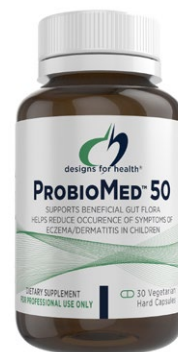


ProbioMed™ 50



Supports beneficial gut flora and helps reduce occurrence of symptoms of eczema/dermatitis in children



1 Vegetarian Hard Capsule

OVERVIEW

- > Broad spectrum formulation delivering 10 specific and researched probiotic species at 50 billion CFU per capsule
- > Single daily dosage for easy patient compliance
- > Shelf-stable for convenience

Active Ingredients (per soft capsule)	
<i>Bifidobacterium animalis ssp. lactis</i> (BS-01) equiv.	36 mg 18 billion CFU
<i>Lactobacillus plantarum</i> (Lp-115) equiv.	17.5 mg 7 billion CFU
<i>Lactobacillus acidophilus</i> (La-14) equiv.	30 mg 6 billion CFU
<i>Lactobacillus casei</i> (Lc11) equiv.	13.33 mg 4 billion CFU
<i>Bifidobacterium breve</i> (Bb-18) equiv.	13.33 mg 4 billion CFU
<i>Lactobacillus salivarius ssp. salivarius</i> (Ls-33) equiv.	60 mg 3 billion CFU
<i>Lactobacillus paracasei</i> (LPC-37) equiv.	7.5 mg 3 billion CFU
<i>Lactobacillus rhamnosus</i> (HNO01) equiv.	6.67 mg 3 billion CFU
<i>Bifidobacterium bifidum</i> (Bb-06) equiv.	10 mg 1 billion CFU
<i>Bifidobacterium longum</i> (BI-05) equiv.	10 mg 1 billion CFU

Pack Size	30
Serving Per Pack	30

Designed and packed in Australia from imported ingredients.

Excipients
Colloidal anhydrous silica
Microcrystalline cellulose
Hypromellose
Purified water
Magnesium stearate

Directions for Use
Adults & Children: Take 1 capsule per day or as directed by your healthcare professional.

Allergen Information
Does not contain: gluten, dairy, lactose, soy or nuts.

Prescribing Information:
Probiotics are contraindicated in individuals hypersensitive to probiotics or components. ¹

Warnings
If symptoms persist or worsen, talk to your health professional.
If you are pregnant, consult your doctor before taking this product.



No Added Gluten



No Added Dairy



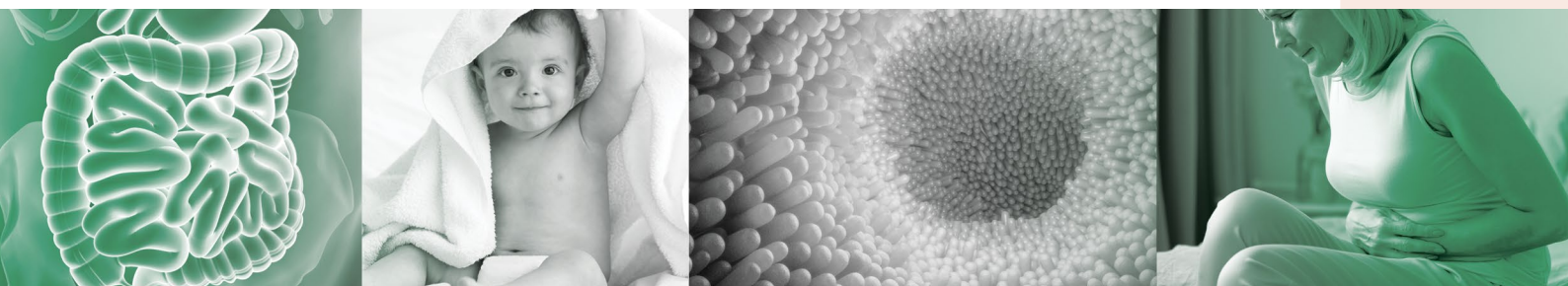
No Added Soy



No Added Nuts



Vegan Friendly



EDUCATION

The human microbiota, considered our ‘last organ’,² is a complex ecosystem of commensal, symbiotic and pathogenic microorganisms (bacteria, archaea, viruses, fungi and parasites) that significantly influences gastrointestinal and systemic health.²⁻⁵

The composition and diversity of the intestinal microbiota at the species level is subject to significant intra- and inter-individual variability consequent to many influencing factors including genetics, dietary patterns, medical interventions (medications or surgery), infection, age, stress, body composition, physical activity and hormonal cycles.³⁻⁶ Perturbation of intestinal microbiota composition (dysbiosis) is associated with impaired/disordered health and increased disease susceptibility.⁴⁻⁶ Improving the incidence, severity and long-term impact of such clinical symptoms and disorders requires a multifaceted therapeutic approach that includes the beneficial modulation of the intestinal microbiome using a combination of lifestyle strategies with researched, strain-specific probiotics.

Probiotics are defined as live microorganisms that induce a beneficial medicinal effect when used in therapeutic concentrations.⁷⁻¹⁰ Probiotic nomenclature requires specification of the genus, species and subspecies followed by the specific strain identification/designation.¹¹

An increasing body of research emphasises the importance of strain specificity for probiotic identification, mechanisms of action and efficacy in relation to clinical outcomes for many symptoms, disorders and pathologies.^{11,13}

QUALIFYING CHARACTERISTICS OF PROBIOTIC MICROORGANISMS^{8,11,12}

- > Proper strain characterisation (established named genus, species and subspecies).
- > Viable (survives gastric and intestinal transition through acidic pH, enzymes, bile salts).
- > Adheres to intestinal epithelium.
- > Safe for intended use and human consumption.
- > Clinical therapeutic efficacy demonstrated by human studies (at least 1).
- > Strains active and at a therapeutic concentration for whole shelf life.

(Plaza-Diaz 2019, Binda 2020, Maldonado Galdeano 2019)

Several meta-analyses have found that while some probiotic mechanisms are exhibited by the genus group (e.g. lactobacillus, bifidobacterium), others are strain-specific.^{11,13,14}

This combination of genus-specific and strain-specific mechanisms exhibited by probiotic bacteria enables a therapeutic benefit for a range of symptoms, disorders and pathologies including impaired intestinal health and mild-to-moderate eczema. See Figure 1 and Table 1.

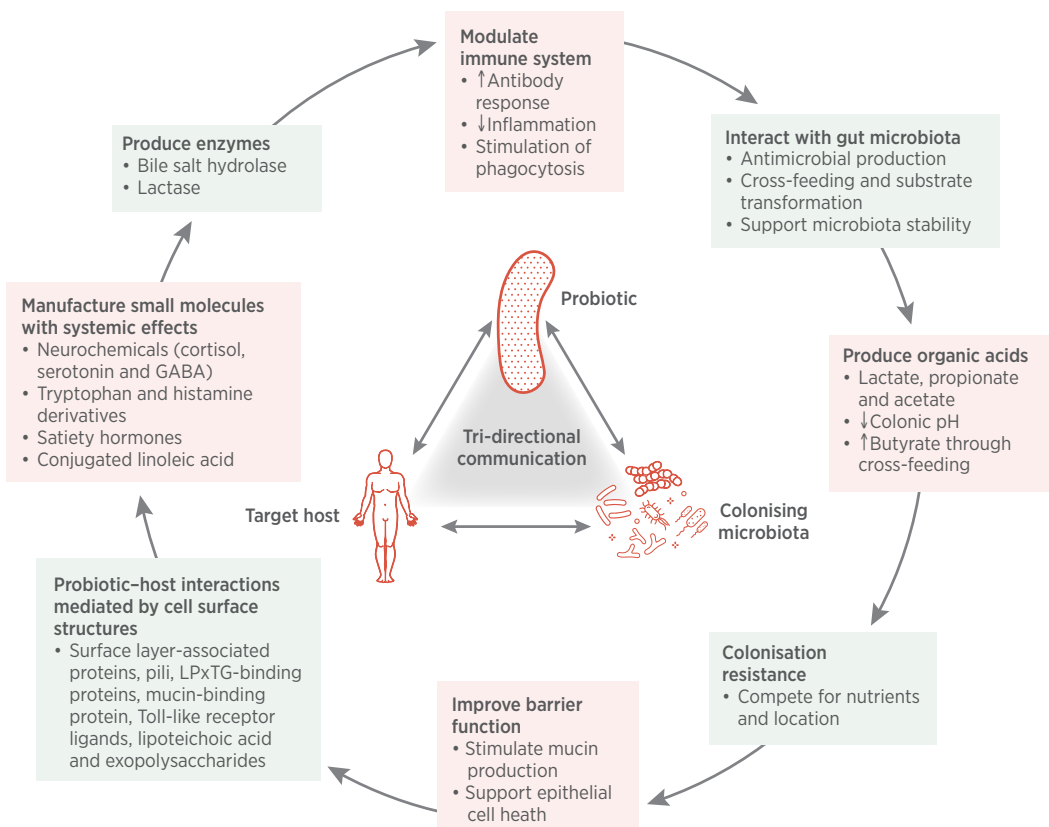


Figure 1: Probiotic mechanisms of action. Diverse mechanisms are likely to drive probiotic benefits to host health. In some cases, such as production of antimicrobial products and cross-feeding other resident microorganisms, these mechanisms are driven directly by interactions with the resident microbiota. In other cases, such as direct interaction with immune cells, their effects might be direct via interaction with host cells. Overall, clinical benefits delivered by probiotics could result from the combined action of several mechanisms.

Intestinal health

The gastrointestinal microbiome fundamentally influences intestinal health by regulating many functional aspects including stool frequency and consistency, intestinal pH, mucosal barrier integrity, immune response and function, antimicrobial peptide synthesis and macro- and micronutrient absorption.^{6,15-21} Given the pleiotropic nature of the microbiota in relation to gastrointestinal health, consequences of microbiome disruption are broad including intestinal symptoms (bloating, constipation, excessive gas, food intolerances), dysbiosis, pathogenic overgrowth, altered immunity, local and systemic inflammation, impaired nutrient absorption and functional or structural intestinal disorders.^{6,16,17,21-23}

Mild-moderate eczema

Eczema is a highly prevalent, atopic, non-infectious relapsing dermal condition characterised by itchy, red rash.³² Evidence demonstrates that multi-strain-specific probiotic combinations protects against eczema development and atopic sensitization and risk of onset in children when taken from 35-weeks' gestation to 6-months postpartum.^{33,34}

Figure 2: Causes of gastrointestinal tract microbiota dysbiosis and effect on host health. GIT: Gastrointestinal tract; NAFLD: Non-alcoholic fatty liver disease; IBD: Inflammatory bowel diseases; IBS: Irritable bowel syndrome; CVD: Cardiovascular disease.

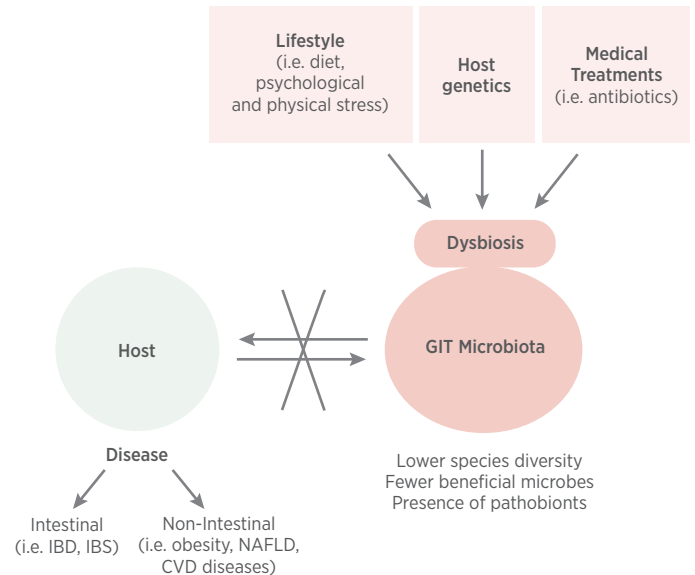


Table 1: Strain-specific therapeutic actions.

Strain	Strain-Specific Therapeutic Action
<i>Bifidobacterium animalis ssp. lactis</i> (BS-01)	<ul style="list-style-type: none"> Increases gastrointestinal bifidobacteria colonisation.³⁵ Improves bowel movement frequency and stool consistency.³⁶
<i>Lactobacillus plantarum</i> (Lp-115)	<ul style="list-style-type: none"> Reduces intestinal inflammation (myeloperoxidase levels) when used adjunctively with sulfasalazine.³⁷
<i>Lactobacillus acidophilus</i> (La-14)	<ul style="list-style-type: none"> Enhances immunoglobulin G (IgG) responses following oral vaccination.³⁸ Antimicrobial.³⁹
<i>Bifidobacterium breve</i> (Bb-18)	<ul style="list-style-type: none"> Ameliorates intestinal dysbiosis in a multi-probiotic formulation.⁴⁰
<i>Lactobacillus salivarius ssp. salivarius</i> (Ls-33)	<ul style="list-style-type: none"> Beneficially modulates gastrointestinal microbiota.⁴¹ Promotes intestinal immune activity.⁴² Ameliorates intestinal inflammation.⁴³
<i>Lactobacillus paracasei</i> (LPC-37)	<ul style="list-style-type: none"> Increases SCFA levels (acetate, propionate, butyrate) and total bifidobacterial counts.⁶
<i>Lactobacillus rhamnosus</i> (HN001)	<ul style="list-style-type: none"> Modulates gastrointestinal microbiota composition by reducing pathogenic and increasing beneficial bacteria.⁴⁴⁻⁴⁶ Beneficial for management of intestinal inflammation.⁸ Significantly protects against eczema development and atopic sensitization in children when taken from 35-weeks' gestation to 6-months postpartum.^{33,34}
<i>Bifidobacterium bifidum</i> (Bb-06)	<ul style="list-style-type: none"> Ameliorates intestinal dysbiosis in a multi-probiotic formulation (including Bb-06 and BI-05).⁴⁰
<i>Bifidobacterium longum</i> (BI-05)	<ul style="list-style-type: none"> Ameliorates intestinal dysbiosis in a multi-probiotic formulation (including Bb-06 and BI-05).⁴⁰

References supplied on request.