

# BIOPROSPECTING OF NEXT-GENERATION PROBIOTICS FOR MICROBIAL BIOTHERAPY: NOVEL DRUGS AND FUNCTIONAL FOODS

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Bioprospecting of next-generation probiotics for microbial biotherapy involves the search and discovery of novel microorganisms that can be used as beneficial bacteria in the development of new drugs and functional foods. Next-generation probiotics aim to identify and develop microorganisms that can address specific health conditions or provide enhanced benefits compared to existing probiotic strains. This involves screening for strains that exhibit desirable properties, such as the ability to survive in the gastrointestinal tract, adhere to intestinal epithelial cells, modulate the immune system, and produce bioactive compounds. Functional foods fortified with next-generation probiotics can offer additional health benefits beyond basic nutrition. These foods may include dairy products, fermented foods, beverages, or even supplements. The probiotic strains selected for use in functional foods should be able to survive processing, storage, and the acidic conditions of the gastrointestinal tract to reach the intended site of action. The bioprospecting of next-generation probiotics for microbial biotherapy involves the search for novel microorganisms with potential therapeutic applications. This approach utilizes the human microbiome and advanced technologies to identify strains that can be developed into new drugs or incorporated into functional foods to promote health and well-being.

## References

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