

## PREBIOTICS AND PROBIOTICS: A FOCUSED REVIEW OF APPLICATIONS IN RESPIRATORY DISORDERS

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### ABSTRACT

The principal function of food is to provide sufficient nutrients to achieve healthy diets and give a sense of fulfillment and health to people. The prevalence, seriousness, predicted patterns and economic effects of chronic respiratory conditions such as asthma, COPD, COVID-19, and other such diseases pose a serious public health challenge. The use of, among many other therapies, antibiotics, immunosuppressants, and radiation can induce alterations and influence the gastrointestinal biome. Therefore, it would be a very enticing choice to re-establish microbial balance and avoid disease if favorable microorganisms are introduced in the GIT. Probiotic and prebiotic ingredients have been the focus of substantial studies in recent decades in human nutrition with therapeutic potentials. The number of studies on possible health advantages that come via the use of probiotics and prebiotics has improved dramatically in the last few years. The concept of probiotic products has emerged from a live active culture that enhances the balance of the intestinal microbiota composition and the immunomodulatory capacity of clearly specified strains, to specific results. Prebiotics are short-chain carbohydrates that beneficially alter the composition or metabolism of intestinal microbiota. Therefore, prebiotics is supposed to improve wellness like probiotics but at the same time are economic, less toxic, and easier to introduce into the diet than probiotics. These are used to prevent and cure different medical problems and to encourage general well-being.

### GRAPHICAL ABSTRACT

