



# Digestive Health and Probiotics

Scientifically researched probiotics and solutions for your patients' digestive complaints.



# Solutions for Optimal Digestive Health and Function

The gut is considered in traditional Naturopathic philosophy, as the seat of all health. It's not surprising then, that managing the gastrointestinal tract (GIT) is a key step in managing almost all other body systems.

The gut is a complex system and any dysfunction in the gut can have a profound influence over other body systems. As a result of this complexity, managing digestive disorders isn't always simple and there are often many contributing factors that lead to, and are a consequence of, GIT dysfunction.

To truly restore gut health, a treatment plan will ideally address each and every one of these six functional layers, which form an interrelated web. As such, imbalances in any one layer can lead to imbalances in the others.

## Diet



Food is consumed to not only provide the body with the energy and nutrients it requires; it also has a strong influence on digestive health. For example, a diet high in refined carbohydrates may result in a dysbiotic GIT.

Many people make food choices that are detrimental, whether it is due to low nutrient content, high calories, excessive processing or food intolerances and allergies; a patient's diet should be reviewed and improved as part of any treatment protocol. Particularly in those patients whose primary condition is digestive, food intolerances should be determined using the Metagenics' Allergy and Reactivity Reduction Program. A custom elimination diet or low FODMAP diet may be useful. Visit Metagenics Institute to learn more about this program for your patients.

## Enzymes



Most food that is consumed contains nutrient complexes that are too large for the body's cells to utilise. In a healthy system, digestive organs secrete acids and enzymes that break down these nutrients to make them small enough for the cells to use. When digestive secretions are reduced, nutrient absorption is also compromised, betaine hydrochloride and pepsin may need to be prescribed.

## Bacteria



What comes first – the chicken or the egg? When it comes to gut function, is it inflammation at the barrier that's deteriorating the microbial environment; or are dysbiotic bacteria and pathogens driving the loss of mucosal integrity? Both may be at play, highlighting the necessity of also addressing the bacteria level. Probiotics are the ideal way to develop a healthy microbiome and restore digestive balance. This balance can be restored via the use of antimicrobials, good quality probiotics and diet, and lifestyle corrections.

## Barrier



There are three main lines of defence in preventing bacteria from penetrating the gut barrier. Firstly, secretory immunoglobulin A (secretory IgA); secretory IgA in the GIT binds to bacteria, and therefore keeps those bacteria in the digestive tract where they can do less damage.

The second line of defence is the mucus. This is a physical barrier between the gut lumen and the epithelium which prevents bacterial adherence to the epithelial cells. Nutrients, such as glutamine, zinc and vitamin A increase levels of secretory IgA and improve mucosal health.

Complex epithelial barrier functions include nutrient absorption, gut immunity, enteric endocrine signalling and nervous system communication. By continuously resisting dietary, lifestyle, microbial and environmental insults, gut homeostasis may become overwhelmed and lead to gut barrier dysfunction. In gut pathology, epithelium can become physically damaged. Many nutrients are shown to nourish and protect epithelial barrier functions, including glutamine and zinc. *Aloe vera* and BosPure® *Boswellia* support epithelial healing via anti-inflammatory action.

## Immune



With 70% of the immune system being in the gut, the digestive and immune systems are very closely related. Immune balance is influenced by the gut microbiome and, in turn, gut microbiome is influenced by immune balance. Immune function ought to be considered in treating gut health, as immune driven inflammation in the gut can lead to gut barrier dysfunction.

There are two main approaches in treating this 'see-saw'. The immune system can be treated with a patient specific immune protocol, and the gut microbiome can be brought back in line with the use of good quality probiotics. Evidence based strain-specific probiotic strains, at the correct researched dose, exert specific actions to either regulate or stimulate the immune system. *Lactobacillus rhamnosus* (LGG®) modulate immune reactions by interacting with dendritic cells within the gut associated lymphoid tissue (GALT), stimulates the production of regulatory T cells and increases the production of anti-inflammatory cytokines.

## Enteric Nervous System



































All GIT functions, including digestive secretion, motility, mucosal epithelial barrier health and gut immunity, are controlled by the enteric nervous system (ENS). The ENS also communicates information from the gut to the brain (i.e. the central nervous system), using the vagus nerve as a conduit between these two systems. This bi-directional communication pathway, known as the gut-brain axis (GBA), maintains GIT homeostasis, as well as facilitating immune and inflammatory control. ENS dysfunction and disrupted vagus nerve signalling have been associated with both gut and systemic inflammatory conditions.<sup>3,4</sup>

## Taking a Holistic Approach

With digestion as the seat of health, treatment that focuses on restoring barrier and bacteria function will result in resolution of the majority of your patients' digestive complaints and many systemic issues. However, it is essential to take a holistic approach, addressing the specific factors affecting each individual, including poor diet, weakened digestion (enzymes) and imbalances in the immune and enteric nervous systems. Just as the gut is central within our body, and its health is central to our continued wellness, these treatment recommendations may well become central to your practice.

# Digestive Health and Probiotics Range

Probiotics for a Healthy Microbiome				
Establish		Maintain		LGG®
Pregnancy and Breastfeeding	Children	Microbiome Support	Microbiome Support	Microbiome and Immune Modulation
 <p><b>Ultra Flora Mother and Baby</b> LGG®, M-16v, BB536, BB-12®</p> <ul style="list-style-type: none"> <li>Maternal health</li> <li>Foetal microbiome establishment</li> <li>Infant health (reduce atopy, support behavioural health)</li> </ul>	 <p><b>Ultra Flora Kids Care</b> LGG®, NCFM®, Bif-07</p> <ul style="list-style-type: none"> <li>Commensal flora restoration and maintenance</li> <li>Immune protection</li> <li>Antibiotic use (microbiome restoration)</li> </ul>	 <p><b>Ultra Flora Restore Dairy Free</b> LGG®, NCFM®, Bif-07</p> <ul style="list-style-type: none"> <li>Commensal flora maintenance</li> <li>Gastrointestinal function</li> <li>Fridge-free convenience</li> </ul>	 <p><b>Ultra Flora Spectrum</b> NCFM®, Bif-07, HN001™, HN019™, SB</p> <ul style="list-style-type: none"> <li>Gastrointestinal health</li> <li>Immune wellbeing</li> <li>Pathogen protection</li> </ul>	 <p><b>Ultra Flora LGG® Forte</b> LGG®</p> <ul style="list-style-type: none"> <li>Commensal flora maintenance</li> <li>Immune modulation</li> <li>Fridge-free convenience</li> </ul>
 <p><b>Digestex</b></p> <ul style="list-style-type: none"> <li>Supports digestive secretions and GI motility</li> </ul>	 <p><b>Ultra Flora GI Soothe</b></p> <ul style="list-style-type: none"> <li>Reduces occurrence of GI pain, discomfort (e.g., IBS), bloating, excessive gas and diarrhoea</li> </ul>	 <p><b>Ultra Flora GI Regulate</b></p> <ul style="list-style-type: none"> <li>Supports GI motility, barrier integrity and symptoms of IBS (pain and discomfort)</li> </ul>	 <p><b>Laxatone</b></p> <ul style="list-style-type: none"> <li>Supports GI motility, carminative for dyspepsia and flatulence</li> </ul>	 <p><b>Gastro Aid</b></p> <ul style="list-style-type: none"> <li>Soothes inflamed, irritated mucous membranes and aids digestive function</li> </ul>
<b>Digestive Function</b>				
 <p><b>Bloating</b></p>	 <p><b>Pain / IBS / Diarrhoea</b></p>	 <p><b>Constipation / IBS</b></p>	 <p><b>Constipation</b></p>	 <p><b>Heartburn/Reflux</b></p>
 <p><b>Digestive Insufficiency</b></p>	 <p><b>Bile Insufficiency</b></p>	 <p><b>Vegetarian Digestive Enzymes</b></p> <ul style="list-style-type: none"> <li>Aids protein, carbohydrate and fat digestion</li> </ul>	 <p><b>Lipogen</b></p> <ul style="list-style-type: none"> <li>Liver and gallbladder tonic that aids digestion and fat metabolism</li> </ul>	
<b>Gut Mucosa</b>				
 <p><b>Glutagenics</b></p> <ul style="list-style-type: none"> <li>Supports GI discomfort and integrity</li> <li>Supports motility and digestive secretions</li> <li>Mild to moderate dysfunction</li> </ul>	 <p><b>Gut InflammX</b></p> <ul style="list-style-type: none"> <li>Stimulates the vagus nerve</li> <li>Relieves inflammation in gut and systemic inflammatory conditions</li> </ul>	 <p><b>Gut Care for Kids</b></p> <ul style="list-style-type: none"> <li>Supports digestive secretions and motility</li> <li>Supports GI integrity, soothes and protects gut mucosa</li> </ul>	 <p><b>Bactrex</b></p> <ul style="list-style-type: none"> <li>Antimicrobial support with targeted release into small intestine</li> </ul>	 <p><b>Ultra Flora SB Dysbiosis</b></p> <ul style="list-style-type: none"> <li>Diarrhoea, candida and dysbiosis</li> </ul>
<b>Gut Pathogens</b>				
 <p><b>Parasitic</b></p>	 <p><b>Bacterial Overgrowth</b></p>	 <p><b>Pathogen Control</b></p>	    	



# Supporting Practitioners to be at the Forefront of Probiotic Science

## The Human Microbiome

The gastrointestinal tract (GIT) is host to a plethora of microorganisms composed of bacteria, archaea, viruses and eukaryotic microbes, collectively known as the gut microbiome. Humans exist in a symbiotic relationship with their bacterial ecosystem, and the bidirectional nature of this relationship makes individual health inseparable from that of the microbiome and vice versa. The benefits of a healthy microbiome extend beyond the gut and have significant systemic impacts, affecting nutrient metabolism, body composition, cardiovascular health, immunity and neuroendocrine function.

## The Microbiome Evolution

Recent estimates suggest 38 trillion bacteria cohabitate with the human host (also called 'commensals'); the majority of which exist in the GIT. Over 1000 species and many thousands of genetically unique strains have been identified, contributing to a broad and diverse microbiome. It is postulated that healthy individuals typically host appreciable levels of certain 'core' bacterial genera; *Faecalibacterium*, *Eubacterium*, *Clostridium*, *Blautia*, *Ruminococcus* and *Roseburia*. Additionally, healthy individuals tend to have higher levels of bacterial diversity. As such, it may seem logical to think that prescribing more probiotic species is better, however this is not the case.

## Clinically Effective Probiotics

As probiotic research is evolving, so too is the understanding of their specific functions and the profound impact they have on health. Historically, probiotics were thought to replenish or 'seed' commensal bacteria. This, now outdated, understanding suggested that by supplying commensal-like bacterial species, they would take up residence within the gut, where they could proliferate and restore balance to a dysfunctional microbiome by sheer weight of numbers. It is now known this is not how probiotics work. Instead, positive results are gained by introducing particular influential probiotic strains that are able to restore each patient's unique microbiome by promoting the growth of key commensal groups, but also by improving overall GIT function – not by simply 'adding to the masses'.

Recent research confirms that probiotic function changes not only from species to species, but also at a subspecies and strain level, highlighting the importance of prescribing only specific strains that have been genetically characterised with proven therapeutic benefits. While condition specific probiotics are appropriate for many patients for microbiome restoration, or to target particular health conditions, all patients may benefit from taking probiotics for microbiome maintenance, and to support their everyday health.

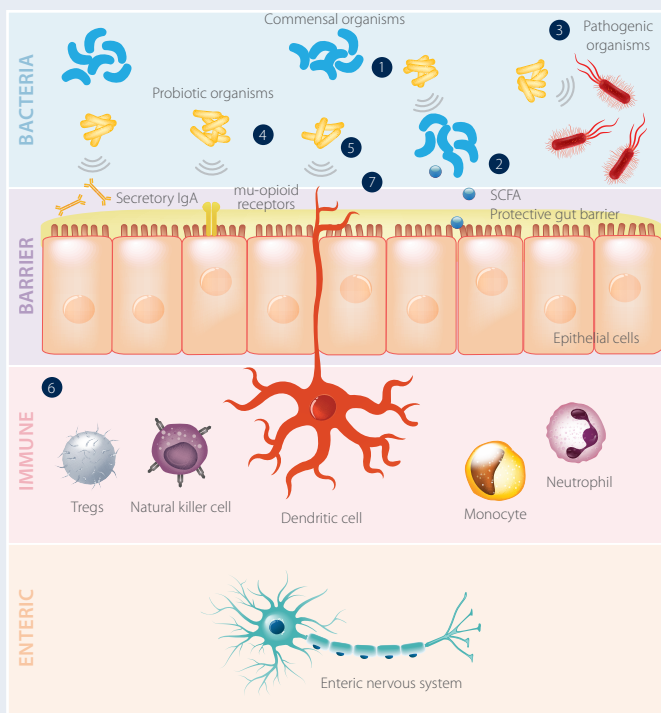


Figure 1: A Healthy Functioning Microbiome.

1. *Lactobacillus rhamnosus* (LGG®) and *Bifidobacterium animalis ssp lactis* (BB-12®) help to increase growth of the dominant bacterial commensal families, genera, species and strains.<sup>4</sup>
2. LGG® modulates the quantity, diversity (composition) and function of other bacteria and commensal organisms,<sup>5</sup> producing short-chain fatty acids (such as butyrate), which helps restore a healthy epithelial barrier and tight junction integrity.
3. *Saccharomyces cerevisiae* (boulardii) (SB) is a beneficial yeast that is able to displace pathogens and reduce antibiotic-associated loss of bacteria by rapidly restoring core bacteria.<sup>6,7</sup> BB-12® prevents the growth of pathogenic organisms by secreting antimicrobial peptides to prevent pathogen adhesion.<sup>8</sup>
4. Bind to mu-opioid gut receptors, such as *Lactobacillus acidophilus* (NCFM®) to reduce gut discomfort.<sup>9</sup>
5. Exerting a binding action to immune receptors i.e. *Lactobacillus plantarum* (HEAL9), *Lactobacillus paracasei* (8700:2), *Lactobacillus rhamnosus* (HN001™).<sup>10,11,12,13,14</sup>
6. Influencing inflammatory markers via T regulatory cells (Tregs) (LGG®, *Lactobacillus paracasei* - LP-33®).<sup>15,16,17</sup>
7. NCFM® interacts with dendritic cells, which help to modulate the immune response.



# Metagenics Delivering Industry Leading High Quality Probiotics Standards

## Activ-Vial™ - Advanced Fridge Free Technology

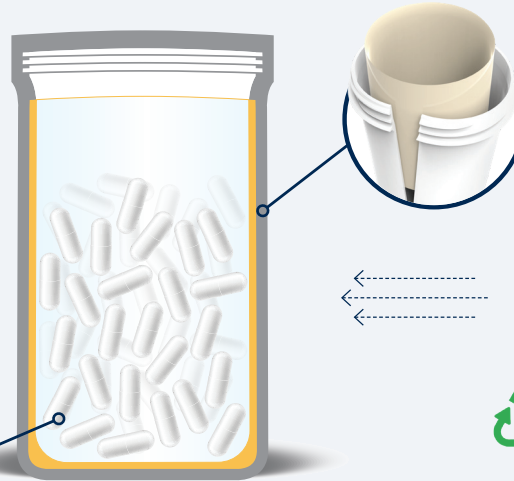
### ACTIV-VIAL™ BOTTLE

**Insulated double wall with active inner core of moisture absorbing polymers to:**

- ✓ Trap moisture
- ✓ Reduce light
- ✓ Insulate the probiotic

Protection remains active for the life of the product even after the bottle is opened.

Capsules see virtually no moisture because moisture is trapped before entering head space.



Built in desiccant wall

Incoming moisture



Activ-Vial™ packaging is recyclable\*

**TruQuality™**  
PURITY, POTENCY, TRANSPARENCY

Metagenics quality guarantee

\*The Activ-Vial™ bottle is a category 5 hard plastic. Kerbside recycling of this plastic in New Zealand may vary depending on the local council.

## Specialised Probiotic Processes – From Raw Material to Finished Product

### 1. FORMULATION



- ✓ 30+ Regulatory, Research and Scientific personnel analysing ingredients and formulation
- ✓ 100% researched strains and strengths
- ✓ Stable, therapeutic products

TESTING INCOMING RAW MATERIAL TO SUBSTANTIATE SUPPLIER CERTIFICATE OF ANALYSIS

### 2. INGREDIENT CHARACTERISTICS



- ✓ Strain expertise – researched probiotic strains and doses
- ✓ Optimised fermentation methods to foster core bacterial characteristics
- ✓ Raw materials undergo freeze drying to maintain ingredient integrity and stability

TESTING RAW MATERIAL TO CONFIRM STABILITY AND SPECIES IDENTIFICATION

### 4. FINISHED PRODUCT



- ✓ Correct finished product storage conditions to preserve stability
- ✓ Retention samples for testing at end of shelf life
- ✓ Labelling, identification and formulation in accordance to ISAPP standards (an association of academic and industrial scientists involved in research on fundamental and applied aspects of probiotics and prebiotics)

QUALITY TESTING EVERY 15 MINUTES DURING PACKAGING

### 3. MANUFACTURING AND MICROLABORATORY



- ✓ Manufactured by Metagenics, ensuring high quality probiotics, live and full strength at expiry
- ✓ Metagenics purpose-built, climate-controlled facilities, maintain stable conditions to protect probiotics against changes in temperature and humidity
- ✓ Finished product testing to confirm shelf-life, survival and metabolic activity

QUALITY TESTING EVERY 30 MINUTES DURING ENCAPSULATION

### 5. CLINICAL BENEFITS



- ✓ Microbiome confidence and expertise
- ✓ Efficacious – clinically demonstrated patient health outcomes
- ✓ Therapeutic results build patient trust and repeat consults
- ✓ Personalised options: specific health conditions, fridge or Activ-Vial™ room temperature storage, powder or capsule format



# Ultra Flora Intensive Care

Microbiome Restoration Formula.

**Contents:** 30 capsules (VegeCaps) (15 to 30 days) and 60 capsules (VegeCaps) (30 to 60 days)  
**Order Code:** UFIC30 (30 capsules), UFIC60 (60 capsules)  
**Storage:** Store at 2°C to 8°C (Refrigerate. Do not freeze.)

- Rebuilds native commensal flora populations.<sup>1,2</sup>
- Improves microbiome composition<sup>3</sup>, function of healthy gut flora and gut barrier integrity.
- Well researched strains and strengths<sup>5</sup> with clinically demonstrated patient health outcomes.<sup>6,7,8,9,10</sup>

### Each capsule contains:

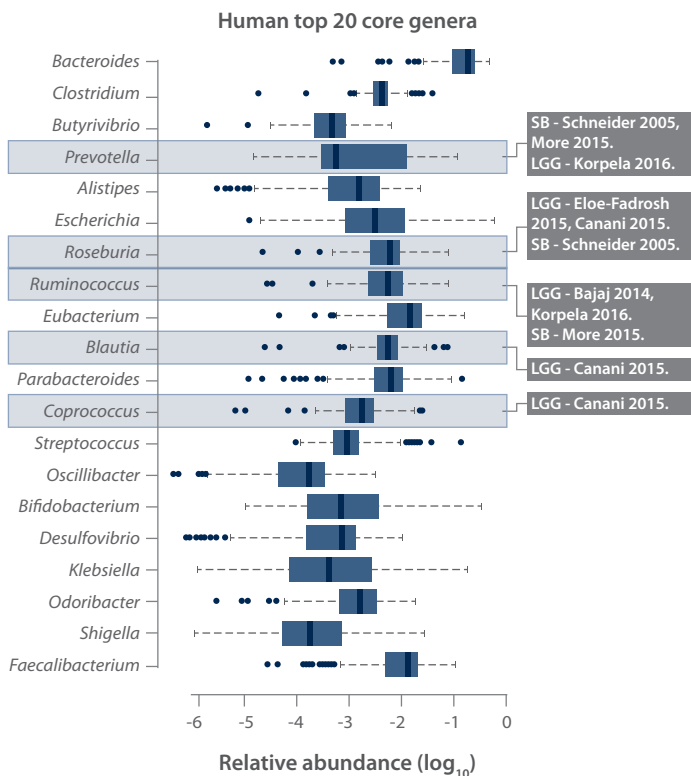
22.5 billion live probiotic organisms:	
<i>Lactobacillus rhamnosus</i> (LGG®)	10 billion CFU (organisms)
<i>Saccharomyces cerevisiae</i> (boulardii) (SB)	7.5 billion CFU (organisms)
<i>Bifidobacterium animalis ssp lactis</i> (BB-12®)	5 billion CFU (organisms)

### Directions for use: Adults:

**To rebuild healthy gut flora balance:** Take 1 capsule twice daily.  
**To assist gut health:** Take 1 capsule daily.

### Clinical Benefits:

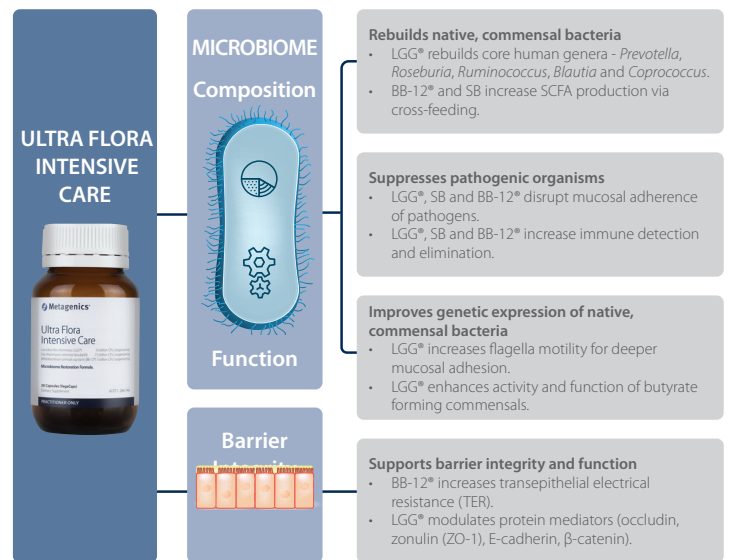
**Rebuilds native commensal flora of the gut microbiome.** Recent probiotic research<sup>11</sup> has shown that the key mechanism by which probiotics rebuild a disrupted microbiome is the modulation of native commensal bacterial populations. This is in contrast to the old understanding that probiotics repopulate by directly replacing and recolonising with specific probiotic strains and species.<sup>12,13</sup> The dominant bacterial families of the microbiome contain over 1,000 species and many thousands of genetically unique strains to total approximately 38 trillion organisms.<sup>14</sup>



Xiao L, et al. A catalog of the mouse gut metagenome. Nat Biotechnol. 2015 Oct;33(10):1103-8

**Figure 1: LGG® and SB Rebuild Core, Native Commensal Bacteria.**

**Ultra Flora Intensive Care contains three of the world's most widely researched probiotics (LGG®, SB and BB-12®) with documented outcomes and mechanisms for microbiome replenishment.<sup>15,16</sup>** These genetically unique probiotics support the growth and function of the dominant bacterial groups of the microbiome<sup>17,18</sup> and suppress pathogen growth.<sup>19</sup> In addition, BB-12®<sup>20</sup> and LGG®<sup>21</sup> strains specifically support the gut epithelial mucosa where the bacterial populations reside and interact systemically.



**Figure 2: Strain Specific Mechanisms to Rebuild Microbiome Composition and Function.**

**Ultra Flora Intensive Care provides LGG®, SB and BB-12® strains at a clinically validated dose for microbiome restoration and to assist gastrointestinal function.<sup>22,23,24</sup>** In addition, there is a substantial supportive body of evidence showing clinical improvement in patients with symptoms associated with microbiome depletion.<sup>25,26,27</sup>

### Contains live, original and clinically researched probiotic forms.

LGG®, SB and BB-12® are three of the world's most extensively researched probiotics with a range of clinically demonstrated health benefits. Factors that can influence probiotic activity include its genetic profile, manufacture (from culture to production) and storage. Live SB synthesises and secretes polyamines in order to exert its beneficial effects on the gastrointestinal mucosa, and inhibits pathogens.<sup>28</sup> Ultra Flora Intensive Care guarantees live SB CFU (colony forming units) at the label dose until expiry for clinical efficacy. LGG® is a genetically unique probiotic grown to a specific culturing and manufacturing process in order to provide reproducible and consistent clinical benefits in line with its wide body of research. Probiotics are genetically unique at a strain level and health benefits are not transferrable between strains (even within species).

Free from animal products, dairy protein, lactose, eggs, gluten, wheat, nuts, soy protein and salt. Free from artificial colours, sweeteners, flavours and preservatives.

LGG® is registered trademark of Chr. Hansen A/S.



# Ultra Flora Mother and Baby

Specialised Probiotic Support During Pregnancy, Breastfeeding and Infancy.

**Contents:** 60 capsules (VegeCaps) (30 to 60 days)

**Order Code:** UFMB

**Storage:** Store at 2°C to 8°C (Refrigerate. Do not freeze.)

- Assists baby's behavioural<sup>1</sup>, immune<sup>2</sup> and gastrointestinal health<sup>3</sup> when taken during pregnancy.
- Supports maternal flora balance<sup>4</sup>, glucose metabolism<sup>5</sup> and wellbeing.
- 2 in 1 formula that can be used by both mother and baby.

## Each capsule contains:

25 billion live probiotic organisms:

<i>Lactobacillus rhamnosus</i> (LGG®)	10 billion CFU (organisms)
<i>Bifidobacterium animalis ssp lactis</i> (BB-12®)	5 billion CFU (organisms)
<i>Bifidobacterium breve</i> (M-16v)	5 billion CFU (organisms)
<i>Bifidobacterium longum</i> (BB536)	5 billion CFU (organisms)

## Directions for use:

### Pregnant and breastfeeding women:

Take 1 capsule daily to support baby's development.

Take 1 capsule twice daily for maternal health.

**Infants (from birth):** Empty the contents of 1 capsule and mix with breast milk, formula or water once daily to support baby's gut flora and immune health.

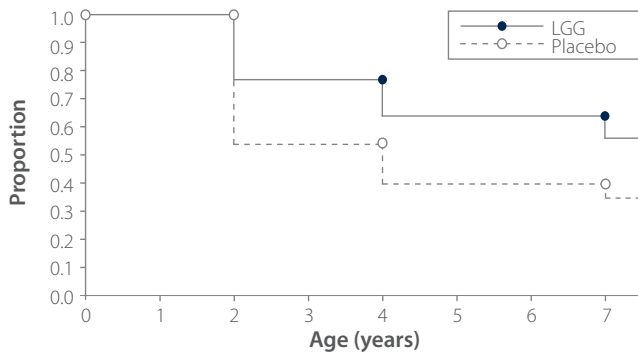
## Clinical Benefits:

### Assists behavioural complaints in later childhood (when taken during pregnancy and infancy).

In a 2015 randomised trial, 159 mother-baby pairs were given 10 billion LGG® daily prenatally and until the age of six months. At the age of 13 years, no children in the LGG® group had developed behavioural complaints associated with ASD, compared to 17% of the control group.<sup>6</sup> In addition, the study also measured the level of bifidobacterium species bacteria which was significantly lower in affected children. The regulation of emotional behaviour and the central GABAergic system may be via the vagus nerve (gut-brain axis).<sup>7</sup>

### 20 billion LGG® has demonstrated benefits for childhood atopy and immune development.<sup>8</sup>

LGG® is well known with multiple randomised trials showing a reduction in atopy (allergy and eczema) when taken in the last trimester and during infancy.<sup>9,10,11</sup> LGG® has a substantial body of evidence confirming efficacy at a dose of 20 billion per day in the last trimester and throughout breastfeeding, or 10 billion when given direct to infants.<sup>12</sup> The mechanism is understood to be an increase in transforming anti-inflammatory growth factor (TGF-β2) in breast milk. TGF-β2 is a key immunoregulatory anti-inflammatory factor that inhibits IgE synthesis.<sup>13</sup>

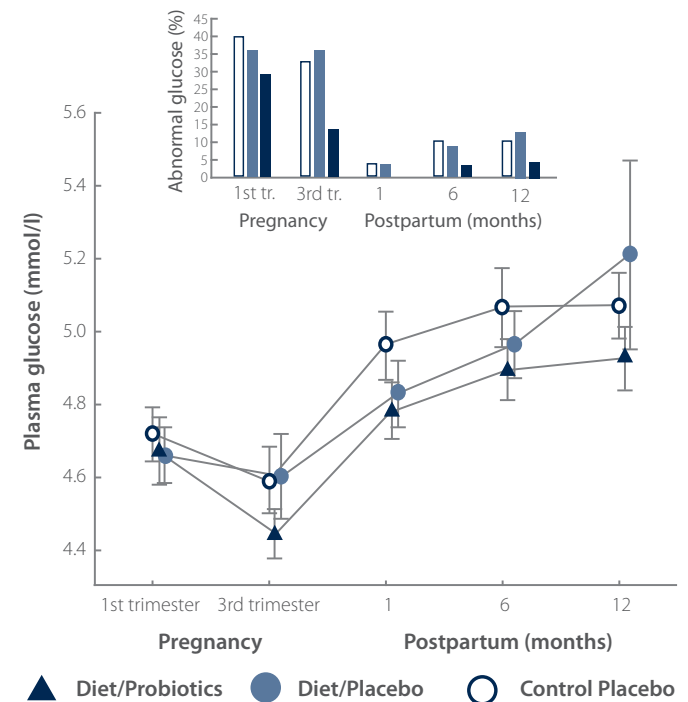


Kalliomäki M, Salminen S, Poussa T, Isolauri E. J. Probiotics during the first 7 years of life: a cumulative risk reduction of eczema in a randomized, placebo-controlled trial. *Allergy Clin Immunol.* 2007 Apr; 119(4):1019-21.

**Figure 1: 20 Billion LGG® Has Long Lasting Benefits in Childhood Atopy Prevention.**

### Up to 10% of pregnant women experience glucose transport problems.<sup>14</sup>

In late pregnancy, increases in serum insulin are often accompanied by insulin resistance. A 2009 randomised controlled trial demonstrated that a combination of 10 billion CFU of each strain (BB-12® and LGG®) assists maternal glucose metabolism when taken during pregnancy.<sup>15</sup> In 2011, LGG® and BB-12® (alongside dietary counselling) were also demonstrated to help reduce the occurrence of central weight gain following childbirth.<sup>16</sup>

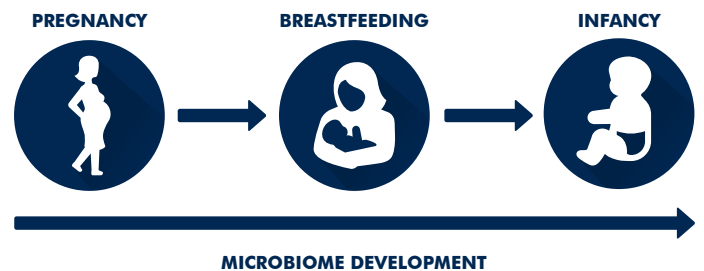


Lahtinen K, Poussa T, Isolauri E; Nutrition, Allergy, Mucosal Immunology and Intestinal Microbiota Group. Probiotics and dietary counselling contribute to glucose regulation during and after pregnancy: a randomised controlled trial. *Br J Nutr.* 2009 Jun;101(11):1679-87.

**Figure 2: LGG® and BB-12® Combination Regulates Pregnancy.**

### Promotes the growth of infant commensal flora populations.

Commensal microbiota colonisation is initiated by contact with vaginal microflora during birth, and matures under breast milk and environmental influences. LGG®, when given to infants, enhances the relative levels of key *bifidobacterium*, including *B. breve*.<sup>17</sup> *B. longum* (BB536) and *B. breve* (M-16v) are both human residential bacterial strains that have a modulating action on the gut microbiota of pregnant women and their infants.<sup>18</sup> A dose of 10 billion *B. longum* (BB536) can help to establish a healthy intestinal microbiota in early life and improve T helper 1 (Th1) immune response.<sup>19</sup>



Free from animal products, dairy protein, lactose, eggs, gluten, wheat, nuts, yeast, soy protein and salt. Free from artificial colours, flavours and preservatives.

ELISA tested to ensure 100% dairy free and gluten free product. D-lactate free.

LGG® is registered trademark of Chr. Hansen A/S.





# Ultra Flora Kids Care

Probiotic for Beneficial Gut Flora, Bowel Function and Immune Health in Children.

**Contents:** 50 g oral powder (12 to 25 days)

**Order Code:** FCK

**Storage:** Store at 2°C to 8°C. (Refrigerate. Do not freeze.)

- Maintains beneficial gut flora and bowel function.<sup>1,2</sup>
- Supports healthy immunity in children.
- Dairy free probiotic and prebiotic combination.

### Each dose (2 g) contains:

11 billion live probiotic organisms:

<i>Lactobacillus rhamnosus</i> (LGG®)	6 billion CFU (organisms)
<i>Lactobacillus acidophilus</i> (NCFM®)	2.5 billion CFU (organisms)
<i>Bifidobacterium lactis</i> (Bi-07)	2.5 billion CFU (organisms)
Fructooligosaccharides	1 g

### Directions for use: Suitable for children aged 0 to 12 years:

**Children up to 12 years:** Take 2/3 of a metric teaspoon (2 g) once daily, mixed into cool or warm (not hot) liquids or food.

### Clinical Benefits:

The average Australian and New Zealand child can have up to 10 colds per year,<sup>3,4</sup> with 70% of children (2 years of age and over) in day care;<sup>5</sup> an environment understood to triple the risk of becoming sick.<sup>6</sup> A randomised, double-blind, placebo-controlled trial measured the effect of NCFM® and Bi-07 on immunity in 326 children aged between three to five years old in day care. There was a significant reduction in the incidence and number of sick days (Figure 1) in children taking NCFM® and Bi-07. Daily probiotic supplementation also reduced the use of antibiotics as well as days missed from school and day care. The study demonstrated the combination of NCFM® and Bi-07 worked better than NCFM® alone.<sup>7</sup> Known for its immune-modulating actions.

**Ultra Flora Kids Care is scientifically formulated with extensively researched strains that have been validated results to support gastrointestinal health and bowel function.** LGG® is one of the world's most researched strains, with over 30 studies in children. This strain has a balancing effect in microbial composition, increasing lactobacilli levels and bifidobacteria species, stimulating short chain fatty acid (SCFA) production, while also normalising and restoring the intestinal mucosal barrier.<sup>8</sup> Utilising specific prebiotics (i.e. fructooligosaccharides) and probiotic strains, such as LGG®, NCFM® and Bi-07 provides an array of benefits for children. This combination supports prebiotic metabolism, colonic function and regularity, as well as healthy microbiome composition; thereby assisting immune responses including minimising risk of inflammatory issues, pathogenic activity and allergies.<sup>9,10,11</sup>

**If children have been taking antibiotics, Ultra Flora Kids Care may assist in restoring healthy flora levels that have been disrupted.** Research undertaken in 2015 during the winter period found that 51% of 0 to 4 year olds took at least one antibiotic.<sup>12</sup> LGG® has been shown to reduce the use of antibiotics for common infections in both infants and children.<sup>13</sup> Further to this, a 2018 Meta-analysis of infants and children who received probiotics (including LGG®) to prevent acute illnesses had a lower risk of being prescribed antibiotics, relative to those who received placebo.

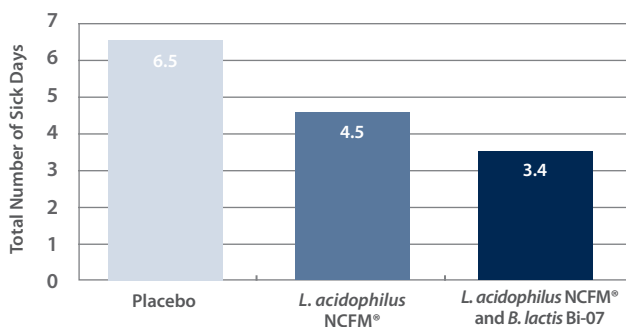


Figure 1: Bi-07 and NCFM® Has Been Shown to Support Immunity.



# Ultra Flora Spectrum

Multi-Strain Complex with Five Researched Strength, Scientifically Validated Probiotics.

**Contents:** 60 capsules (VegeCaps) (60 days)

**Order Code:** UFS60 (60 Capsules)

**Storage:** Store at 2°C to 8°C (Refrigerate. Do not freeze.)

- Help to maintain healthy gut and immune wellbeing.
- Contains 52.5 billion live organisms from five probiotics at researched strengths.
- Combines 5 billion (250 mg) *S. boulardii* with scientifically validated probiotic bacterial strains.

### Each capsule contains:

52.5 billion live probiotic organisms:

<i>Lactobacillus acidophilus</i> (NCFM®)	20 billion CFU (organisms)
<i>Bifidobacterium lactis</i> (Bi-07)	12.5 billion CFU (organisms)
<i>Lactobacillus rhamnosus</i> (HN001™)	10 billion CFU (organisms)
<i>Bifidobacterium animalis ssp lactis</i> (HN019™)	5 billion CFU (organisms)
<i>Saccharomyces cerevisiae</i> (boulardii) (SB)	5 billion CFU (organisms) (250 mg)

**Directions for use: Adults:** Take 1 capsule daily.

### Clinical Benefits:

#### Maintain gastrointestinal (GI) comfort and healthy digestive function:

***Lactobacillus acidophilus* (NCFM®)** is one of the world's most researched acidophilus strains and has been used exclusively in Metagenics probiotics for almost 30 years. Studies have shown benefits for patients experiencing digestive discomfort. For example, a 2014 clinical trial found a modulatory effect of colonic mucosal opioid receptor expression and activity in patients with functional abdominal pain at 20 billion CFU/day.<sup>1</sup> Further, a 2017 Australian randomised trial combining NCFM® and Bi-07 showed a significant reduction in the duration of pain post colonoscopy.<sup>2</sup> SB is understood to support healthy GI function and has been shown to increase short chain fatty acid production.<sup>3</sup> NCFM® is also able to maintain beneficial intestinal flora to help restore GI wellbeing.<sup>4</sup>

**Regulation of transit time and flora balance: *Bifidobacterium animalis ssp lactis* (HN019™)** has been clinically trialled in 2011, demonstrating a decrease in gut transit time at a daily dose of 1.8 billion CFU and a reduction in the frequency of functional GI symptoms.<sup>5</sup> HN019 has also been researched in combination with NCFM® and HN001™.<sup>6,7</sup> SB's effects have been shown to be dose dependent in a 2010 systematic review and meta-analysis, which included a study involving 3,000 subjects.<sup>3</sup> For example, 5 billion CFU (250 mg) SB may be used to maintain gut health by preventing pathogenic attachment to intestinal receptors.<sup>3</sup>

**Immune wellbeing: *Lactobacillus rhamnosus* (HN001™)** is a well-researched probiotic with a wide body of evidence for immune wellbeing. A 2018 randomised, controlled trial shows a reduction in *Staphylococcus aureus* in the stool and the GI tract at a dose of 10 billion CFU per day.<sup>8</sup> After four weeks, presence of *S. aureus* in the GI tract was reduced by 73%.<sup>8</sup> HN019™ has been shown to help improve the body's defence against infection through strengthening immune function and specific immune cell activity (phagocytes and natural killer cells).<sup>9</sup>

Free from animal products, dairy protein, lactose, eggs, gluten, wheat, nuts, soy protein, starches and salt. Free from artificial colours, sweeteners, flavours and preservatives.

NCFM® is a registered trademark of DuPont.



# Ultra Flora Restore Dairy Free

Maintain Digestive Health and Wellbeing.

**Contents:** 30 capsules (VegeCaps) (30 days) and 60 capsules (VegeCaps) (60 days)  
**Order Code:** UFRDF30 (30 capsules), UFRDF (60 capsules)  
**Storage:** Store below 25°C. Activ-Vial™ desiccant lined bottle guarantees live and effective probiotics without refrigeration.

- Maintain healthy gut flora balance.<sup>1,2</sup>
- Assist digestive health and wellbeing.<sup>4</sup>
- No refrigeration required - remains full strength for the length of shelf life (when stored below 25°C), for improved patient compliance.

### Each capsule contains:

25 billion live probiotic organisms:

<i>Lactobacillus acidophilus</i> (NCFM®)	11.5 billion CFU (organisms)
<i>Bifidobacterium lactis</i> (Bi-07)	11.5 billion CFU (organisms)
<i>Lactobacillus rhamnosus</i> (LGG®)	2 billion CFU (organisms)

### Directions for use:

**Adults and children over five years:** Take 1 capsule daily.

### Clinical Benefits:

**Aids general health and wellbeing:** One in three probiotic consumers take a probiotic to maintain gut health and immune wellbeing.<sup>1</sup> Ultra Flora Restore supports gut function, maintains healthy flora balance and supports wellbeing via dendritic cell regulation.<sup>1</sup>

**May assist in maintaining healthy gut flora balance:** The probiotic strains in Ultra Flora Restore have been shown to assist in maintaining and restoring the normal healthy flora<sup>1</sup> by utilising a wide variety of dietary fibres to create food for the native commensal flora<sup>1</sup>. The NCFM® strain also produces key antimicrobial substances such as bacteriocins<sup>1</sup> to suppress the growth of opportunistic pathogenic organisms.

**May maintain healthy gastrointestinal function:** Healthy intestinal microflora populations exert many benefits for digestive health - assisting bloating, discomfort and function. The NCFM® strain has a unique ability to activate the opioid receptors in the gut, and has research in combination with Bi-07 in relieving gut pain and bloating.<sup>1</sup> LGG® has been shown to improve intestinal barrier function by protecting intestinal epithelial cells.<sup>1</sup>

NCFM®, Bi-07 and LGG® are also available within Ultra Flora Plus Dairy Free, an oral powder. This powdered format may be more appropriate for certain patient groups (e.g. elderly or those with dysphagia).

Free from animal products, dairy protein, lactose, eggs, gluten, wheat, nuts, soy protein and salt. Free from artificial colours, flavours and preservatives.

NCFM® is a registered trademark of DuPont.  
 LGG® is registered trademark of Chr. Hansen A/S.



# Digestex

Triple Action Digestive Support.

**Contents:** 30 tablets (15 days)  
**Order Code:** DGX  
**Storage:** Store below 30°C

Contains traditional herbs for:

- Relief of digestive discomfort.
- Stimulation of digestive secretions.
- Digestive motility.

### Each tablet contains:

Dry herbal extracts:

<i>Taraxacum officinale</i> (Dandelion), root	750 mg
Derived from dry root	3 g
<i>Filipendula ulmaria</i> (Meadowsweet), herb	200 mg
Derived from dry herb	2 g
<i>Gentiana lutea</i> (Gentian), root	250 mg
Derived from dry root	1 g
<i>Melissa officinalis</i> (Lemon balm), leaf	200 mg
Derived from dry leaf	1 g
<i>Cinnamomum verum</i> (Cinnamon), stem bark	100 mg
Derived from dry stem bark	1 g
<i>Zingiber officinale</i> (Ginger), rhizome	47 mg
Derived from dry rhizome	750 mg

### Directions for use:

**Adults:** Take 1 tablet twice daily with food.

### Clinical Benefits:

**Relief of digestive discomfort.** Digestex provides digestive support<sup>1</sup> with traditional Western herbs to relieve symptoms such as bloating and stomach discomfort.<sup>2,3</sup> Meadowsweet, traditionally used to soothe and protect the gastrointestinal tract<sup>4</sup> is combined with carminative and anti-spasmodic herbs<sup>5</sup> to help relieve intestinal spasm by relaxing intestinal muscles.<sup>6</sup>

**Stimulation of digestive secretions with bitter herbs such as dandelion<sup>7,8</sup> and gentian.** Gentian has traditionally been given orally to increase saliva, gastric and bile secretions.<sup>9</sup> Bitter herbs do not need to be tasted to stimulate upper digestive function<sup>10</sup> as they activate taste receptors (TASR2) located throughout the gastrointestinal tract.<sup>11</sup> TASR2 hormonal and neuronal signalling may affect the secretion of pancreatic enzymes and bile helping to regulate stomach function and acid production.<sup>12</sup>

**Digestive motility.**<sup>13</sup> Ginger stimulates antral contractions, reduces postprandial antral area, and accelerates gastric emptying.<sup>14</sup> Animal studies indicate that ginger contains a combination of spasmogenic (cholinergic) and spasmolytic (calcium antagonist) constituents<sup>15</sup> to support gastric motility<sup>16</sup> and aid digestion.<sup>17,18</sup>

**Part of the Metagenics Clinical Detoxification Program.** Digestex contains the traditional liver herb dandelion to assist digestive processes<sup>19</sup>, and ginger to assist gastric motility for improved digestive transit time. Activation of gastrointestinal bitter receptors is thought to indirectly improve the elimination of absorbed toxins from the gut epithelium.<sup>20</sup>

Free from animal products, dairy protein, lactose, eggs, gluten, wheat, nuts, yeast, soy protein and salt. Free from artificial colours, sweeteners, flavours and preservatives. Contains methyl salicylate which is a natural component of *filipendula ulmaria*.



# Ultra Flora LGG® Forte

Double Strength, Researched, Authentic LGG®.

**Contents:** 60 capsules (VegeCaps) (60 days)

**Order Code:** UFLC

**Storage:** Store below 25°C. Activ-Vial™ desiccant lined bottle guarantees live and effective probiotics without refrigeration.

- For a wide range of microbiome clinical protocols and for immune conditions and gastrointestinal function.
- Contains the authentic LGG® strain and supply chain, with over 20 years of clinical research.
- No refrigeration required - remains full strength for the length of shelf life (when stored below 25°C), for improved patient compliance.

**Each capsule contains:**

20 billion live probiotic organisms:

<i>Lactobacillus rhamnosus</i> (LGG®)	20 billion CFU (organisms)
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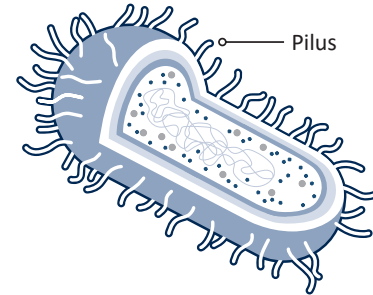
**Directions for use: Adults:** Take 1 capsule daily.

**Clinical Benefits:**

LGG® is one of the world's most researched probiotic strains with 1000+ scientific publications and over 300 in humans.<sup>1</sup> Isolated by Gorbach and Goldin in 1985, LGG® has unique hair-like appendages called pili which increase its persistence in the gastrointestinal tract where it is able to exert positive health benefits (see Figure 1).<sup>2</sup> Not all *Lactobacillus rhamnosus* GG probiotics are comparable; commercialised GG probiotics (against LGG®) show major DNA segments to be missing with pili encoding genes among these (Figure 2). Manufacturing and growth mediums can also effect both the genetic expression and survival of pili. Metagenics have exclusively used trademarked LGG® since 2008, guaranteeing strain and manufacturing authenticity, and matching the majority of human clinical trials.

**LGG® has demonstrated the following mechanisms:**

- Increases the levels of commensal flora in the gastrointestinal tract.<sup>5</sup>
- Increases the formation of short chain fatty acids (SCFAs), which facilitate essential gastrointestinal functions.<sup>6</sup>
- Improves and supports intestinal barrier integrity.<sup>7</sup>



**Figure 1: LGG® with Pili (Hair-Like Appendages) to Maximise Mucosal Adhesion.**

An increasing number of probiotic customers prefer the convenience of shelf storage while not compromising on quality. Activ-Vial® is a specialised type of packaging that has an in-built desiccant sleeve consisting of moisture absorbing polymers within the bottle wall, for maximum surface area to ensure the probiotic strains are kept full strength, live and effective throughout the duration of use, until expiry.

Ultra Flora LGG® Forte can be kept at room temperature (up to 25°C) because it is kept live and stable by the Activ-Vial™ bottle moisture defence technology. Metagenics manufacturing, testing and shipping procedures ensure all probiotics are live and effective until expiry.

Free from animal products, dairy protein, lactose, eggs, gluten, wheat, nuts and soy protein. Free from artificial colours, flavours and preservatives.

LGG® is a registered trademark of Chr. Hansen A/S.

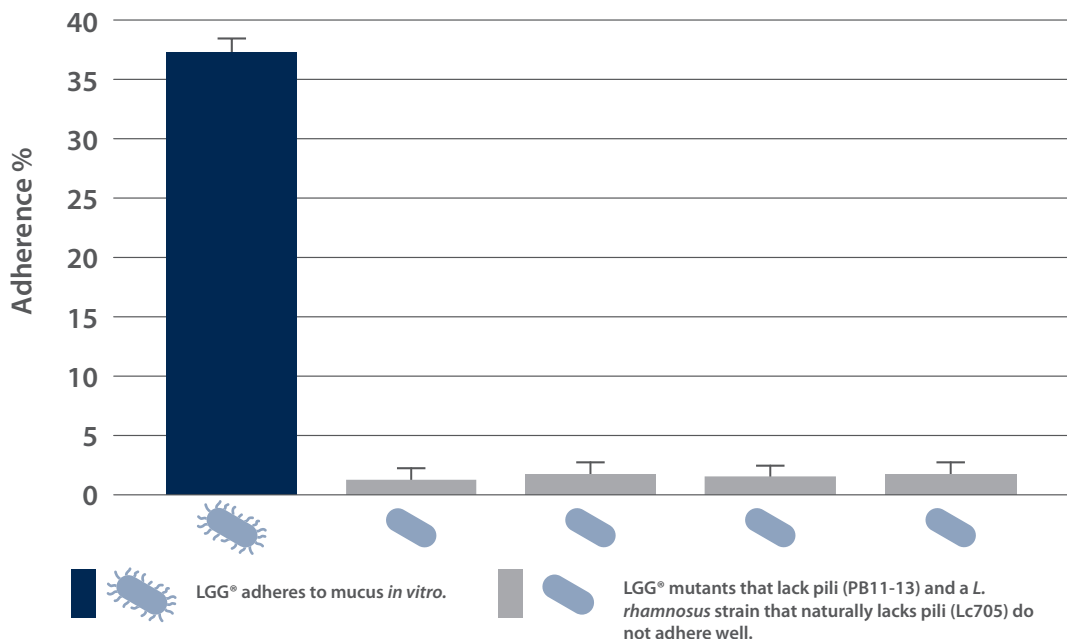


Figure adapted from Rasinkangas et al., 2014 Appl Environ Microbiol.

**Figure 2: LGG® Mucus Adhesion v GG Mutants.**





# Ultra Flora GI Soothe

Specialised Probiotic to Reduce the Occurrence and Symptoms Associated with Medically Diagnosed IBS.

**Contents:** 30 capsules (VegeCaps) (30 days) or 60 capsules (VegeCaps) (60 days)  
**Order Code:** PBXC30 (30 capsules) and PBXC (60 capsules)  
**Storage:** Store at 2°C to 8°C (Refrigerate. Do not freeze.)

Ingredients in Ultra Flora GI Soothe have been clinically shown to or may help to:

- Assist in the management of medically diagnosed irritable bowel syndrome (IBS).<sup>1</sup>
- Reduce occurrence of IBS symptoms including, gastrointestinal pain, discomfort, bloating and excessive gas.<sup>2</sup>
- Contains clinically proven, extensively researched exclusive probiotic strain *Lactobacillus plantarum* 299v.

### Each capsule contains:

20 billion live probiotic organisms:  
*Lactobacillus plantarum* 299v 20 billion CFU (organisms)

### Directions for use:

**Adults:** Take 1 to 2 capsules daily.

### Clinical Benefits:

*L. plantarum* 299v is an extensively researched probiotic strain having been investigated in at least 140 studies to date, with more than 50 clinical trials.<sup>11</sup>

**Around 1 in 5 Australians experience the unpleasant symptoms of IBS at some stage including abdominal pain, mucus in stools, and diarrhoea.**<sup>3</sup> A randomised, double-blind placebo-controlled trial tested the efficacy of *L. plantarum* 299v in 40 people with IBS over four weeks. All patients treated with *L. plantarum* 299v reported significant improvement in stool frequency and complete resolution of their abdominal pain (Figure 1).<sup>4</sup> An overall improvement in all IBS symptoms were noted in 95% of patients in the treatment group, compared to only 15% in the placebo group (Figure 2).<sup>5</sup> Another study involving 204 adults with medically diagnosed IBS found significant symptom improvement within 2 to 4 weeks including abdominal bloating, pain and bowel movements.<sup>6</sup>

**Defective mucosal intolerance and inflammation:** Disruption of the intestinal barrier can lead to inappropriate inflammatory responses which may occur in IBS. Studies have shown *L. plantarum* 299v to have an effect on barrier function by decreasing permeability.<sup>7</sup> *L. plantarum* 299v has also been shown to exert antipathogenic activity via the production of antimicrobial compounds and inhibiting pathogen adhesion.<sup>8</sup>

**A 2016 randomised control trial shows *L. plantarum* 299v reduces salivary cortisol during stress.**<sup>9</sup> Stress is well recognised as a common trigger for IBS impacting gut secretions, motility, sensitivity and intestinal permeability. A 2016 study on 41 students showed a significant difference in salivary cortisol levels after only 10 days of taking 10 billion CFU.<sup>10</sup>

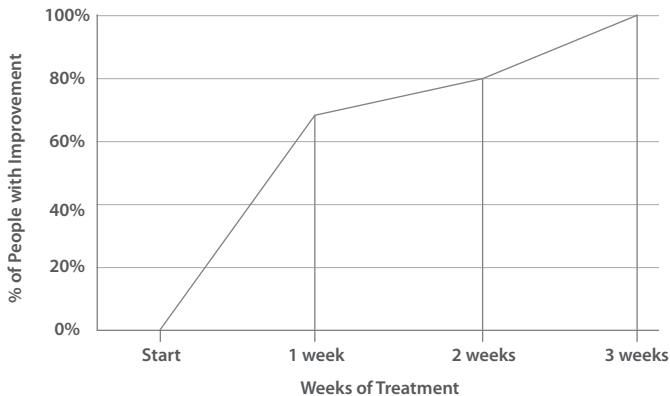
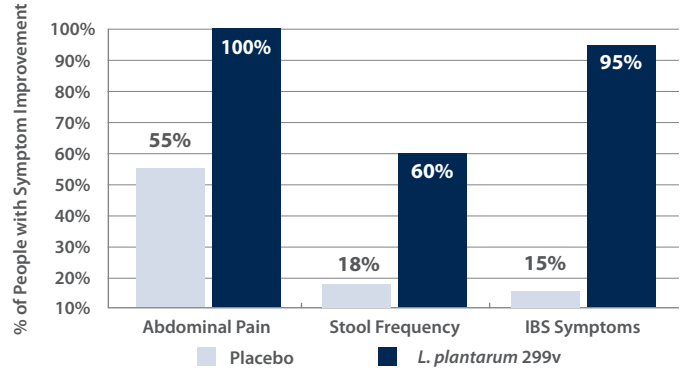


Figure 1: Change in IBS Abdominal Pain From *L. plantarum* 299v.



Niedzielin K, Kordecki, H and Birkenfeld, B. A controlled, double-blind, randomized study on the efficacy of *Lactobacillus plantarum* 299v in patients with Irritable Bowel Syndrome. Eur J Gastro Hepat 2001; 13:1143-7.

Figure 2: *L. plantarum* 299v in IBS.

A 12-week RCT published in 2021 showed 299v alleviated IBS symptoms of abdominal pain, flatulence, bloating, constipation, as well as improving the feeling of incomplete/urgent evacuation by 50% after 4 weeks (Figure 3 [A] and [B]), and decreased diarrhoea severity and frequency. 299v's significant and continuous reduction of overall symptom scores observed is compelling for IBS sufferers. Further, long-term treatment with 299v was well tolerated by 94% of the patients and quality of life increased, encompassing mental well-being and influence on everyday life.<sup>12</sup>

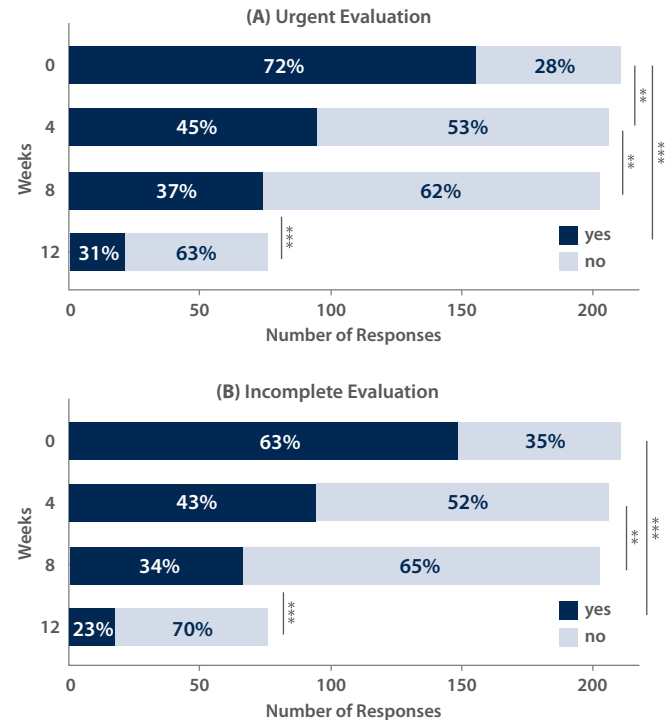


Figure 3: Percentage Distribution of Urgent and Incomplete Evacuation with 299v Supplementation.

Free from animal products, corn, dairy protein, lactose, FODMAPs, eggs, gluten, wheat, nuts, yeast and soy protein. Free from artificial colours, sweeteners, flavours and preservatives.





# Ultra Flora GI Regulate

Specialised Probiotic and Prebiotic for Healthy Bowel Function.

**Contents:** 150 g powder (30 days)

**Order Code:** GIREG

**Storage:** Store at 2°C to 8°C (Refrigerate. Do not freeze.)

Ingredients in Ultra Flora GI Regulate have been clinically shown to:

- Support healthy bowel function.<sup>1</sup>
- Reduce constipation<sup>19</sup> and irritable bowel syndrome (IBS) symptoms<sup>2,3,4,5</sup> via modulation of small intestinal bacterial overgrowth (SIBO),<sup>6</sup> methane levels,<sup>7</sup> short chain fatty acids (SCFAs) (i.e. butyrate),<sup>8</sup> intestinal barrier integrity<sup>9,10</sup> and inflammation.<sup>11</sup>
- Low reactive, FODMAP free, powdered prebiotic and probiotic food for sensitive patients.

**Each serve (5 g) contains only:**

	Per 5 g	Per 100 g
Partially Hydrolysed Guar Gum (PHGG)	5 g	
<i>Lactobacillus plantarum</i> 299v	20 billion CFU (organisms)	
Energy	44 kJ (11 Cal)	879 kJ (210 Cal)
Protein	<1 g	1.1 g
Fat - total	<1 g	<1 g
Carbohydrate		
- total	<1 g	13.1 g
- sugars	<1 g	<1 g
Dietary fibre	3.9 g	78.3 g
Sodium	<5 mg	99 mg

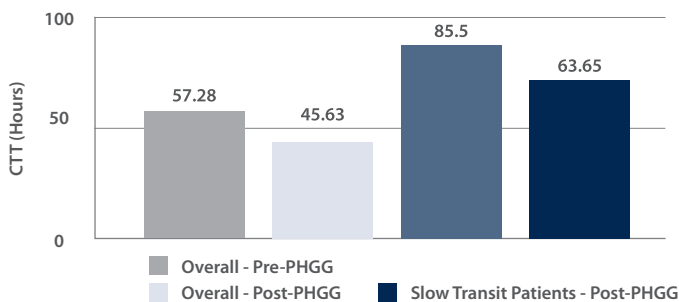
Average values given.

**Serving suggestion: Adults:** Add 2 1/2 metric teaspoons (5 g) to 200 mL of water and stir until dissolved. Take once daily.

Ultra Flora GI Regulate is an easily dissolved and non-flavoured powder, making it suitable for mixing with other powdered supplements.

## Clinical Benefits:

**Reduction of chronic constipation and IBS symptoms:** Both IBS and non IBS related constipation are commonly occurring health issues in Australia, however, non IBS related constipation is twice as common in Australia as IBS.<sup>12,13</sup> *Lactobacillus plantarum* 299v is extensively researched and shown to reduce a range of IBS symptoms.<sup>14</sup> PHGG is a selective prebiotic, used as a fuel by butyrate producing bacteria.<sup>15</sup> A meta-analysis of seven randomised trials<sup>16</sup> of PHGG found a reduction in chronic constipation (Figure 1) while several randomised trials,<sup>17,18</sup> found a significant decrease in IBS symptoms.

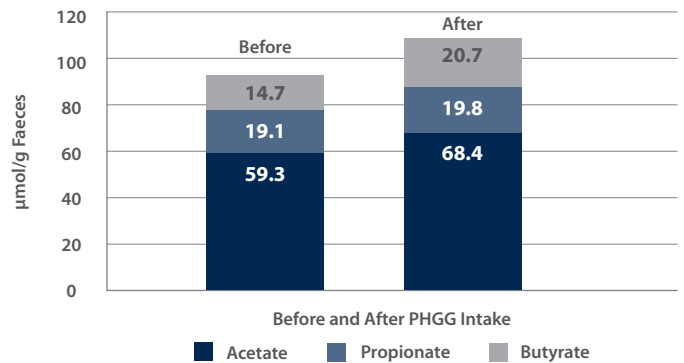


Polymeros D, Beintaris I, Gaglia A, Karamanolis G, Papanikolaou IS, Dimitriadis G, Triantafyllou K. Partially hydrolyzed guar gum accelerates colonic transit time and improves symptoms in adults with chronic constipation. *Dig Dis Sci.* 2014 Sep;59(9):2207-14. doi: 10.1007/s10620-014-3135-1.

**Figure 1: PHGG Reduces Colon Transit Time in Patients With Chronic Constipation.**

**SIBO, methane and butyrate regulation;** PHGG is fermented by large intestinal commensal bacteria increasing SCFA production particularly butyrate<sup>19</sup> (Figure 2), as well as assisting colonic blood flow and epithelial repair.<sup>20</sup> PHGG influences gut motility, secretions and vagal modulation of contraction,<sup>21</sup> and has been shown to reduce methane levels. Methane production is implicated in the reduction in 5HT (gut serotonin) levels and reduced intestinal motility.<sup>22</sup> Excessive production of methane has been linked to gastrointestinal issues such as SIBO, chronic constipation, IBS and slow transit time.<sup>23,24</sup> PHGG may therefore assist in reducing severity of these conditions and symptoms. Research of PHGG has also shown other benefits, including:

- Reduced methane excretion<sup>25</sup>
- Improved effectiveness of antibiotic SIBO treatment (when used with PHGG)<sup>26</sup>
- Improvements in chronic constipation<sup>27</sup>



Ohashi Y, Sumitani K, Tokunaga M, Ishihara N, Okubo T, Fujisawa T. Consumption of partially hydrolysed guar gum stimulates Bifidobacteria and butyrate-producing bacteria in the human large intestine. *Benef Microbes.* 2015;6(4):451-5. doi: 10.3920/BM2014.0118.

**Figure 2: Effect of PHGG on Mean SCFA Concentration in Human Faeces (µmol/g Faeces).**

**Visceral hypersensitivity, abdominal pain and inflammation;** Probiotics can help modulate visceral hypersensitivity (increased pain sensitivity) to reduce abdominal pain<sup>28</sup> and improve patient comfort. Both *L. plantarum* 299v and PHGG have been shown to reduce abdominal pain by 50%,<sup>29</sup> which can be a key symptom driving patients to seek health advice. Gut inflammation can also contribute to pain and associated symptoms that may benefit from probiotic strains, such as *L. plantarum* 299v, shown to exert a modulatory effect on the inflammatory response of epithelium,<sup>30</sup> helping to improve gastrointestinal comfort and health.

Free from animal products, corn, dairy protein, lactose, eggs, gluten, wheat, nuts, yeast, salt and FODMAPs. Free from artificial colours, sweeteners, flavours and preservatives.

**probi**<sup>®</sup>



# Laxatone

Herbal Bowel Support.

**Contents:** 30 capsules (VegeCaps) (8 or 30 days)

**Order Code:** LXT

**Storage:** Store below 30°C

The ingredients in Laxatone have been traditionally used to:

- Assist in the relief and treatment of constipation.<sup>1</sup>
- Relieve flatulence and intestinal spasm.<sup>2</sup>
- Tiered dose for acute and chronic conditions.

### Each capsule contains:

Dry herbal extracts:

<i>Zingiber officinale</i> (Ginger), rhizome	100 mg
Derived from dry rhizome	500 mg
<i>Matricaria chamomilla</i> (German chamomile), flower	83 mg
Derived from dry flower	500 mg
<i>Frangula purshiana</i> (Cascara/Rhamnus), stem bark	100 mg
Derived from dry stem bark	400 mg
<i>Cinnamomum cassia</i> (Cinnamon), stem bark	31 mg
Derived from dry stem bark	375 mg
<i>Rheum officinale</i> (Rhubarb), root	25 mg
Derived from dry root	250 mg

### Directions for use:

**Adults: As a laxative to assist in the relief of constipation:** Take 2 capsules twice daily.

**To produce more regular bowel movements:** Take 1 capsule daily.

### Clinical Benefits:

**Assist in the relief and treatment of constipation:** *Frangula purshiana* is traditionally used in Western herbal medicine to treat constipation and regulate bowel movements.<sup>1</sup> At a lower dose of 1 capsule a day, *Frangula purshiana* helps to regulate bowel movements via stimulation of peristalsis and increasing fluid secretion.<sup>3</sup> At a higher dose of 4 capsules a day, components in the herb activate the underlying smooth muscle cells of the large intestine, triggering muscular contractions to relieve constipation.<sup>4</sup> *Rheum officinale* is also traditionally used to aid the relief of constipation via an increase in bile flow.<sup>5</sup>

**Flatulence and intestinal spasm:** Laxatone contains carminative herbs; *Cinnamomum cassia* and *Zingiber officinale* to assist in the management of non-specific dyspepsia and reduce intestinal spasm that may occur with laxative herbs.<sup>6,7</sup> *Zingiber officinale* has been shown in an animal study to directly inhibit smooth muscle activity, reducing intestinal spasms.<sup>8</sup>

Free from animal products, dairy protein, lactose, eggs, gluten, wheat, nuts, yeast, soy protein and salt. Free from artificial colours, flavours and preservatives.



# Gastro Aid

Heartburn and Dyspepsia Relief.

**Contents:** 60 capsules (VegeCaps) (20 to 30 days)

**Order Code:** GASA

**Storage:** Store below 30°C

Ingredients in Gastro Aid have been shown or traditionally used:

- For treatment of indigestion, heartburn and reflux, and to soothe mucus membranes.<sup>1,2,3,4</sup>
- To relieve symptoms of non-specific dyspepsia.<sup>1</sup>
- To aid digestion and support gastric motility and bile production.<sup>5,6,7</sup>

### Each capsule contains:

Dry herbal extracts:

<i>Curcuma longa</i> (BCM-95™ Turmeric), root and rhizome	100 mg
Derived from dry root and rhizome	2.5 g
<i>Glycyrrhiza glabra</i> (GutGard® Licorice), root	75 mg
Derived from dry root	2.1 g
<i>Cynara scolymus</i> (Globe artichoke), leaf	80 mg
Derived from dry leaf	2 g
<i>Foeniculum vulgare</i> (Fennel), seed	167 mg
Derived from dry seed	1.7 g
<i>Matricaria chamomilla</i> (Chamomile), flower	83 mg
Derived from dry flower	500 mg

### Directions for use:

**Adults: Acute:** Take 1 capsule three times daily.

**Maintenance:** Take 1 capsule twice daily.

### Clinical Benefits:

**Multiple clinical trials have shown ingredients in Gastro Aid to be effective in the treatment of upper gastrointestinal symptoms such as indigestion and reflux:**<sup>1,2,3</sup> GutGard® Licorice has been shown to significantly improve symptoms of non-specific dyspepsia.<sup>1,4</sup> A randomised, double-blind, placebo controlled study on 50 subjects with non-specific dyspepsia showed that, compared to placebo, patients experienced an average of 66% improvement in their Nepean index scores after taking 2.1 g of GutGard® Licorice twice daily for 30 days.<sup>1</sup> Another multicentre, randomised, double-blind, placebo controlled study on 106 subjects with non-specific dyspepsia showed 86% of participants experienced improvements in their symptoms after taking 500 mg of turmeric twice a day for seven days.<sup>3</sup> Typical symptoms of non-specific dyspepsia include upper abdominal pain, indigestion, belching, bloating, acid regurgitation (reflux) and heartburn.<sup>1</sup>

**Demulcent activity to soothe mucus membranes:**<sup>2</sup> Licorice has been traditionally used for its demulcent activity in Western herbal medicine.<sup>2</sup> Licorice may help to heal damaged gut mucosa by increasing local concentrations of prostaglandins that promote mucus production and cell proliferation in the stomach.<sup>4</sup>

**Aid digestive function:**<sup>7</sup> Multiple ingredients in Gastro Aid support digestion, including improving gastric motility and bile production.<sup>5,6,7</sup> Turmeric has been shown in *in vitro* and *in vivo* trials, to suppress gastric acid production and reduce gastric acid-induced damage via the inhibition of histamine<sup>2</sup> receptors.<sup>8</sup> Fennel exerts its action by supporting gastric motility and globe artichoke supports bile acid production.<sup>5,7</sup>

Free from animal products, dairy protein, lactose, eggs, gluten, wheat, nuts, yeast, soy protein and salt. Free from artificial colours, flavours and preservatives.





# Vegetarian Digestive Enzymes

Vegetarian Enzymes to Support Digestion.

**Contents:** 90 capsules (VegeCaps) (30 days)  
**Order Code:** VDE  
**Storage:** Store below 30°C

- Assists in the digestion of protein, carbohydrates and fat.<sup>1,2,3</sup>
- Assists the digestion of plant foods containing cellulose.<sup>2</sup>
- Suitable for vegetarians.

**Each capsule contains:**

Protease	30 Thousand HUT
Amylase	15 Thousand DUAA
Cellulase	2 Thousand CU
Lipase	600 LipU

**Directions for use:**

**Adults:** Take 1 capsule three times daily during meals.

**Clinical Benefits:**

**Protein, carbohydrate and fat digestion:** Vegetarian digestive enzymes assist with most aspects of food digestion including the digestion of protein, carbohydrates and fat.<sup>1,2,3</sup> Protease assists with protein digestion by attacking the peptide bonds to release free amino acids.<sup>1</sup> Amylase aids carbohydrate digestion by catalysing the hydrolysis of alpha-1,4-glycosidic linkages of polysaccharides to yield dextrans, oligosaccharides, maltose and D-glucose.<sup>2</sup> Lipase assists in fat digestion by hydrolysing fatty acids.<sup>4</sup>

**Cellulose digestion:** Cellulose is a form of dietary fibre that requires the enzyme cellulase to assist its digestion. Cellulase facilitates the digestion of cellulose by hydrolysing beta-D-1,4-glycosidic bonds of cellulose.<sup>2</sup>

Free from animal products, dairy protein, lactose, eggs, gluten, wheat, nuts, yeast and soy protein. Free from artificial colours, sweeteners, flavours and preservatives.



# Lipogen

A Liver Tonic that Aids Digestion.

**Contents:** 60 tablets (30 days)  
**Order Code:** LP1  
**Storage:** Store below 30°C

Lipogen contains ingredients traditionally or clinically used as:

- A liver tonic that aids digestion.<sup>1</sup>
- Contains lipotropic factors to assist the assimilation of fats.<sup>2</sup>
- Contains bupleurum, barberry and dandelion extracts.

**Each tablet contains:**

Choline bitartrate	167 mg
Equivalent Choline	69 mg
Inositol	100 mg
Taurine	100 mg
Methionine	100 mg
Pyridoxine hydrochloride (Vitamin B6)	25 mg
Folic acid	200 micrograms
Mecobalamin (co-methylcobalamin) (Vitamin B12)	200 micrograms
Dry herbal extracts:	
<i>Bupleurum falcatum</i> (Bupleurum), root	150 mg
Derived from dry root	1.5 g
<i>Berberis vulgaris</i> (Barberry), stem bark	100 mg
Derived from dry stem bark	1 g
<i>Taraxacum officinale</i> (Dandelion), root	100 mg
Derived from dry root	500 mg

Contains Betaine hydrochloride as an excipient.

**Directions for use:**

**Adults:** Take 1 tablet twice daily. Take each dose with a large glass of water.

**Clinical Benefits:**

**A liver tonic that aids digestion:** Lipogen contains a combination of herbal extracts to aid digestion plus vitamins and amino acids. Dandelion, barberry and bupleurum are traditionally used to aid digestive function and support liver and gallbladder function.<sup>1,3</sup> A primary mechanism by which dandelion and barberry support digestion has been shown, in animal studies, to be an increase in bile production and flow.<sup>4,5</sup> Lipogen also contains lipotropic factors to assist with the distribution and assimilation of fats in the digestive system.<sup>6</sup> Choline is a methyl donor, important for normal metabolism of fats by the liver and gallbladder.<sup>7</sup>

Free from animal products, dairy protein, lactose, eggs, gluten, wheat, nuts, yeast, soy protein and salt. Free from artificial colours, flavours and preservatives.



# Gut InflamX

Gastrointestinal Nervous System, Immune and Inflammatory Support.

**Contents:** 60 capsules (VegeCaps) (15 days)

**Order Code:** GIX60

**Storage:** Store below 30°C

- Activates the cholinergic anti-inflammatory pathway (CAP) which reduces immune activation, a driver of gut dysfunction and systemic inflammatory conditions.
- Stimulation of the vagal nerve supports healthy communication between the enteric nervous system and the brain in inflammatory disorders.
- A unique herbal and nutrient formulation containing berberine and zinc carnosine.

### Each capsule contains:

Polaprezinc (Zinc carnosine)	28 mg
Equivalent Zinc	6.25 mg
Colecalciferol (Vitamin D3)	6.25 micrograms
Equivalent Vitamin D3	250 IU
Dry herbal extracts:	
<i>Andrographis paniculata</i> (King of Bitters) herb top,	160 mg
Derived from dry herb top	2.6 g
Equivalent to Andrographolides	22 mg
<i>Boswellia serrata</i> (BosPure® Boswellia), gum oleoresin	75 mg
Derived from dry gum oleoresin	750 mg
<i>Coptis chinensis</i> (Goldthread), rhizome	167 mg
Derived from dry rhizome	1.7 g
Equivalent to berberine chloride	50 mg
<i>Zingiber officinale</i> (Ginger), rhizome	18 mg
Derived from dry rhizome	748 mg

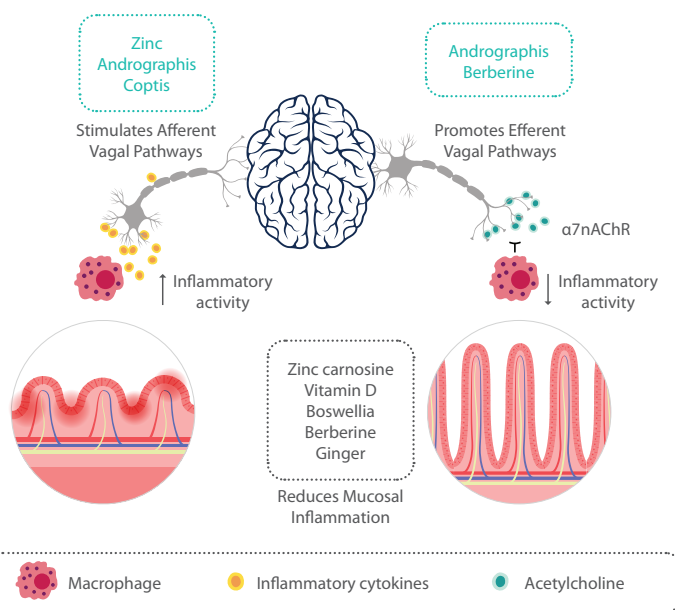
### Directions for use:

**Adults:** Take 2 capsules, twice daily.

### Clinical Benefits:

**The CAP activation involves the vagus nerve and has anti-inflammatory effects.**<sup>1</sup> Association with a reduction in gastrointestinal and systemic inflammation, make the CAP a potential treatment target for intestinal permeability, gastrointestinal resilience, and systemic inflammation<sup>2</sup> (Figure 1). Studies conducted in animals and *in vitro* found that *Andrographis paniculata*<sup>3</sup> and *Coptis chinensis*<sup>4</sup> both activate the CAP. *Zingiber officinale* (Ginger) inhibits Acetylcholinesterase *in vitro*, which reduces the breakdown of acetylcholine (Figure 1).<sup>5</sup>

**Immune activation, partly driven by pro-inflammatory macrophages, can be a driver of gut and systemic inflammatory conditions and diseases (Figure 1).** Activating the CAP enhances T-regulatory (T-reg) cells and reduces inflammatory cytokines (in animal and *in vitro* studies).<sup>6</sup> Mast cells within the gastrointestinal tract release inflammatory mediators when triggered.<sup>7</sup> *In vitro* and animal studies show that vitamin D and constituents from *Andrographis* and *Coptis chinensis* (dehydroandrographolide and berberine), *Boswellia* and *Zingiber officinalis* (shogaols and gingerols), reduce the activation of mast cells, and thus help to minimise inflammation.<sup>8</sup>



**Figure 1: The Cholinergic Anti-Inflammatory Pathway (CAP).**

**Vagal nerve stimulation promotes healthy neuronal communication, which can downregulate the inflammatory response in a range of conditions.**<sup>9</sup> Zinc stimulates vagal nerve fibres and nervous system function.<sup>10</sup> Herbal extracts with bitter characteristics, such as *Andrographis* and *Coptis chinensis*<sup>11,12</sup> stimulate taste receptors throughout the gastrointestinal (GI) tract.<sup>13,14</sup> Such effects have been shown to trigger the release of gut hormones, such as cholecystokinin (CCK), which activate afferent vagal receptors.<sup>15,16</sup>

**Gut InflamX's unique herbal and nutrient combination provides anti-inflammatory support for systemic conditions where GI dysfunction is present.** Studies *in vitro* demonstrate that zinc, vitamin D, *Boswellia serrata* and berberine all support intestinal mucosal barrier function via several mechanisms including antioxidant action, cell membrane repair and tight junction support.<sup>17</sup> *Boswellia serrata* is traditionally used in Ayurvedic medicine to relieve gastrointestinal pain, digestive discomfort, and GI inflammation.<sup>18</sup> Zinc carnosine's anti-inflammatory and antioxidant actions are thought to be responsible for its beneficial effects in the maintenance, prevention, and treatment of the mucosal lining and other epithelial tissues.<sup>19</sup> In addition, a review found that berberine has a protective effect and reduces cell permeability, and protects the intestinal mucosal epithelial barrier from TNF- $\alpha$  damage.<sup>20</sup>

Free from dairy protein, lactose, eggs, gluten, wheat, nuts, yeast and soy protein. Free from artificial colours, sweeteners, flavours and preservatives.



# Glutagenics

To Soothe, Repair and Support a Healthy Gastrointestinal Lining.

**Contents:** 230 g oral powder (15 days) Lemon Lime flavour

**Order Code:** GLU230

**Storage:** Store below 30°C

Ingredients in Glutagenics have been shown or traditionally used to:

- Relieve mild gastrointestinal discomfort, pain and minor inflammation.<sup>1,2,3,4</sup>
- Protect gastrointestinal mucosa and gut integrity.<sup>5,6,7</sup>
- Great tasting powder to aid digestion.

### Each dose (7.7 g) contains:

Glutamine	2.2 g
Larix arabinogalactan (Larch)	2 g
Zinc amino acid chelate (Meta Zn® - Zinc bisglycinate)	75 mg
Equivalent Zinc	15 mg
Retinol palmitate (Vitamin A)	1.4 mg
Equivalent Vitamin A	750 micrograms RE
Colecalciferol (Vitamin D3)	12.5 micrograms
Equivalent Vitamin D3	500 IU
<i>Aloe vera</i> ( <i>Aloe barbadensis</i> ), leaf inner juice dry	25 mg
Derived from fresh leaf inner	5 g
Dry herbal extract:	
<i>Boswellia serrata</i> (BosPure® <i>Boswellia</i> ), gum oleoresin	150 mg
Derived from fresh gum oleoresin	1.5 g

**Directions for use: Adults:** Add 2 level scoops (7.7 g) to 200 mL of water twice daily with food.

### Clinical Benefits:

**Protective effect on gastrointestinal mucosa and gut integrity:** Glutamine and vitamin A protect the integrity of the intestinal tract by increasing secretory IGA (sIGA) secretion and therefore inhibiting the adherence of gram negative bacteria, to help resist dysbiosis.<sup>5,8</sup> In addition, glutamine and zinc enhance epithelial regeneration, supporting and protecting mucosal barrier integrity.<sup>9,10</sup>

**Gut pain and inflammation:** *Aloe vera* has been used traditionally for its protective effects on the gastric mucosa. This is possibly due to its inhibition of the inflammatory mediators PGE<sub>2</sub> and IL8.<sup>6</sup> *Boswellia* has traditionally been used to relieve digestive spasms and pain<sup>13</sup> as well as relieving inflammation of the gastrointestinal tract.<sup>14</sup> BosPure® *Boswellia* is a proprietary extract of *Boswellia*.

Free from dairy protein, lactose, eggs, gluten, wheat, nuts, yeast and soy protein. Free from artificial colours, flavours and preservatives. Sweetened with steviol glycosides.



# Gut Care for Kids

Gut and Liver Detox Support.

**Contents:** 140 g oral powder (14 doses) Pineapple flavour

**Order Code:** GTCK

**Storage:** Store below 30°C

Ingredients in Gut Care for Kids have been clinically shown to or traditionally used to:

- Soothe the gut.<sup>1</sup>
- Support healthy gastrointestinal and liver detoxification in children.<sup>2,3</sup>
- Once per day dosing for children under five years of age to assist compliance.

### Each dose (10 g) contains:

Larix arabinogalactan (Larch)	2 g
Glutamine	1 g
Glycine	500 mg
Pectin (Citrus)	500 mg
<i>Ulmus rubra</i> (Slippery elm), stem bark inner powder	500 mg
Cysteine	200 mg
Zinc amino acid chelate (Meta Zn® - Zinc bisglycinate)	40 mg
Equivalent Zinc	8 g
Selenomethionine	125 micrograms
Equivalent Selenium	50 micrograms
Dry herbal extracts:	
<i>Curcuma longa</i> (BCM-95™ Turmeric), rhizome	100 mg
Derived from dry rhizome	2.5 g
<i>Silybum marianum</i> (Milk thistle), seed	29 mg
Derived from dry seed	2 g
<i>Glycyrrhiza glabra</i> (Deglycyrrhizinised liquorice), rhizome	238 mg
Derived from dry rhizome	1.9 g
<i>Althaea officinalis</i> (Marshmallow), root	75 mg
Derived from dry root	300 mg

### Directions for use:

**Children 2 to 5 years:** Mix 1 level scoop (5 g) into 50 mL of water once daily.

**Children 6 to 12 years:** Mix 2 level scoops (10 g) into 100 mL of water once daily.

### Clinical Benefits:

**Soothes the gut mucosa:** Glutamine may supply a source of nutrients to the cells of the intestines, protecting the gut mucosa from damage and promoting repair.<sup>1</sup> Gut Care for Kids also contains marshmallow, slippery elm and liquorice that are traditionally used in Western herbal medicine to soothe the gastrointestinal tract.<sup>4</sup> Liquorice has been shown to soothe the gastrointestinal tract by inhibiting prostaglandin and lipoxygenase synthesis.<sup>4,5</sup>

**Liver detoxification:** Turmeric, St Mary's thistle, glycine and cysteine help to support liver detoxification.<sup>2,3</sup> Gut Care for Kids may also enhance phase II detoxification via increases in glutathione by selenium and cysteine.<sup>6,7</sup>

Ingredients in this product are known to contain salicylates.

Free from dairy protein, lactose, eggs, gluten, nuts, yeast and soy protein. Free from artificial colours, sweeteners and flavours. Contains steviol glycosides.





# Parex

Antiparasitic and Anthelmintic Herbs for Intestinal Health.

**Contents:** 50 tablets and 100 tablets

**Order Code:** PRX50 (50 tablets) and PRX100 (100 tablets)

**Storage:** Store below 30°C

Traditionally, ingredients in Parex have been used to or may:

- Help rid the body of intestinal worms and parasites, maintaining healthy intestinal microbial balance.<sup>1,2,3</sup>
- Exert antimicrobial,<sup>4</sup> antiparasitic<sup>5</sup> and antifungal<sup>6</sup> activity.
- Prescribed as part of the Gut Pathogen Elimination Program.

### Each tablet contains:

Peppermint oil	25 mg
Dry herbal extracts:	
<i>Punica granatum</i> (Pomegranate), fruit peel	67 mg
Derived from dry fruit peel	3.3 g
<i>Artemisia annua</i> (Sweet wormwood), herb	100 mg
Derived from dry herb	2 g
<i>Juglans nigra</i> (Black walnut), fruit hull	100 mg
Derived from fresh fruit hull	1 g
<i>Nigella sativa</i> (Nigella), seed	67 mg
Derived from dry seed	1 g
<i>Commiphora myrrha</i> (Myrrh), gum oleoresin	100 mg
Derived from dry gum oleoresin	1 g

**Directions for use: Adults:** Take 1 tablet three times daily with food.

### Clinical Benefits:

**Parex contains a potent herbal formulation used for its broad spectrum anti-pathogenic properties in traditional Chinese, Western and Ayurvedic herbal medicine.**

**Antiparasitic and anthelmintic:** Pomegranate peel extract may reduce and eliminate parasitic cyst shedding due to the presence of metabolic toxins, which has a direct effect on parasitic intestinal growth and cyst formation.<sup>7</sup> Nigella and myrrh may exert antiparasitic action via immunomodulatory effects.<sup>8,9</sup> Artemisinin, a constituent from sweet wormwood, has multiple antiparasitic and antiprotozoal actions, including formation of free radicals which can alter biochemical pathways within the parasite and mediate eradication.<sup>10</sup> Parex contains pomegranate, nigella, myrrh and black walnut, which have been used in traditional Western herbal medicine to assist in the expulsion of intestinal worms from the body.<sup>11,12,13,14</sup>

**Antifungal:** Artemisinins possess antifungal activity via multiple mechanisms, including disruption to fungal mitochondrial function.<sup>15</sup> Pomegranate peel extract, specifically the polyphenol component punicalagin, has been shown to inhibit biofilm formation in fungi and bacteria.<sup>16,17</sup> Punicalagin may inhibit the growth of microbial co-aggregation, and exhibits antifungal activity by deprivation of substrates and direct action on microbial metabolism.<sup>18</sup>

**Antimicrobial:** The sesquiterpenes in myrrh interact with bacterial cell envelopes which leads to the disruption of cell membranes, and subsequently bacteriolysis.<sup>19</sup> Peppermint oil may also inhibit the formation of microbial biofilms via damaging microbial cytoplasmic membranes.<sup>20</sup>

**Microbiome health:** Dysbiosis is the imbalance of good and bad bacteria, occurring predominantly in both the small and large intestine.<sup>21</sup> Pomegranate peel not only exerts antimicrobial activity, but also has a prebiotic effect, positively modulating gut microbiota towards bifidobacterium, and possesses significant anti-inflammatory activity in the gastrointestinal tract.<sup>22</sup>

**Reduces symptoms of dyspepsia and mild digestive discomfort.**<sup>23,24</sup>

**A part of the Metagenics Clinical Detoxification Program.** Parex has been included in the four week Gut Pathogen Elimination Program, which is designed to manage dysbiosis and maintain a healthy gut microbial balance.

Free from animal products, corn, dairy protein, lactose, eggs, gluten, wheat, yeast, soy protein, starches and salt. Free from artificial colours, sweeteners, flavours and preservatives. Contains tree nut products.

Do not use if pregnant or likely to become pregnant.

Parex is not available in New Zealand. Please use Bactrex or contact Clinical Support for an alternative.



# Bactrex

Enteric Coated Herbs for Upper Intestinal Health.

**Contents:** 60 enteric coated capsules (15 days)

**Order Code:** BTX

**Storage:** Store below 30°C

- Helps maintain upper intestinal health in Traditional Chinese Medicine.<sup>1</sup>
- Enteric coated for targeted release into the small intestine.
- Provides antimicrobial support.<sup>2</sup>

### Each capsule contains:

<i>Origanum vulgare</i> , leaf oil essential (Oregano)	100 mg
<i>Syzygium aromaticum</i> , leaf oil essential (Clove oil)	50 mg
<i>Thymus vulgaris</i> , herb flowering oil essential (Thyme oil)	50 mg
Dry herbal extract:	
<i>Phellodendron amurense</i> (Phellodendron), stem bark	150 mg
Derived from dry stem bark	750 mg

### Directions for use:

**Adults:** Take 2 capsules twice daily with food.

### Clinical Benefits:

**May help maintain upper intestinal health:** Bactrex contains *Phellodendron amurense* which is traditionally used in Traditional Chinese Medicine to maintain upper intestinal health.<sup>1</sup> *Phellodendron amurense* contains a number of constituents that have been shown *in vitro*, to display antimicrobial properties on a range of bacteria. Constituents found in *Phellodendron amurense* have been shown to block the adhesion of bacteria to erythrocytes and epithelial cells.<sup>3</sup> Bactrex also contains the essential oils: oregano, clove and thyme in an enteric coated capsule ensuring targeted release into the small intestine.

**Definition of Small Intestinal Bacterial Overgrowth (SIBO):** Small Intestinal Bacterial Overgrowth (SIBO) is a condition in which normal bacterial and fungal flora of the large intestine extends proximally into the small intestine.<sup>4</sup>

Free from dairy protein, lactose, eggs, gluten, wheat, nuts, yeast and soy protein. Free from artificial flavours.



# Ultra Flora SB Dysbiosis

Dysbiosis Control.

**Contents:** 60 capsules (VegeCaps) (30 days)

**Order Code:** UFSBD

**Storage:** Store at 2°C to 8°C (Refrigerate. Do not freeze.)

- Assists with the management of dysbiosis.<sup>1</sup>
- Relieves diarrhoea.<sup>1,2</sup>
- Reduces the risk of traveller's diarrhoea.<sup>3</sup>

### Each capsule contains:

12.5 billion live probiotic organisms:

<i>Saccharomyces cerevisiae</i> (boulardii) (SB)	7.5 billion CFU (organisms)
<i>Bifidobacterium lactis</i> (Bi-07)	5 billion CFU (organisms)

### Directions for use:

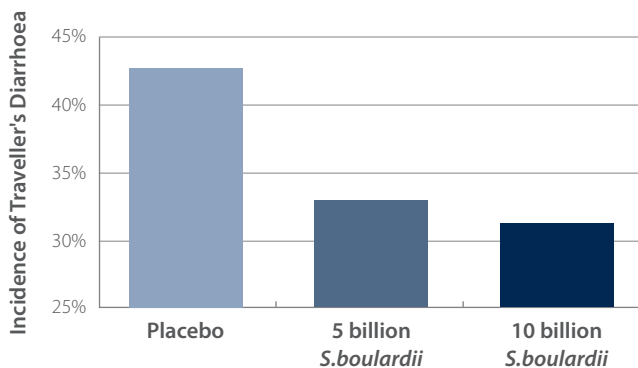
**Adults:** Take 1 capsule twice daily with food until finished.

### Clinical Benefits:

27 trials encompassing 5,029 people showed *Saccharomyces boulardii* (*S. boulardii*) as being effective in the management of dysbiosis.<sup>1</sup> *S. boulardii* exerts its effects throughout the gastrointestinal tract to reduce the symptoms of dysbiosis including diarrhoea and constipation.<sup>4,5,6</sup> Maintaining healthy mucosal bacterial populations helps to restore normal gut functionality and healthy mucosal biofilm communities.<sup>7</sup>

10 billion CFU of *S. boulardii* per day has been shown to reduce the incidence of traveller's diarrhoea.<sup>3</sup> *S. boulardii* has been shown to increase short chain fatty acids which favour normal colonic function.<sup>1</sup>

Ultra Flora SB Dysbiosis contains *Bifidobacterium lactis* (Bi-07) as *bifidobacteria* may be decreased in traveller's diarrhoea.<sup>3</sup>



Kollaritsch HH, Kreamsner P, Wiedermann G, Scheiner O. Fortschr Med 1993;111(9): 152-6.

**Figure 1: *S. boulardii* Has Been Shown to Reduce the Risk of Traveller's Diarrhoea.**

Free from animal products, corn, dairy protein, lactose, eggs, gluten, wheat, nuts, soy protein, starches and salt. Free from artificial colours, flavours and preservatives.



# MetaBiome™ Microbiome Sampling Kit

A Comprehensive Test for Microbiome Composition and Function.

**Contents:** Each kit contains: 1 x activation card, sample collection tube, sampling instructions, Bristol stool chart, reply paid sleeve and envelope.

**Order code:** MBKIT

**Storage:** Store below 30°C

- Simple, non-invasive sampling performed at home and conveniently posted in the supplied reply paid envelope for assessment.
- Practitioner-centric report, emailed, with information sorted into body systems for easy interpretation.
- Report provides complete picture of gut microorganisms and their function.

### Directions for use:

1. Provide patient with kit. Retain activation card with unique identifier.
2. Access activation portal at [metabiome.com.au](http://metabiome.com.au) and follow prompts to activate the kit using the unique identifier and your patient's details. **Samples received that have not been activated cannot be processed.**
3. Have your patient take the kit home and follow the step by step Sampling Instructions.
4. Receive your patient's comprehensive MetaBiome™ Practitioner Report direct to your email address.

You may also provide your patient with their MetaBiome™ Kit, via eReferral. This is a convenient way to send your Patient an email link to purchase a kit, and have it shipped directly to them via the MetaBiome™ online portal. For more information on the Kit Sampling process, visit [metagenics.com.au/Products/Product/MBKIT](http://metagenics.com.au/Products/Product/MBKIT), or contact your Metagenics Territory Manager.

### Clinical Benefits:

Metagenomic (or whole genome) sequencing of the gut microbiome. The MetaBiome™ utilises a comprehensive and up to date microbiome assessment technology, providing a complete picture of the bacteria within the gut and their functional potential. By sequencing the whole genome, the test can identify individual genes in the bacteria that may contribute to the function of that bacteria and the related influence on microbial and functional health.

From providing the kit to your patient, to receiving the comprehensive report, the MetaBiome™ test offers accuracy, simplicity and clinical application.

The MetaBiome™ Microbiome Sampling Kit samples an individual's gut microbiome in a non-invasive manner and for non-diagnostic purposes. For support in reviewing and interpreting the report, contact our MetaBiome™ experts in Clinical Services.

# Clinical Tools and Resources

All clinical tools and resources are available on  Metagenics Institute™

Visit [metagenicsinstitute.com.au](http://metagenicsinstitute.com.au) and you will find a wealth of information readily available, to assist you in your practice for free.



## Clinical Tools



Technical Data



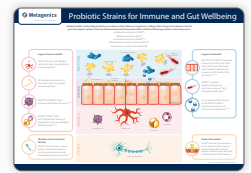
Treatment Protocols



Health Appraisal Questionnaire



Rebuilding a Healthy Microbiome Infographic



Probiotic Strains for Immune and Gut Wellbeing Infographic



## Patient Resources

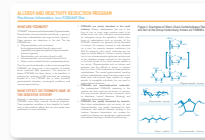


Probiotics Brochure  
(Pack of 15)



Digestion Patient Booklet  
(Pack of 10)

Available to order through your Metagenics Territory Manager.



Low FODMAP Diet Practitioner Information



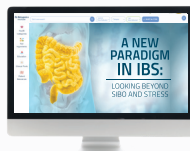
Public Facebook Page  
[facebook.com/metagenics](https://facebook.com/metagenics)



## Education



When Microbes Move In:  
Spotlight on SIBO and Gut-Dwelling Pathogens Webinar



A New Paradigm in IBS:  
Looking Beyond SIBO and Stress Webinar



The Evolution of Gut Care:  
Scientific Updates and Revelations in Functional Gastrointestinal Health Webinar



Metagenics Institute Podcast



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## Metagenics Clinical Support

Delivering Practitioner to Practitioner support and access an industry leading Clinical team with 202 years of combined clinical experience. Available to help save you time and support your business and patient needs.

- Clinical support (i.e. treatment plans/product prescriptions/test results and interpretation/contraindications);
- Writing resources (technical/patient/digital tools);
- Education;
- Researching cases (providing information and evidence to support your research/patient treatment needs).

Our Clinical Support team can be reached on:

### AUSTRALIA

1800 777 648  
8:00 am – 5:00 pm AEST

### NEW ZEALAND

0508 227 744  
8:00 am – 5:00 pm



# Digestive Health and Probiotics Range Summary

	Product Highlights	Page		Product Highlights	Page
	<b>Ultra Flora Intensive Care</b> <i>Microbiome Restoration Formula.</i>	6		<b>Gastro Aid</b> <i>Heartburn and Dyspepsia Relief.</i>	13
<ul style="list-style-type: none"> <li>Contains the world's most widely researched probiotics strains – LGG®, SB and BB-12®.</li> </ul>			<ul style="list-style-type: none"> <li>2.5 g BCM-95™ Turmeric</li> <li>2.1 g GutGard® Liquorice</li> </ul>		
	<b>Ultra Flora Mother and Baby</b> <i>Specialised Probiotic Support During Pregnancy, Breastfeeding and Infancy.</i>	7		<b>Vegetarian Digestive Enzymes</b> <i>Vegetarian Enzymes to Support Digestion.</i>	14
<ul style="list-style-type: none"> <li>Clinically researched probiotic strain LGG® for childhood atopy and immune development.</li> <li>BB-12® and LGG® for glucose metabolism.</li> </ul>			<ul style="list-style-type: none"> <li>Vegetarian protease, amylase, lipase.</li> </ul>		
	<b>Ultra Flora Kids Care</b> <i>Probiotic for Beneficial Gut Flora, Bowel Function and Immune Health in Children.</i>	8		<b>Lipogen</b> <i>A Liver Tonic that Aids Digestion.</i>	14
<ul style="list-style-type: none"> <li>Clinically trialled NCFM® and Bi-07 strains in 326 children to support immunity.</li> </ul>			<ul style="list-style-type: none"> <li>1.5 g Bupleurum</li> <li>1 g Barberry</li> <li>500 mg Dandelion</li> </ul>		
	<b>Ultra Flora Spectrum</b> <i>Multi-Strain Complex with Five Researched Strength, Scientifically Validated Probiotics.</i>	8		<b>Gut Inflammation</b> <i>Gastrointestinal Nervous System, Immune and Inflammatory Support.</i>	15
<ul style="list-style-type: none"> <li>Help to maintain healthy gut function and wellbeing.</li> <li>Contains 52.5 billion live organisms from five probiotics at researched strengths, including <i>S. boulardii</i>.</li> </ul>			<ul style="list-style-type: none"> <li>50 mg Berberine</li> <li>28 mg Zinc carnosine</li> <li>250 IU Vitamin D3</li> </ul>		
	<b>Ultra Flora Restore Dairy Free</b> <i>Maintain Digestive Health and Wellbeing.</i>	9		<b>Glutagenics</b> <i>To Soothe, Repair and Support a Healthy Gastrointestinal Lining.</i>	16
<ul style="list-style-type: none"> <li>Activ-Vial™ desiccant lined bottle guarantees live and effective probiotics without refrigeration.</li> <li>Available with added colostrum (Ultra Flora Restore) and powder (Ultra Flora Plus Dairy Free).</li> </ul>			<ul style="list-style-type: none"> <li>2.2 g Glutamine</li> <li>1.5 g BosPure® Boswellia</li> <li>Lemon Lime flavour</li> </ul>		
	<b>Digestex</b> <i>Triple Action Digestive Support.</i>	9		<b>Gut Care for Kids</b> <i>Gut and Liver Detox Support.</i>	16
<ul style="list-style-type: none"> <li>3 g Dandelion</li> <li>2 g Meadowsweet</li> <li>750 mg Ginger</li> </ul>			<ul style="list-style-type: none"> <li>2.5 g BCM-95™ Turmeric</li> <li>Delicious Pineapple flavour</li> </ul>		
	<b>Ultra Flora LGG® Forte</b> <i>Double Strength, Researched, Authentic LGG®.</i>	10		<b>Parex</b> <i>Antiparasitic and Anthelmintic Herbs for Intestinal Health.</i>	17
<ul style="list-style-type: none"> <li>20 billion CFU of <i>Lactobacillus rhamnosus</i> (LGG®).</li> <li>Activ-Vial™ desiccant lined bottle guarantees live and effective probiotics without refrigeration.</li> </ul>			<ul style="list-style-type: none"> <li>3.3 g Pomegranate</li> <li>1 g Myrrh</li> <li>1 g Nigella</li> </ul>		
	<b>Ultra Flora GI Soothe</b> <i>Specialised Probiotic to Reduce the Occurrence and Symptoms Associated with Medically Diagnosed IBS.</i>	11		<b>Bactrex</b> <i>Enteric Coated Herbs for Upper Intestinal Health.</i>	17
<ul style="list-style-type: none"> <li>Clinically trialled <i>Lactobacillus plantarum</i> 299v strain in a total of 224 adults with IBS in multiple trials.</li> </ul>			<ul style="list-style-type: none"> <li>750 mg Phellodendron</li> <li>100 mg Oregano oil</li> </ul>		
	<b>Ultra Flora GI Regulate</b> <i>Specialised Probiotic and Prebiotic for Healthy Bowel Function.</i>	12		<b>Ultra Flora SB Dysbiosis</b> <i>Dysbiosis Control.</i>	18
<ul style="list-style-type: none"> <li>Low reactive powder with clinically trialled <i>Lactobacillus plantarum</i> 299v combined with the prebiotic partially Hydrolysed Guar Gum (PHGG).</li> </ul>			<ul style="list-style-type: none"> <li>Clinically trialled <i>Saccharomyces cerevisiae</i> (boulardii) strain in 2,271 tourists to reduce the risk of traveller's diarrhoea</li> </ul>		
	<b>Laxatone</b> <i>Herbal Bowel Support.</i>	13		<b>MetaBiome™ Microbiome Sampling Kit</b> <i>A Comprehensive Test for Microbiome Composition and Function.</i>	18
<ul style="list-style-type: none"> <li>400 mg Cascara sagrada</li> <li>500 mg Ginger</li> <li>375 mg Cinnamon</li> </ul>			<ul style="list-style-type: none"> <li>A comprehensive test for microbiome composition and function.</li> </ul>		

**View This Practitioner Guide Online:**

**Metagenics Institute**

References available on request.

Join the Metagenics Facebook Group Like the Metagenics Facebook Page

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