

# Cold, Flu & Immunity

Strategies to bring immune balance to your patients.



# Tailored Solutions for Treating the Immune System

## Balance Key Immune Functions

The health of the immune system is influenced by various factors that contribute to inflammatory conditions, allergies, and both acute and chronic infections. While addressing acute symptoms can provide immediate relief for patients, it is essential to correct underlying issues such as nutritional deficiencies, poor sleep, mitochondrial dysfunction, stress, chronic inflammation, and compromised gut health. By doing so, we can enhance overall quality of life and prevent further damage.

Specific nutritional and herbal formulas can offer targeted support: they may provide anti-inflammatory benefits, regulate the immune response in allergic or autoimmune conditions, or stimulate the immune system for acute, recurrent or chronic presentations. Additionally, therapeutic formulations can help rectify nutritional deficiencies, playing a crucial role in preventive immune care.

## Address the Gut-Mediated Immune Response

Targeting gastrointestinal health is important for supporting the immune system. Evidence-based strain-specific probiotics, at the correct researched dose, exert specific actions to either regulate or stimulate the immune system. For example, *Lactobacillus paracasei* (LP-33®) modulates immune reactions by interacting directly with dendritic cells within gut-associated lymphoid tissue (GALT). By selecting the right immune probiotic strain for your patient, you can modulate or enhance immune function via the gut.

## Regulate Immunity

Herbs such as BCM-95™ turmeric can provide pain relief through analgesic actions, while Specialised Pro-Resolving Mediators (SPMs) assist with resolution of chronic inflammatory issues. Patients affected by allergies can address allergic reactivity and build tolerance through the Metagenics Allergy and Reactivity Reduction Program.

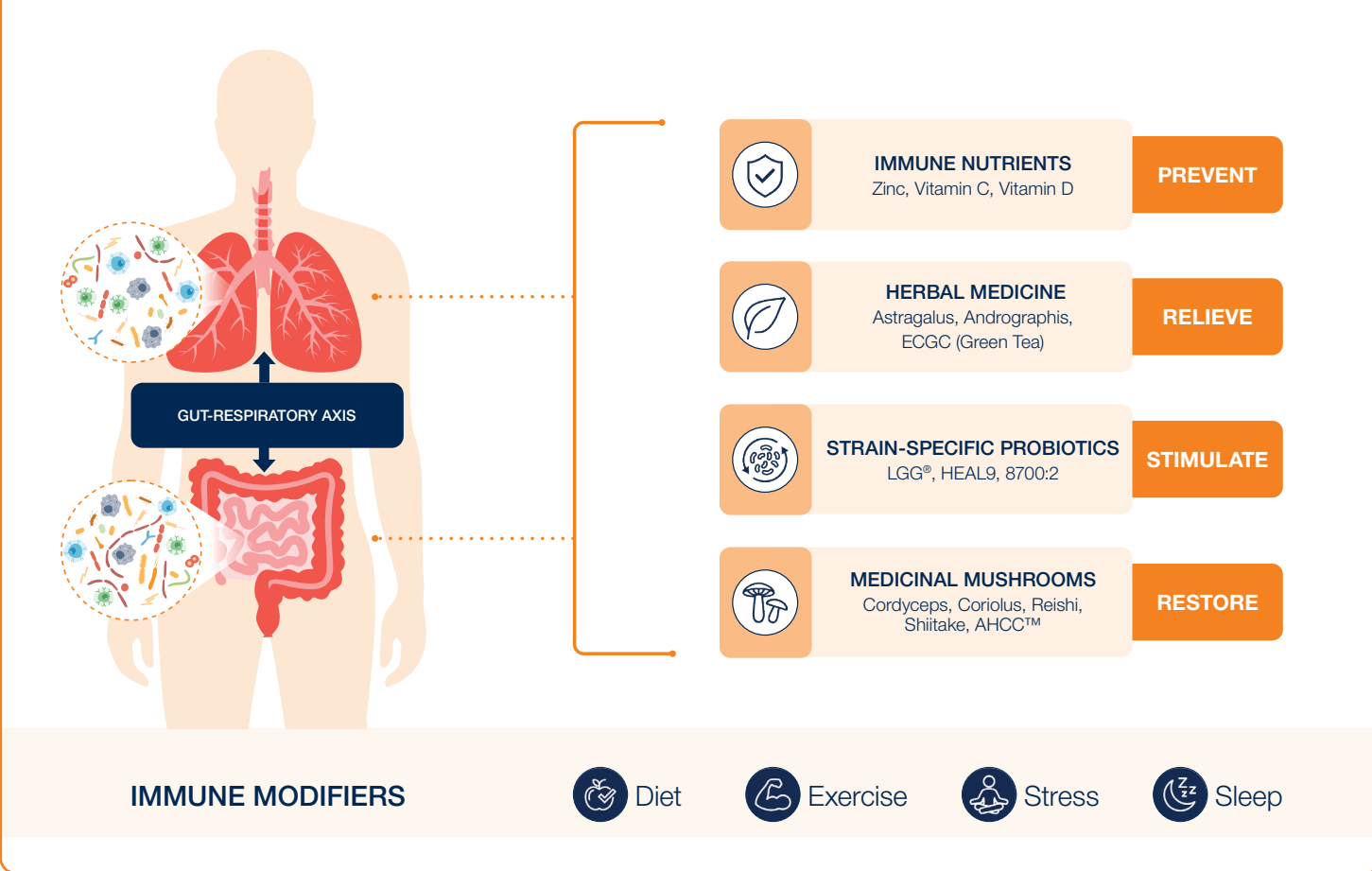
## Stimulate Immunity

Herbal and nutritional support, such as *Andrographis paniculata*, zinc and EGCG (*epigallocatechin-gallate* standardised from Green Tea) can be a powerful tool for patients to reduce severity and duration of acute infections such as colds and flu. However, patients affected by recurrent infections or a chronic impaired immune response may benefit from medicinal mushrooms.
















## Immune Prevention

Nature provides nutrients that are crucial building blocks for immune health function and prevention of acute or chronic issues. However, modern lifestyle and dietary practices continue to increase the prevalence of nutritional deficiencies. Research shows 1 in 4 Australians are at risk of vitamin D deficiency<sup>1</sup>, while 23% of Australians do not meet adequate daily zinc intake, compromising immune health, while increasing risk of infection and impaired recovery. Metagenics provides nutritional options such as vitamin D and Meta Zinc® in capsule, liquid, powder or tablet format to address patient nutritional needs, preventing unwanted digestive side effects to ensure patient compliance.

## STIMULATING IMMUNITY TO COMBAT INFECTION



# Clinically Effective Solutions for Cold, Flu & Immunity

REGULATE		PREVENT	STIMULATE		
 Allergies	 Inflammatory Conditions	 Key Immune Nutrients	 Acute	 Recurrent	 Chronic
 UltraFlora Immune Control Probiotic		 Meta Zinc with Vitamin C and MetaZinc		 UltraFlora Immune Enhance Probiotic	
 Alergenics	 Alergeze	 Vitamin D3 Liquid and Capsules		 Immune Active NK	 Super Mushroom with Astragalus
				 Super Mushroom Complex	



# Allergenics

Support for Mild Allergy Relief and Healthy Immune Function.

**Contents:** 202 g oral powder (28 doses) Mixed Berry flavour

**Order Code:** ALS202

**Storage:** Store below 30°C

- Supports healthy immune regulation<sup>1</sup> and function.
- Supports gastrointestinal immune function<sup>3</sup> and liver detoxification processes.<sup>4</sup>
- Relieve symptoms of mild allergies and allergic rhinitis in children.

## Each dose (7.2 g) contains:

Glutamine	3.5g
Choline bitartrate	1.5g
Zinc amino acid chelate (Meta Zn® - Zinc bisglycinate)	30mg
Equivalent Zinc	6mg
Retinol palmitate	1.4mg
Equivalent Vitamin A	750 micrograms RE
Colecalciferol	12.5 micrograms
Equivalent Vitamin D	500IU
Dry herbal extracts:	
<i>Lentinula edodes</i> (Shiitake), fruiting body	375mg
Derived from dry fruiting body	6g
<i>Ganoderma lucidum</i> (Reishi), fruiting body	353mg
Derived from dry fruiting body	6g
<i>Silybum marianum</i> (Milk thistle), seed	86mg
Derived from min. dry seed	6g
Std. to flavanolignans calc. as silybin	72mg
<i>Scutellaria baicalensis</i> (Baical skullcap), root	300mg
Derived from dry root	3g
<i>Perilla frutescens</i> (Perilla), leaf dry	208mg
Derived from dry leaf	2.5g

## Directions for use:

**Children 9 to 13 years:** Add 1 level metric teaspoon (3.6g) to 100mL of water twice daily with food.

**Adults and children over 13 years:** Add 2 level metric teaspoons (7.2g) to 200mL of water twice daily with food.

## Clinical Benefits:

### Helps to increase allergic tolerance and reduce allergic reactions

by addressing underlying factors of allergy such as immune dysfunction, inflammation, detoxification processes and gut barrier function (Figure 1).

**Supports immune regulation and function:** Glutamine and Shiitake increase secretory IgA (sIgA) secretion to prevent antigen adhesion and translocation through the luminal epithelial surface.<sup>5,6</sup> Baical skullcap and Reishi help to regulate T helper 1 (Th1) and T helper 2 (Th2) balance.<sup>7,8</sup> Baical skullcap also exerts an anti-allergic effect by regulating T cell-mediated responses including decreasing IgE and increasing IgG2.<sup>9</sup>

### Reduces intestinal permeability and inhibits allergen permeation.

Baical skullcap<sup>10</sup>, glutamine, zinc, vitamin A and vitamin D act upon tight junctions of intestinal epithelium.<sup>11</sup> Baical skullcap may attenuate a food allergic response by inhibiting allergen permeation.<sup>12</sup>

### Symptomatic relief of allergies via anti-inflammatory and mast cell stabilising mechanisms.

Allergenics contains Baical skullcap, Milk thistle and Reishi which inhibit the release of histamine from mast cells.<sup>13</sup> In a randomised controlled trial, *Perilla frutescens* leaf extract was shown to suppress immunoglobulin response and inflammation in mild allergic rhinitis.<sup>14</sup> Choline intake leads to an increase in membrane phosphatidylcholine<sup>15</sup> and may be effective in relieving urticaria and allergic rhinitis symptoms.<sup>16</sup> Vitamin D may also exert an anti-inflammatory effect due to suppressing the production of matrix metalloproteinases (MMPs),<sup>17</sup> which may play an active role in allergic rhinitis.<sup>18</sup>

**Supports detoxification processes.** Detoxification processes may help to remove immunologically active material, which reduces the potential of immune reactions.<sup>19</sup> Milk thistle helps the liver with natural detoxification processes.<sup>20</sup>



**Figure 1: Key Ingredients to Build Tolerance.**

Free from dairy protein, lactose, eggs, gluten, wheat, nuts, yeast and soy protein. Free from artificial colours and flavours. Allergenics is sweetened with stevia and is dairy free.

When taken in excess of 3000 micrograms retinol equivalents, vitamin A can cause birth defects. If you are pregnant, or considering becoming pregnant, do not take vitamin A supplements without consulting your doctor or pharmacist.



# Alergeze

Specialised Herbal Extracts to Relieve Hayfever and Allergic Rhinitis Symptoms.

**Contents:** 60 tablets (15 days)

**Order Code:** ALZ60

**Storage:** Store below 30°C

- Assists in the symptomatic relief and management of seasonal and perennial allergic rhinitis.<sup>1</sup>
- A unique combination of NRA2™ plus Bromelains and Quercetin.
- Provides anti-inflammatory support associated with allergic reactions.

## Each tablet contains:

Quercetin dihydrate	500mg
Bromelains	9 million PU (282mg)
NRA2™ Polyherbal Complex containing dry herbal extracts equivalent to:	
<i>Terminalia chebula</i> ( <i>Terminalia myrobalan</i> ), fruit pericap	129mg
Derived from dry fruit pericap	644mg
<i>Phyllanthus emblica</i> ( <i>Emblis</i> ), fruit pericap	78mg
Derived from dry fruit pericap	391mg
<i>Terminalia bellirica</i> ( <i>Myrobalan</i> ), fruit pericap	76mg
Derived from dry fruit pericap	380mg
<i>Albizia lebbek</i> ( <i>Albizia</i> ), stem bark	24mg
Derived from dry stem bark	189mg
<i>Piper longum</i> ( <i>Long pepper</i> ), fruit	11mg
Derived from dry fruit	15mg
<i>Zingiber officinale</i> ( <i>Ginger</i> ), rhizome	5.5mg
Derived from dry rhizome	15mg
<i>Piper nigrum</i> ( <i>Black pepper</i> ), fruit	7.1mg
Derived from dry fruit	15mg

## Directions for use

**Adults only:** Take 2 tablets, twice daily with food.

## Clinical Benefits:

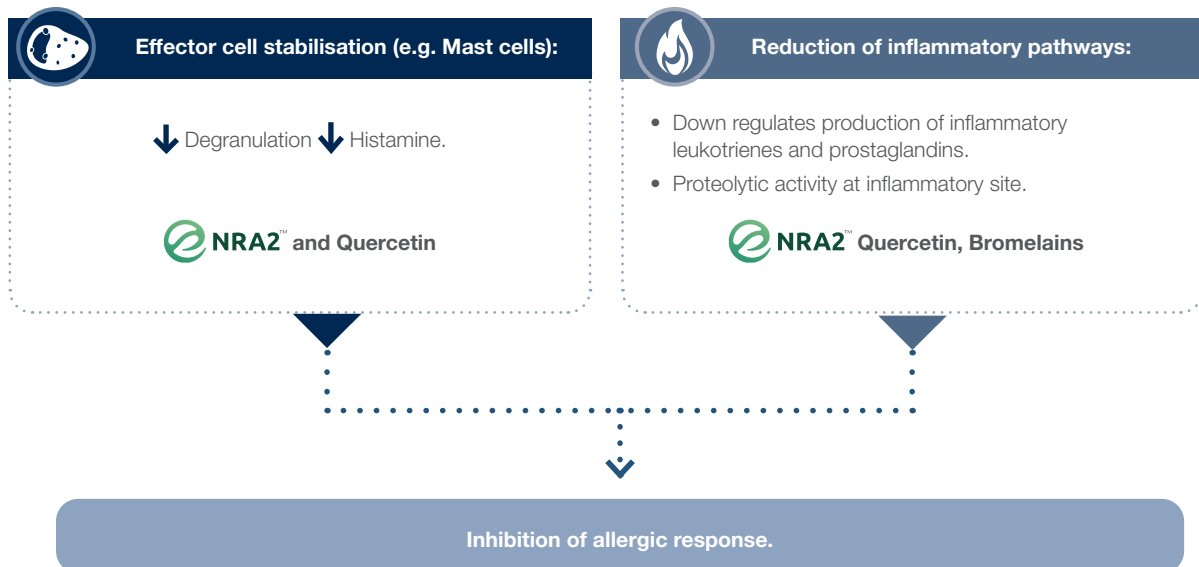
**For symptomatic relief of allergies and hay fever:** A multicentre clinical trial involving 545 patients concluded that NRA2™ significantly reduced major symptoms of seasonal and perennial allergic rhinitis including sneezing, rhinorrhoea and nasal congestion.<sup>2</sup> Furthermore, absolute eosinophil count, mucociliary clearance time, peak expiratory flow rate and peak nasal flow rate also improved.<sup>3</sup> In another trial, patients also reported a 70% improvement on quality of life parameters after 3 months.<sup>4</sup> NRA2™ can be used alongside allergy medication without any additional adverse side effects.<sup>5</sup>

**Modulates histamine release and inflammation associated with allergic reactions:** Alergeze contains a potent combination of ingredients that exhibit antihistamine, antioxidant and anti-inflammatory activity (Figure 1).<sup>6</sup> NRA2™<sup>7</sup> and Quercetin assist with mast cell stabilisation to inhibit histamine release and down regulate the production of allergic cytokines, inflammatory leukotrienes and prostaglandins.<sup>8</sup> Bromelains induces proteolytic activity during inflammation<sup>9</sup> and is an effective mucolytic agent.<sup>10</sup>

**Immune modulation:** Quercetin may assist with immune tolerance by improving T helper 1 (Th1) and T helper 2 (Th2) balance.<sup>11</sup> Allergic sensitisation involves Th2 like adaptive immunity and production of antibodies.<sup>12</sup>

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

 NRA2™ is a trademark of Natural Remedies Pvt. Ltd.



**Figure 1: Synergistic Combination of Ingredients for Allergy Symptom Relief.**





# C-Ultrascorb Tablets

pH Adjusted Vitamin C Tablet with Hesperidin and Cysteine.

**Contents:** 60 tablets (60 days)

**Order Code:** UST

**Storage:** Store below 30°C

- Reduces the severity and duration of colds.<sup>1,2</sup>
- Assists in the management of minor wounds.<sup>3,4</sup>
- Easy, once a day tablet for improved compliance.

## Each tablet contains:

Calcium ascorbate dihydrate	799mg
Equivalent Ascorbic acid (Vitamin C)	660mg
Ascorbic acid (Vitamin C)	151mg
Sodium ascorbate	138mg
Equivalent Ascorbic acid (Vitamin C)	123mg
Magnesium ascorbate monohydrate	55mg
Equivalent Ascorbic acid (Vitamin C)	49mg
Potassium ascorbate	22mg
Equivalent Ascorbic acid (Vitamin C)	17mg
Nicotinamide	25mg
Hesperidin	18mg
Cysteine hydrochloride monohydrate	11mg

Each dose provides a total of 1000 mg of Ascorbic acid (Vitamin C).

## Directions for use:

**Adults:** Take 1 tablet daily.

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



# C-Ultrascorb II Powder

pH Adjusted Vitamin C Supplement with Hesperidin and Cysteine.

**Contents:** 250 g (185 days) oral powder, Orange flavour

**Order Code:** US2 (250 g)

**Storage:** Store below 30°C

- Reduces the severity and duration of colds.<sup>1,2</sup>
- Assists in the management of minor wounds.<sup>3,4</sup>
- A pH adjusted powder to help minimise gut irritation.<sup>5</sup>

## Each dose (1.35 g) contains:

Calcium ascorbate dihydrate	515mg
Equivalent Ascorbic acid (Vitamin C)	426mg
Ascorbic acid (Vitamin C)	397mg
Sodium ascorbate	148mg
Equivalent Ascorbic acid (Vitamin C)	131mg
Nicotinamide (Vitamin B3)	100mg
Magnesium ascorbate	71mg
Equivalent Ascorbic acid (Vitamin C)	64mg
Potassium ascorbate	24mg
Equivalent Ascorbic acid (Vitamin C)	18mg
Hesperidin	17mg
Cysteine	6.8mg

Each dose provides a total of 1036 mg of Ascorbic acid (Vitamin C).

## Directions for use:

**Adults:** Add 1/3 of a metric teaspoon (1.35 g) to water or juice daily.

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

## Clinical Benefits:

**Minimises gut irritation and provides enhanced absorption of vitamin C:** Metagenics' vitamin C contains mineral ascorbates that are buffered and therefore less acidic, helping to minimise gut irritation. The use of mineral ascorbates also provides valuable electrolytes including sodium, potassium, magnesium and calcium that are well absorbed.<sup>5</sup> The pH adjusted vitamin C is combined with hesperidin, a flavonoid which works synergistically with vitamin C, enhancing absorption and inhibiting oxidation.<sup>6</sup>

**May assist in reducing hay fever and allergies:** An inverse relationship has been shown between plasma concentrations of vitamin C and histamine. In a review study, vitamin C was shown to significantly depress histamine levels by destroying the imidole ring of the histamine molecule.<sup>7</sup> Excess histamine can irritate the respiratory tract and impair neutrophil chemotaxis, resulting in allergy-like symptoms and weakened immunity.<sup>8</sup>

**Helps repair skin:** Vitamin C is an essential cofactor for the synthesis of collagen, proteoglycans and other components of the intracellular matrix of tissues, such as skin, bones and teeth. The important role that vitamin C plays in the formation of collagen also indicates its use in repairing wounds, such as minor cuts, scratches and abrasions. Vitamin C has been shown in clinical trials to significantly speed up the rate of wound healing.<sup>9</sup>

**A review of 21 placebo-controlled trials has shown vitamin C to reduce the severity of symptoms and the duration of the common cold by an average of 23%.<sup>10</sup>** Vitamin C concentrations rapidly decline during infections, such as the common cold, indicating the important role that vitamin C plays in resistance to infection. Vitamin C has been shown to enhance leukocyte motility, neutrophil chemotaxis, T lymphocyte proliferation and improve antimicrobial and natural killer cell activity.<sup>11</sup>



# Five Mushroom

High Potency Mushroom Extract  
for Immune Support.

**Contents:** 25 mL oral liquid (12 days)

**Order Code:** ME

**Storage:** Store below 25°C

Ingredients in Five Mushroom are traditionally used to or may:

- Promote and support healthy immune function.<sup>1</sup>
- Assist in the management of allergies and upper respiratory tract infections (URTIs).<sup>2</sup>
- Contains five Japanese mushrooms organically grown.

**Ingredients:** Water/alcohol base containing extracts from *Bionectria ochroleuca* (20%), *Annulohypoxylon stygium* (20%), *Polyporus umbellatus* (Zhuling) (20%), *Ganoderma lucidum* (Reishi) (20%), *Lentinula edodes* (Shiitake) (20%)

## Nutritional Information:

Servings per package: 25

Serving size: 1 mL

Quantity per	1mL	100mL
Energy	1.94kJ (<1.0 Cal)	194kJ (46 Cal)
Protein	<1g	1.6g
Fat		
- total	<1g	<1g
- saturated	<1g	<1g
Carbohydrate		
- total	<1g	9.3g
- sugars	<1g	5.9g
Sodium	<1.0mg	<5.0mg

Average values given.

## Serving suggestion:

**Adults:** Shake well before use. Take 1 mL (35 drops in water or juice) twice daily.

## Clinical Benefits:

**Helps promote and support healthy immune function:** Five Mushroom promotes healthy immune function by potentiating the innate and acquired immune responses.<sup>2</sup> Five Mushroom may also assist in the management of upper respiratory tract infections via several mechanisms. Shiitake has been shown to potentiate the response of precursor T cells and macrophages to cytokines as well as restore the suppressed activity of T helper cells.<sup>3</sup>

**May assist in the management of allergies:** Five Mushroom contains reishi mushroom which is traditionally used in Chinese medicine to assist in the management of allergies.<sup>2</sup> The potential mechanism to support the effect of reishi mushroom on allergies is via the inhibition of histamine release from mast cells, demonstrated *in vitro*.<sup>7</sup>

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

Contains no more than 30% alcohol by volume.



# Lysine Shield

Support Skin Repair and Wound Healing,  
Including the Lips.  
Formerly Viraclear.

**Contents:** 60 tablets (30 or 60 days)

**Order Code:** LS60

**Storage:** Store below 30°C

- Lysine to help reduce the occurrence of facial cold sores.
- Zinc to support skin health and wound healing.
- Maintains and supports healthy immune system function.

## Each tablet contains:

Lysine hydrochloride	800 mg
Ascorbic acid (Vitamin C)	250 mg
Zinc sulfate monohydrate	33 mg
Equivalent Zinc	12 mg
Dry herbal extract:	
<i>Astragalus membranaceus</i> (Astragalus), root	200 mg
Derived from dry root	2 g

## Directions for use:

### Adults:

For reducing the occurrence of facial cold sores: Take 1 tablet twice daily.

For immune support: Take 1 tablet daily.


## Clinical Benefits:

Contains Astragalus, Zinc and Vitamin C for healthy immune system function. Astragalus also helps the body cope with environmental stress.

Lysine Hydrochloride helps to reduce the occurrence of facial cold sores.

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

NAME CHANGE 2025



# Immune Active NK

For Cough, Cold, Fever, Phlegm and Sore Throat.  
Formerly Andro NK.

**Contents:** 40 tablets (20 days)  
**Order Code:** IMA40  
**Storage:** Store below 30°C

Ingredients in Immune Active NK have been traditionally used or shown to:

- Provide relief of fever, cough, sore throat and phlegm.
- Assist in the recovery of common cold infections and illness.
- Combines standardised epigallocatechin gallate (EGCG) and zinc to support healthy immune function.

**Each tablet contains:**

Dry herbal extracts:

<i>Andrographis paniculata</i> (King of Bitters), herb top	394mg
Derived from dry herb top	6.3g
Equivalent to Andrographolides	55mg
<i>Camellia sinensis</i> (Green Tea), leaf	152mg
Derived from min. dry leaf	4.6g
Std. to Catechins	126mg
Std. to Epigallocatechin-3-O-gallate (EGCG)	76mg
Calcium ascorbate dihydrate	242mg
Equivalent Ascorbic acid (Vitamin C)	200mg
Colecalciferol (Vitamin D3)	12.5 micrograms
Equivalent Vitamin D3	500IU
Zinc amino acid chelate (Meta Zn® - Zinc bisglycinate)	37.5mg
Equivalent Zinc	7.5mg

**Directions for use:**  
**Adults:** Take 2 tablets daily with food.

**Clinical Benefits:**

**Immune Active NK combines herbs and nutrients to reduce symptom severity of common cold infections and illness, via viral control.**<sup>1,2,3</sup>

Over 200 viruses are known drivers of respiratory tract infections, involving inflammatory responses<sup>4</sup> and symptoms ranging from the common cold to more severe illness.<sup>5,6,7</sup> Zinc is directly antiviral, and during infections, increased demands can compromise zinc status.<sup>8,9,10,11</sup> Cellular uptake of zinc is enhanced when binding with EGCG to form compounds, called zinc ionophores\*.<sup>12,13</sup> Studies have shown a doubling of intracellular free zinc ions with ionophore delivery.<sup>14,15</sup> Vitamin C inhibits viral replication via increased antiviral interferon production, as well as increasing proliferation of natural (NK) cells as part of the innate immune response.<sup>16,17</sup> Clinical studies of *Andrographis paniculata* demonstrate immune stimulation,<sup>18,19,20</sup> explaining the traditional use to relieve symptoms including sore throat, fever and cough.


**Studies have shown that EGCG, vitamins C, D, and zinc play various roles to regulate inflammation and inflammasome activation.**<sup>21</sup>

Inflammasomes are multiprotein intracellular complexes that help initiate appropriate proinflammatory responses to pathogens.<sup>22</sup> Prolonged or dysregulated inflammasome activation is associated with severe consequences, including tissue damage.<sup>23</sup> Restoration of inflammatory homeostatic mechanisms enables healthy recovery, helping patients feel better sooner and mitigates against ongoing health complications.

**Immune Active NK features ingredients that stimulate immunity to support healthy function.**<sup>24,25</sup> Zinc, vitamin C and vitamin D are all critical to innate immunity, and deficiencies in one or more of these nutrients is associated with impaired immune responses and higher risk to infections.<sup>26,27,28,29,30,31,32</sup> Furthermore, vitamins C, D, and zinc support structural and functional integrity of mucosal barriers against pathogens.<sup>33</sup> While, clinical studies confirm EGCG and andrographolides both inhibit viral activity through inhibiting viral absorption to host cells and preventing viral formation and maturation.<sup>34,35</sup>

\*Ionophores are lipid soluble compounds, formed by binding flavonoids, that increase the cellular uptake of free ions.

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



# Immunogenics

Shiitake and Ginger to Support Healthy Immune Function and Reduce Nausea.

**Contents:** 60 capsules (VegeCaps) (15days)  
**Order Code:** IMG60  
**Storage:** Store below 30°C

- Supports patients with an impaired immune response.
- Clinically trialled AHCC™ with an extensive safety and tolerance profile.
- Contains ginger to address nausea, vomiting and appetite, and to protect intestinal mucosa.

**Each capsule contains:**

Dry herbal extracts:

<i>Lentinula edodes</i> , (Shiitake) (AHCC™) hyphae	338mg
Derived from fresh hyphae	3g
<i>Zingiber officinale</i> , (Ginger) rhizome	38.5mg
Derived from dry rhizome	1.6g

**Directions for use:**  
**Adults:** Take 2 capsules twice daily.

**Clinical Benefits:**

**Immunogenics supports patients with an impaired immune response, assisting with immune system surveillance and modulation.** Research into AHCC™ reveals positive effects on both innate and adaptive immunity. Specifically, AHCC™ has been shown to enhance natural killer (NK) cell activity, cytokine production, whilst promoting macrophage activity and increasing the number and activity of dendritic cells.<sup>1,2,3,4</sup> Furthermore, research also indicates benefits for the adaptive immune response pertaining to both B and T cell lymphocytes.<sup>5,6,7,8</sup> AHCC™ is well tolerated, making it suitable as an adjunct for immunosuppressed patients during and in between treatments to reduce possible side effects.


**Ginger assists with nausea, vomiting, gut barrier function, and also exerts anti-ulcer, anti-inflammatory and immunomodulatory effects.**<sup>9,10</sup>

Supporting gastrointestinal health is paramount to optimal functioning of the immune system. Ginger provides a protective action on the intestinal mucosa<sup>11</sup> and has been shown to ameliorate intestinal damage by reducing neutrophil infiltration and the pro-inflammatory response, while reducing oxidant stress and lipid peroxidation.<sup>12</sup> Ginger compounds are also able to elicit an anti-inflammatory effect via inhibition of key inflammatory response mediators, such as Nuclear factor kappa B (NFkB), Cyclooxygenase (COX) enzymes, and 5-Lipoxygenase (5-LOX).<sup>13</sup> Furthermore, ginger is able to support a healthy appetite thereby supporting energy production and reduce fatigue.<sup>14,15</sup>

**Having been studied in hundreds of clinical trials, AHCC™ is used in more than 600 international hospitals and institutions for an array of medical conditions.**<sup>16,17</sup> Immunogenics has been formulated to match the amount of AHCC™ used in human clinical trials. AHCC™ itself is a mixture of amino acids, lipids, and minerals extracted from a culture of Shiitake mushroom (*Lentinula edodes*), with polysaccharides being an active component. AHCC™ research in human populations has also shown improved immune parameters in immunocompromised people.<sup>18</sup> AHCC™ has demonstrable safety and a history of being well tolerated since its launch in 1989, with hundreds of thousands of users reporting no serious side effects.<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.

AHCC™ is a registered trademark of Amino Up Chemical Co. Ltd Japan.



8 Metagenics





# Meta Zinc with Vitamin C

High Strength, Bioavailable Zinc Powder with Vitamin C and Activated B6.

**Contents:** 114 g powder (30 days) and 228 g powder (60 days)

**Order Code:** Orange: MZOS (114 g), MZOL (228 g)

Raspberry: MZRS (114 g), MZRL (228 g)

**Storage:** Store below 30°C

- Prevent zinc deficiency.<sup>1</sup>
- Reduce duration of colds.<sup>2,3</sup>
- Meta Zn®- Zinc bisglycinate powder is easily absorbed with little side effects, such as nausea. It's high strength, great tasting, and suitable for use in children.

## Each dose (1.9 g) contains:

Calcium ascorbate dihydrate	605mg
Equivalent Ascorbic acid (Vitamin C)	500mg
Zinc amino acid chelate (Meta Zn® - Zinc bisglycinate)	125mg
Equivalent Zinc	25mg
Pyridoxal 5-phosphate monohydrate (Vitamin B6)	10mg
Betacarotene	2.0mg
Colecalciferol	12.5 micrograms
Equivalent Vitamin D3	500IU

## Directions for use:

**Children 4 to 13 years for immune support:** Add ¼ metric teaspoon (0.95 g) to 100 mL of water once daily with food. Drink immediately.

**Adults and teenagers: Acute:** Add ½ metric teaspoon (1.9 g) to 200 mL of water twice daily with food. Drink immediately.

**Maintenance:** Add ½ metric teaspoon (1.9 g) to 200 mL of water once daily with food. Drink immediately.

## Clinical Benefits:

**Meta Zinc with Vitamin C provides superior absorption and bioavailability, without the side effects, including nausea.** Zinc in Meta Zn® – Zinc bisglycinate is covalently bound to two glycine molecules. As glycine is the smallest amino acid, the whole Meta Zn® – Zinc bisglycinate molecule is small enough to be absorbed through abundant protein absorption channels instead of competing for few mineral absorption channels. The covalent bond is strong enough that it is not affected by stomach acid therefore preventing interactions with the gastro-intestinal lumen, where other forms of zinc may irritate and cause nausea and stomach upsets.

## Deficiencies of vitamin C and zinc severely suppress immune response.

Low zinc status may increase susceptibility to infectious diseases, such as diarrheal diseases or viral infections, as well as impact both T and B lymphocyte function, and the production of thymic hormone in the thymus.<sup>1</sup> Vitamin C and zinc support epithelial barriers, cellular proliferation and antibody production.<sup>1</sup>

Vitamin C is necessary for:

- Leucocyte and macrophage functions
- Neutrophil motility and phagocytosis
- Antimicrobial activity
- Interferon synthesis and antihistamine properties<sup>1</sup>

**Zinc is required for regulating protein synthesis and tissue growth, as well as cellular signalling<sup>4</sup>.** During early development, cellular activity may be particularly sensitive to zinc deficiency, which has been shown to compromise cognitive function.<sup>4</sup>

**Meta Zinc with Vitamin C is also used for male health<sup>6</sup>.** In particular, for sperm health and testosterone production.

**Zinc plays an important role in wound healing<sup>7</sup>.** Therefore, it can be used in the management of acne.

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

\*New Zealand stocks Orange 114 g only. Order code: NZMZOS.

\*\*Directions differ in New Zealand. Contact NZ Clinical Support on 0508 227 744 for further information.

Stop taking this medication if you experience tingling, burning or numbness and see your healthcare practitioner as soon as possible. [Contains vitamin B6].



# MetaZinc

High Strength, Bioavailable Zinc Tablets.

**Contents:** 60 tablets (60 days) and 120 tablets (120 days)

**Order Code:** MZ1S (60 tablets), MZ1L (120 tablets)

**Storage:** Store below 30°C

- Maintains healthy immune system function.<sup>1</sup>
- Assist in the management of mild acne and minor wound healing.<sup>2,3</sup>
- Supports sperm health and motility.
- Contains easily absorbed, low nausea, exclusive Meta Zn® with co-factors manganese and activated B6.
- High strength tablet with a break bar to allow for flexible dosing.

## Each tablet contains:

Zinc amino acid chelate (Meta Zn® - Zinc bisglycinate)	250mg
Equivalent Zinc	50mg
Pyridoxal 5-phosphate monohydrate (Vitamin B6)	50mg
Manganese amino acid chelate	19mg
Equivalent Manganese	3.0mg

## Directions for use:

**Adults and children over 14 years:**

**Acute:** Take 1 tablet daily with food.

**Maintenance:** Take ½ tablet daily with food.

## Clinical Benefits:

**Supports healthy immune function.** Zinc deficiency can affect the healthy functioning of cells necessary for normal immune function, particularly the T lymphocytes which require zinc for numerous processes.<sup>5</sup> This can lead to reduced antibody production and compromised cellular function of the innate immune system, including alteration of natural killer cell activity, phagocytosis and the generation of oxidative burst.<sup>6</sup> These alterations are considered to be important contributors to increased susceptibility to infections.<sup>7</sup>

**Adequate zinc status is essential for optimising male reproductive health.** Zinc is required to support testosterone production and spermatogenesis.<sup>8</sup> Oxidative stress may cause structural damage to sperm DNA, reduced sperm motility and defective sperm membrane integrity.<sup>9</sup> The antioxidant action of zinc, due to its membrane stabilising activity, may inhibit lipid peroxidation of sperm and protect against free radical damage.<sup>10</sup>

**Wound healing and skin integrity:** Zinc and manganese both play crucial roles in wound healing and connective tissue repair due to collagen synthesis.<sup>11</sup> Key mechanisms of zinc in acne management include anti-inflammatory effect on granulocytes, regulation of androgen metabolism and retinol-binding protein synthesis.<sup>12</sup>

**Zinc bisglycinate has been shown to have superior absorption compared to other forms of zinc:<sup>13</sup>** Zinc bisglycinate is absorbed intact and not ionised like other forms of zinc, resulting in less side effects such as nausea, commonly experienced with zinc supplementation.<sup>14</sup>

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

\*Not available in New Zealand.



# Super Mushroom Complex

High Strength Mushroom Blend for Immune System Support.

**Contents:** 100 g (37 doses) and 200 g (74 doses) oral powder Pine Lime flavour

**Order Code:** MUSC (100 g), MUSCL (200 g)

**Storage:** Store below 30°C

Traditionally, ingredients in Super Mushroom Complex have been shown to, or may:

- Enhance the strength and function of the immune system.<sup>1,2</sup>
- Reduce mild upper respiratory tract infections including mucus congestion.<sup>3,4</sup>
- Great tasting, concentrated powder with tiered dosing.

## Each dose (2.7 g) contains:

Dry herbal extracts:

<i>Cordyceps sinensis</i> (Cordyceps), hyphae	267mg
Derived from dry hyphae	4g
<i>Trametes versicolor</i> (Coriolus/Kawaratake), fruiting body	145mg
Derived from dry fruiting body	4g
<i>Ganoderma lucidum</i> (Reishi), fruiting body	235mg
Derived from dry fruiting body	4g
<i>Lentinula edodes</i> (Shiitake), fruiting body	250mg
Derived from dry fruiting body	4g

## Directions for use:

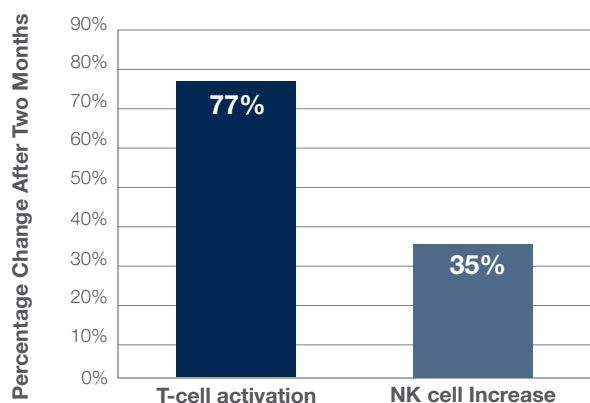
**Adults: For acute:** Add 1 level metric teaspoon (2.7 g) to 125 mL of water, three times daily for five days.

**Adults: For chronic:** Add 1 level metric teaspoon (2.7 g) to 125 mL of water daily.

## Clinical Benefits:

**Enhance and support the immune system:** Coriolus can increase immune activation in those affected by mild viral infections.<sup>5</sup> An intervention study on participants with viral antibodies showed a 77% T-cell activation plus an increase in natural killer cells (NK cells) of 35% after two months of treatment (Figure 1).<sup>5</sup> *Ganoderma lucidum* Proteoglycan (GLPG) has been shown, *in vitro*, to exhibit strong antiviral activity. These effects may be attributed to its ability to inhibit viral replication by interfering with the early events of viral absorption and entry into target cells.<sup>6</sup>

**Reishi exerts immunomodulatory effects due to its ganoderma lucidum polysaccharides (GLPS).**<sup>7</sup> In particular, the active  $\beta$ -D-glucans have the potential to bind to lymphocyte receptors or specific proteins, leading to alteration of the activity of macrophages, T-helper, NK cells and other effector cells.<sup>8</sup>



Munroe JE. J Integrative Medicine; 8. p 101-108. 2004

**Figure 1: *Trametes Versicolor* Can Increase Immune Activation.**

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



# Super Mushroom with Astragalus

Coriolus and Reishi Mushrooms with Astragalus for Immune System Support.

**Contents:** 30 tablets (15 days)

**Order Code:** MUSWA

**Storage:** Store below 30°C

Ingredients in Super Mushroom with Astragalus have been traditionally used or shown to:

- Enhance and regulate immune system function.<sup>1,2</sup>
- Reduce mild upper respiratory tract infections, including mucus congestion.<sup>3,4</sup>
- Provide support during times of fatigue and weakness.<sup>5</sup>

## Each tablet contains:

Dry herbal extracts:

<i>Astragalus membranaceus</i> (Astragalus), root	600mg
Derived from dry root	6g
<i>Trametes versicolor</i> (Coriolus/Kawaratake), fruiting body	327mg
Derived from dry fruiting body	9g
<i>Ganoderma lucidum</i> (Reishi), fruiting body	176mg
Derived from dry fruiting body	3g

## Directions for use:

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

## Clinical Benefits:

**Enhance and regulate the immune system:** Polysaccharide molecules may modulate the immune response due to the interaction with the intestinal ecosystem and gut associated lymphoid tissue (GALT).<sup>6</sup> Coriolus exerts prebiotic activity which modulates the gastrointestinal microbiota<sup>7</sup> and Reishi may protect against impaired intestinal permeability and dysbiosis.<sup>8</sup> As well as medicinal mushrooms, Astragalus also contains polysaccharides that may enhance macrophage, B-cell and T-cell activity, leading to increased surveillance and defence against pathogens.<sup>9</sup> Astragalus also increases the number and activity of T-regulatory cells<sup>10</sup> and modulates inflammatory pathways.<sup>11</sup>

**Antiviral activity:** Reishi contains the polysaccharides  $\beta$ -D-glucans that modulate the activity of macrophages, T-helper, NK cells and other effector cells.<sup>12</sup> *Ganoderma lucidum* Proteoglycan (GLPG) may inhibit viral replication and exerts strong antiviral activity.<sup>13</sup> Coriolus can increase immune activation in those affected by mild viral infections.<sup>14</sup>

**Beneficial during times of fatigue:** Astragalus is used to support immune function, fatigue and a lack of strength in Traditional Chinese Medicine.<sup>15,16</sup>

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



# UltraFlora Immune Control Probiotic

A Probiotic Combination for Healthy Immune System Function.

**Contents:** 30 capsules (VegeCaps) (30 days) and 60 capsules (VegeCaps) (60 days)  
**Order Code:** UFICT (30 capsules) and UFICT60 (60 capsules)  
**Storage:** Store at 2°C to 8°C (Refrigerate. Do not freeze.)

- Enhances immune system function.
- Reduces occurrence of, and manages, allergy symptoms.<sup>2,3</sup>
- Combination of two immune **modulating**, anti-inflammatory probiotic strains.

## Each capsule contains:

25 billion live probiotic organisms:

<i>Lactobacillus rhamnosus</i> (LGG®)	20 billion CFU (organisms)
<i>Lactobacillus paracasei</i> (LP-33®)	5 billion CFU (organisms)

## Directions for use (Adults and adolescents):

**To support immune system function:** Take 1 capsule daily.

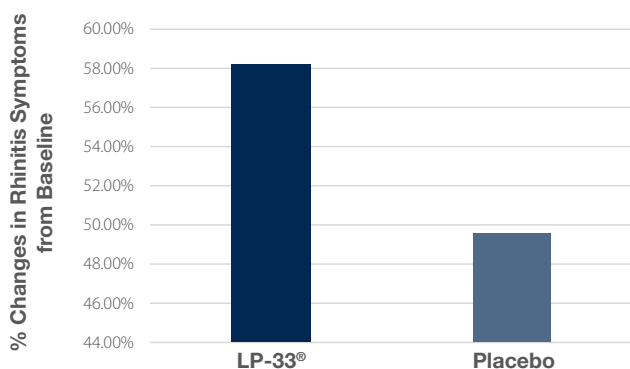
**To reduce symptoms of mild allergies:** Take 1 capsule twice daily.

## Clinical Benefits:

**Regulate the immune system:** *Lactobacillus rhamnosus* LGG® and *Lactobacillus paracasei* (LP-33®) help to promote immune regulation by interacting with dendritic cells within the gut associated lymphoid tissue (GALT), stimulating the production of regulatory T cells and increasing production of regulatory cytokines such as IL-10 and TGF-beta.<sup>5</sup> LGG® also promotes a shift towards an enhanced anti-inflammatory response by a heightened secretion of anti-inflammatory cytokines and decreased secretion of pro-inflammatory cytokines.<sup>3</sup>

**LGG® has bidirectional immunomodulatory effects** – stimulatory when an increased response is needed and down-regulatory when attenuation is appropriate.<sup>6</sup> 20 billion CFU of LGG® daily has been shown to reduce immune hyper-reactivity by strengthening gut mucosal barrier integrity.<sup>8</sup>

**LP-33® modulates inflammation and immune reactions by interacting with these cells and, together with LGG®, inducing development of regulatory T cells which can down regulate IgE, a Th2 cytokine involved in allergy.<sup>2</sup>** A double-blind, randomised, placebo-controlled trial on 425 subjects with allergic rhinitis compared the effects of LP-33® or placebo over a five week period. The LP-33® group demonstrated significant improvements in their Rhinitis Quality Of Life (RQLQ) score, as well as nasal and ocular symptoms (Figure 1).<sup>2</sup>



Costa DJ, Marteau P, Amouyal M, Poulsen LK, Hamelmann E, Cazaubiel M, et al. Efficacy and safety of the probiotic *Lactobacillus paracasei* LP-33 in allergic rhinitis: a double-blind, randomized, placebo-controlled trial (GA2LEN Study). Eur J Clin Nutr. 2014 May;68(5):602-7. 2014

**Figure 1: *Lactobacillus paracasei* (LP-33®) Improves Symptoms of Allergic Rhinitis.**

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

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



# UltraFlora Immune Enhance Probiotic

A Probiotic Combination to Boost Immune System Function.

**Contents:** 30 capsules (VegeCaps) (30 days) and 60 capsules (VegeCaps) (60 days)  
**Order Code:** UFIEN (30 capsules) and UFIEN60 (60 capsules)  
**Storage:** Store at 2°C to 8°C (Refrigerate. Do not freeze.)

- Enhances healthy immune system function.<sup>1</sup>
- Reduces duration and severity of colds.<sup>2,3</sup>
- Maintains healthy gastrointestinal immune function and support beneficial intestinal bacteria adherence.<sup>4,5</sup>
- Exclusive combination of immune **stimulating** probiotic strains.

## Each capsule contains:

6 billion live probiotic organisms:

<i>Lactobacillus rhamnosus</i> (LGG®)	5 billion CFU (organisms)
<i>Lactobacillus plantarum</i> (HEAL 9)	500 million CFU (organisms)
<i>Lactobacillus paracasei</i> (8700:2)	500 million CFU (organisms)

## Directions for use:

**Adults only:** Take 1 capsule daily.

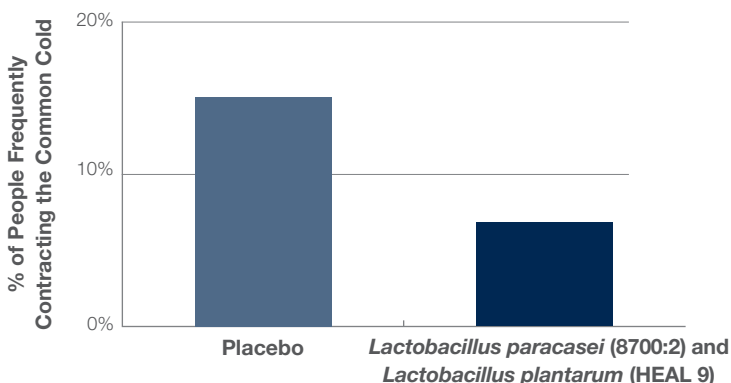
## Clinical Benefits:

***Lactobacillus plantarum* (HEAL 9) and *Lactobacillus paracasei* (8700:2), reduce duration and severity of common colds:** Strains in Ultra Flora Immune Enhance have been clinically shown to induce specific (cell mediated) immunity.<sup>1,2</sup> A randomised, parallel, double-blind, placebo-controlled study supplemented 272 subjects with either 500 million each of HEAL 9 and 8700:2 or a placebo for 12 weeks.<sup>1</sup> Those who were taking this exclusive probiotic combination experienced a 28% reduction in the duration of their cold and a reduction in total symptom score by 24%.<sup>1</sup>

## HEAL 9 and 8700:2 reduce the frequency of recurrent cold infections.

A randomised, double-blind, placebo-controlled 12-week winter study of 898 participants with a history of recurrent cold infections administered with HEAL 9 and 8700:2 or a placebo, found that the former group experienced a 30% reduction in the incidence of recurring colds and an 18% decline in concomitant analgesic use.<sup>7</sup>

**LGG® has bidirectional immunomodulatory effects** – stimulatory when an increased response is needed and down-regulatory when attenuation is appropriate.<sup>6</sup>



Berggren A, Lazou Ahrén I, Larsson N, Önnings G. Randomised, double-blind and placebo-controlled study using new probiotic lactobacilli for strengthening the body immune defence against viral infections. Eur J Nutr. 2011 Apr;50(3):203-10. 2011.

**Figure 1: *Lactobacillus paracasei* (8700:2) and *Lactobacillus plantarum* (HEAL 9) Significantly Reduce the Incidence of the Common Cold.<sup>1</sup>**








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

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**probi**

# Cold, Flu & Immunity Range

	Product Highlights	Pg
	<b>Alergenics</b> Support for Mild Allergy Relief and Healthy Immune Function. <ul style="list-style-type: none"> <li>• Unique blend of herbs and nutrients to build tolerance.</li> </ul>	4
	<b>Alergeze</b> Specialised Herbal Extracts to Relieve Hayfever and Allergic Rhinitis Symptoms. <ul style="list-style-type: none"> <li>• A unique combination of NRA2™.</li> </ul>	5
	<b>C-Ultrascorb Tablets</b> pH Adjusted Vitamin C Tablet with Hesperidin and Cysteine. <ul style="list-style-type: none"> <li>• Vitamin C</li> <li>• Nicotinamide</li> <li>• One-a-day dose.</li> </ul>	6
	<b>C-Ultrascorb Powder</b> pH Adjusted Vitamin C Tablet with Hesperidin and Cysteine. <ul style="list-style-type: none"> <li>• Orange flavour</li> <li>• One-a-day dose.</li> </ul>	6
	<b>Five Mushroom Extract</b> High Potency Mushroom Extract for Immune Support. <ul style="list-style-type: none"> <li>• Unique blend of medicinal mushrooms to support healthy immune function.</li> </ul>	7
	<b>Lysine Shield</b> Support Skin Repair and Wound Healing, Including the Lips. Formerly Viraclear. <ul style="list-style-type: none"> <li>• Vitamin C, Zinc and Astragalus.</li> </ul>	7
	<b>Immune Active NK</b> For Cough, Cold, Fever, Phlegm and Sore Throat. Formerly Andro NK. <ul style="list-style-type: none"> <li>• A Green Tea standardised to contain EGCGs.</li> <li>• Vitamins D, C and Zinc.</li> </ul>	8

	Product Highlights	Pg
	<b>Immunogenics</b> Shiitake and Ginger to Support Healthy Immune Function and Reduce Nausea. <ul style="list-style-type: none"> <li>• Clinically trialled AHCC™.</li> <li>• 38.5 mg Ginger rhizome.</li> </ul>	8
	<b>Meta Zinc with Vitamin C</b> High Strength, Bioavailable Zinc Powder with Vitamin C and Activated B6. <ul style="list-style-type: none"> <li>• Orange or Raspberry flavour.</li> </ul>	9
	<b>MetaZinc</b> High Strength, Bioavailable Zinc Tablets. <ul style="list-style-type: none"> <li>• B6 and Selenium.</li> <li>• One-a-day dose.</li> </ul>	9
	<b>Super Mushroom Complex</b> High Strength Mushroom Blend for Immune System Support. Mushroom Powder Blend. <ul style="list-style-type: none"> <li>• Pine Lime flavour</li> <li>• With four mushroom extracts.</li> </ul>	10
	<b>Super Mushroom with Astragalus</b> Coriolus and Reishi Mushrooms with Astragalus for Immune System Support. <ul style="list-style-type: none"> <li>• Astragalus, Coriolus, Reishi.</li> </ul>	10
	<b>UltraFlora Immune Control Probiotic</b> A Probiotic Combination for Healthy Immune System Function. <ul style="list-style-type: none"> <li>• Clinically trialled LP-33R in 425 subjects to significantly improve symptoms of allergic rhinitis.</li> </ul>	11
	<b>UltraFlora Immune Enhance Probiotic</b> A Probiotic Combination to Boost Immune System Function. <ul style="list-style-type: none"> <li>• Citrus Bioflavonoids extract.</li> </ul>	11

References available on request.



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