

The microbiome is a community of microorganisms that live within and on the human body. These interventions may involve tailored dietary recommendations based on an individual's microbiome profile or the creation of probiotics and prebiotics to promote a beneficial microbial balance. Researchers are working towards developing personalized dietary interventions to prevent and manage conditions such as obesity, diabetes, inflammatory bowel diseases, and mental health disorders. Foods rich in dietary fiber like fruits, vegetables, and whole grains promote the growth of beneficial gut bacteria. It plays a crucial role in various physiological functions, including digestion, metabolism, and immune system .regulation