

# Unveiling the Power Within: A Review of Postbiotics as Dynamic Agents with Antimicrobial Capabilities

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**Abstract:** The concept of postbiotics, representing the diverse array of bioactive molecules produced by beneficial microorganisms during fermentation or metabolic processes, has emerged as a promising avenue in the field of antimicrobial research. These dynamic biological molecules, derived from the byproducts of probiotics or the microbial communities inhabiting the human body, exhibit considerable potential in modulating and enhancing the host's immune response. This abstract delves into the multifaceted role of postbiotics as potent agents with antimicrobial activity, elucidating their mechanisms of action and therapeutic implications. By exploring the intricate interplay between postbiotics and host microbiota, this review aims to shed light on the evolving landscape of postbiotic research and its implications for developing innovative strategies in combating microbial infections and promoting overall health.

**Keywords:** Dynamic biological molecules, Antimicrobial activity, Bioactive compounds

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