

# The Power of Microflora in The Human Gut

## HOW THEY HELP WITH NUTRITION

Improve Bio-Availability Of Nutrients

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Manufacture B-Complex Vitamins And Vitamin K

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Ferment Indigestible Carbohydrates (Prebiotics) To Produce Short Chain Fatty Acids (SCFAs)

SCFA: ACETATE, PROPIONATE, BUTYRATE

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## HOW THEY SUPPORT YOUR IMMUNE SYSTEM

Provide Fuel To Enterocytes That Line The Gut Wall

HEALTHY ENTEROCYTES MAKE A STRONG GUT WALL WHICH PREVENTS ENTRY OF PATHOGENIC BACTERIA

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Produce Anti-Viral Substances

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Produce Anti-Fungal Substances

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Neutralize Endotoxins

TOXIC SUBSTANCES PRODUCED BY SOME GRAM NEGATIVE (PATHOGENIC) BACTERIA

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Regulate Cytokines

CYTOKINES ARE SIGNALING COMPOUNDS INVOLVED IN COORDINATING IMMUNE RESPONSE

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Neutralize Carcinogens

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## ROLE OF SPECIFIC BACTERIA IN IMMUNE SYSTEM

**Bifidobacteria**

THE MOST POPULOUS IN THE GUT. PREVENT COLONIZATION OF VIRULENT MICRO-ORGANISMS

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**Lactobacilli**

PRODUCES LACTASE AND HYDROGEN PEROXIDE WHICH ACT AS POWERFUL ANTISEPTIC, ANTI-VIRAL AND ANTI-BACTERIAL AGENTS. MUTE CYTOKINE RESPONSE