

This study aims to synthesize the latest available data on the use of postbiotics in farm and companion monogastric animals, focusing on mechanisms of action, demonstrated effects, and potential practical applications.

Key words: postbiotics, dysbiosis, animals, digestive health