1.36 The Impact of Microbiome Supplementation on Managing Asthma Exacerbations in Adults

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Background: The rising prevalence of asthma and the microbiome's role in immune modulation necessitate examining the effects of microbiome supplementation on adult asthma exacerbations. Asthma exacerbations significantly burden patients and healthcare systems, highlighting the need for preventive strategies. Investigating microbiome supplementation's potential in reducing exacerbations could lead to novel therapeutic approaches. Methods: A systematic review was conducted using MEDLINE, CINAHL, PubMed, and EMBASE databases from January 2019 to February 2024.Results: The microbiome supplementation improved asthma control, lung function, and gastrointestinal health, suggesting a role for the gut-lung axis in asthma therapy. However, small sample sizes and inconsistencies across studies necessitate cautious interpretation. Conclusions: Microbiome supplementation shows promise in asthma management, potentially enhancing traditional treatments. Further research with larger, standardized studies is required to confirm these findings. Keywords: Asthma, microbiome supplementation, systematic review, gut-lung axis. Disclosures: Conflict of Interest: The Authors declare that they have no conflict of interest.