



HLC PROBIOTICS PROFESSIONAL PRODUCT GUIDE



RESEARCH-DRIVEN

Proprietary, human-sourced strains



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TABLE OF CONTENTS

Probiotics 1011

Market leader:

Driving	probiotic science and innovation
for over	[,] 15 years

.2

HLC Product Overview

DAILY PROBIOTIC
HLC High Potency Capsules
HLC High Potency Powder
HLC Intensive Capsules4
HLC Intensive Powder4
HLC Maintenance5
HLC Multi Strain6
NEW HLC Multi Strain 506
HLC Replenish Capsules7
HLC Synbiotic Intensive

IMMUNE HEALTH

HLC Immunobiotics8	
HLC Immunity + Pro9	

|--|

HLC MindLinx Capsules	10
HLC MindLinx Powder	10

URINARY SUPPORT

HLC Uritol Maintenance	11
COLON SUPPORT	
HLC Colon-izer	11

PREGNANCY & CHILD SUPPORT
HLC Maternity 12
HLC Maternity + Pro 13
HLC Baby B 14
HLC Baby F 14
HLC Child 15
HLC Child + Multi 15
NEW HLC Fit For School 16
HLC Neonate 16
HLC Toddler + Pro 17

Probiotic Clinical Trials

The	Swansea	Baby	Tria	ι . .	• •	 • • •	• •	•	 •		• •	20
The	Sheffield	Trial .				 		•				21

See centerfold for the HLC Probiotic Comparison Chart –

An easy reference guide to our complete line of daily and condition-specific probiotics

PROBIOTICS 101

What are probiotics?

There are billions of bacteria living in the intestinal tract often referred to as "microflora." Probiotics are live, "friendly" bacteria found in the microflora that work to keep a healthy intestinal balance by replenishing and maintaining beneficial strains. Maintaining this balance is critical for overall good health.*

Why supplement with probiotics?

Beneficial bacteria may be reduced due to a variety of factors:

Age

• Lifestyle

- Dietary changes
 or poor diet
- Use of antibiotics or other medications
- Stress
- Traveling

Bacterial balance in the intestine promotes healthy gastrointestinal function.*

Who should take probiotics?

Daily probiotic supplementation is considered a necessary component of any healthy diet. It supports health in:*

- Pre- and post-pregnancy
- Infants (1 year⁺), children and adolescents
- Adults
- Seniors

While probiotics may be added in foods such as yogurts and smoothies, direct probiotic supplementation provides the highest amount of beneficial live cultures. Probiotics should be a routine part of a daily lifestyle to help maintain optimal health conditions.^{*}



All ages can benefit from probiotic supplementation.*

MARKET LEADER

DRIVING PROBIOTIC SCIENCE & INNOVATION FOR OVER 15 YEARS

Pharmax Human Lactic Commensal (HLC) probiotics incorporate safe and effective strains reflecting the latest evidence-based research from human trials, and provide physicians and healthcare professionals a comprehensive range for individualized or condition-specific treatment.*

HUMAN-SOURCED STRAINS

Natural pH and bile acid resistance: No enteric coatings required

Human-sourced microflora bacterial strains have high survival rates through various stomach pH (1.8- 4.2), thus maximizing intestinal tract exposure and eliminating the need for enteric coatings (capsule/tablet barriers that control digestive absorption).

Naturally strong adherence: High ratio of intestinal tract carriage

CFU (Colony Forming Unit) levels are important, but effectiveness is best determined through intestinal tract carriage. Human-sourced microflora bacterial strains have a naturally strong adherence to epithelial cells thus ensuring high ratios of intestinal tract carriage.

RESEARCH-DRIVEN

Randomized, double-blind, placebo-controlled human trials demonstrate safety and efficacy

Trials using isolated consortiums of proprietary strains include:

25 billion CFU/day of:

- Lactobacillus acidophilus (CUL-60)
- Lactobacillus acidophilus (CUL-21)
- *Bifidobacterium bifidum* (CUL-20)
- *Bifidobacterium animalis* subsp. *lactis* (CUL-34)

Shown to:

- Reduce occasional GI symptoms*
- Maintain intestinal flora*

10 billion CFU/day of:

- Bifidobacterium bifidum (CUL-20)
- Bifidobacterium animalis subsp. lactis (CUL-34)
- Lactobacillus salivarius (CUL-61)
- Lactobacillus paracasei (CUL-08)

Shown to:

- Promote a healthy immune balance*
- Promote skin health*
- Reduce incidence of skin sensitivity*

Probiotic expertise: Global research and development drive category innovation

A collaborative think-tank lead by Dr. Nigel Plummer has produced peer-reviewed and PubMed listed publications.



Nigel Plummer, PhD. : Global authority on probiotics

A key probiotic contributor, Dr. Plummer has worked at Pfizer in antibiotic R&D and has extensive knowledge in the field. His continued commitment to research has resulted in collaborations with research institutes and universities within the U.K. and Europe, enabling Dr. Plummer to develop his expertise in probiotics, natural compounds supporting microbial balance and fish oils.

COMPREHENSIVE RANGE: CONVENIENT FORMATS, AGE-SPECIFIC AND CONDITION-SPECIFIC FORMULAS

Products are available in an array of potencies (up to 150 billion CFU), formats (capsules, tablets, powders) and flavors to allow for flexible and convenient dosing. Therapies can be tailored for specific individualized treatments by age (pregnancy support, infants, and children to seniors) or condition-specific probiotics (exorphin-degrading, immune support, GI and urinary support).^{*}



HLC HIGH POTENCY CAPSULES

Probiotic Supplement

Synbiotic formula for intestinal health in adults and children*

- Provides 10 billion CFU per serving from two strains of *Lactobacillus acidophilus*, *Bifidobacterium bifidum*, and *Bifidobacterium animalis* subsp. *lactis*
- · Includes 100 mg of fructooligosaccharides per serving

HLC High Potency Capsules provides a combination of four strains of proprietary, human-sourced probiotics and fructooligosaccharides (FOS) that helps to promote gastrointestinal health in adults and children. In a randomized, placebo-controlled trial involving 22 adults, daily supplementation with a probiotic containing *Lactobacillus acidophilus* supported a healthy microflora balance. *Lactobacilli* and *Bifidobacteria*, the most commonly used probiotics, help colonize the intestines and mediate the permeability of epithelial cells.*

Serving Size 1 Capsule Servings Per Container 60 or 120		
Amount per serving		%DV
HLC Consortium	10 billion viable cells	†
Lactobacillus acidophilus (CUL-60)		
Lactobacillus acidophilus (CUL-21)		
Bifidobacterium bifidum (CUL-20)		
Bifidobacterium animalis subsp. lactis	(CUL-34)	
Fructooligosaccharides (FOS)	100 mg	†

Other ingredients: Cellulose, hypromellose, silica, vegetable magnesium stearate

Recommended intake

Adults and Children (6 years and older): One capsule taken 1-2 times daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.

Pack Size

Product Code PB07-60

PB07-120

60 vegetable capsules

120 vegetable capsules

HLC HIGH POTENCY POWDER

Probiotic Supplement

Synbiotic formula for intestinal health in adults and children*

- Provides 10 billion CFU per day of two strains of *Lactobacillus* acidophilus, Bifidobacterium bifidum, and Bifidobacterium animalis subsp. *lactis*
- Includes 600 mg of fructooligosaccharides per serving

HLC High Potency Powder is a unique combination of four strains of proprietary, human-sourced probiotics and fructooligosaccharides (FOS) that helps to promote gastrointestinal health in adults. In a randomized, placebo-controlled trial involving 22 adults, daily supplementation with a probiotic containing *Lactobacillus acidophilus* supported a healthy microflora balance. *Lactobacilli* and *Bifidobacteria*, the most commonly used probiotics, help colonize the intestines and mediate the permeability of epithelial cells. After they are fermented by microbes in the colon, prebiotics – including FOS – support the growth of beneficial bacteria in the colon and further maintain and support the barrier function of intestinal epithelial cells. Their fermentation can result in the production of short chain fatty acids, including butyrate, the preferred energy source of colon cells.*

SUPPLEMENT FACTS		
Serving Size 1/3 Teaspoon (1 g) Servings Per Container 60 or 120		
Amount per serving		%DV
Total Carbohydrate	<1 g	<1%◆
Dietary Fiber	<1 g	2%♦
HLC Consortium	10 billion viable cells	†
Lactobacillus acidophilus (CUL-60)		
Lactobacillus acidophilus (CUL-21)		
Bifidobacterium bifidum (CUL-20)		
Bifidobacterium animalis subsp. lactis	(CUL-34)	
Fructooligosaccharides (FOS)	600 mg	†
 % Daily Values (DV) are based on a 2,000 % Daily Value (DV) not established 	calorie diet	

Other ingredients: Apricot powder, fructose, apricot flavor

Recommended intake

Adults and Children: In a glass, add water to 1/3 teaspoon (1 g) and mix. Take once daily with a meal, or as professionally directed.

Pack Size

2.1 oz (60 g) 4.2 oz (120 g) **Product Code** PB09-60 PB09-120

HLC INTENSIVE CAPSULES

Probiotic Supplement

Support for intestinal health*

- · Promotes a healthy gut flora*
- Provides 25 billion CFU per day of two strains of *Lactobacillus acidophilus*, *Bifidobacterium bifidum, and Bifidobacterium animalis* subsp. *lactis*

HLC Intensive Capsules provide four strains of proprietary, human-sourced probiotics that promote optimal intestinal health in children, adolescents and adults. *Lactobacilli* and *Bifidobacteria* are the most commonly used probiotics. They effectively colonize the intestines and promote healthy levels of intestinal bacteria into circulation. Probiotics reinforce the epithelial barrier and mediate intestinal permeability via controlling the integrity of tight junctions. Although the microflora composition in the gut is relatively steady, it can be altered by diet, stress, age and medication use. Probiotics promote the presence of beneficial bacteria to support normal intestinal function. In a randomized, placebo-controlled trial involving 155 adults, daily intake of a probiotic supplement providing 25 billion CFU (containing two strains each of *Lactobacillus acidophilus* and *Bifidobacterium*) for 21 days significantly and positively affected the intestinal microbiota.

Servings Per Container 3	0	
Amount per serving		%DV
HLC Consortium	25 billion viable cells	†
Lactobacillus acidophilu	s (CUL-60)	
Lactobacillus acidophilu	s (CUL-21)	
Bifidobacterium bifidum	(CUL-20)	
Bifidobacterium animali	s subsp. <i>lactis</i> (CUL-34)	

Other ingredients: Cellulose, hypromellose

Recommended intake

Adults and Children (6 years and older): One capsule taken daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.

Pack Size 30 vegetable capsules Product Code PB14-30

HLC INTENSIVE POWDER

Probiotic Supplement

Support for intestinal health*

- · Promotes a healthy gut flora*
- Provides 25 billion CFU per day of two strains of Lactobacillus acidophilus, Bifidobacterium bifidum, and Bifidobacterium animalis subsp. lactis

HLC Intensive Powder provides four strains of proprietary, human-sourced probiotics that promote optimal intestinal health in children, adolescents, and adults. *Lactobacilli* and *Bifidobacteria* are the most commonly used probiotics. They effectively colonize the intestines and promote healthy levels of intestinal bacteria into circulation. Probiotics reinforce the epithelial barrier and mediate intestinal permeability via controlling the integrity of tight junctions. Although the microflora composition in the gut is relatively steady, it can be altered by diet, stress, age, and medication use. Probiotics promote the presence of beneficial bacteria to support normal intestinal function. In a randomized, placebo-controlled trial involving 155 adults, daily intake of a probiotic supplement providing 25 billion CFU (containing two strains each of *Lactobacillus acidophilus* and *Bifidobacterium*) for 21 days significantly and positively affected the intestinal microbiota*

SUPPLEMENT FAC Serving Size 1 Scoop (1 g) Servings Per Container 30	TS		
Amount per serving		%DV forAdults and Children 4+ Years	%DV for Children 3-4 Years
Total Carbohydrate	<1 g	<1 %◆	†
HLC Consortium Lactobacillus acidophilus (Lactobacillus acidophilus (Bifidobacterium bifidum (C Bifidobacterium animalis s	CUL-21) UL-20)	t	t
 % Daily Values (DV) are based † % Daily Value (DV) not establi 			

Other ingredients: Maltodextrin

Recommended intake

Adults, adolescents and children (3 years and older): In a glass, add water or milk to one scoop of HLC Intensive Powder and mix. Take once daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.

Pack Size Nt wt 1 oz (30 g) Product Code PB33-30

HLC MAINTENANCE

Probiotic Supplement

Maintains microflora balance*

- Promotes gastrointestinal and digestive health*
- Provides 2.5 billion CFU per capsule from two strains of Lactobacillus acidophilus, Bifidobacterium bifidum, and Bifidobacterium animalis subsp. lactis

HLC Maintenance is a long-term maintenance probiotic formula which provides two strains of proprietary, human-sourced *Lactobacillus acidophilus*, *Bifidobacterium bifidum*, and *Bifidobacterium animalis* subsp. *lactis*. Probiotics naturally promote a healthy microflora balance, support normal intestinal microbiota, and support optimal digestive health.*

Serving Size 1 Capsule Servings Per Container 60 or 120		
Amount per serving		%DV
HLC Consortium	2.5 billion viable cells	†
Lactobacillus acidophilus (CUL-60)		
Lactobacillus acidophilus (CUL-21)		
Bifidobacterium bifidum (CUL-20)		
Bifidobacterium animalis subsp. lactis	(CUL-34)	
Fructooligosaccharides (FOS)	100 mg	†

Other ingredients: Cellulose, hypromellose, silica, vegetable magnesium stearate

Recommended intake

Adults and Children (6 years and older): One capsule taken 1-2 times daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.

Pack Size

60 vegetable capsules 120 vegetable capsules

NON DAIRY GLUTEN SEGAN

Product Code PB06-60 PB06-120



HLC MULTI STRAIN

Probiotic Supplement

Multistrain probiotic formula, including four tested strains

- Promotes gastrointestinal health*
- Provides 16 probiotic strains and 15 billion CFU per capsule
- 100% pure vegetable-sourced

HLC Multi Strain is a 15 billion CFU probiotic formula, providing four strains of proprietary, human-sourced *Lactobacillus acidophilus, Bifidobacterium bifidum*, and *Bifidobacterium animalis* subsp. *lactis* that supports a healthy gut microflora. The intestinal microbiota, which contains more than 400 bacterial species, can be altered by aging, or impacted by premature or caesarean birth. The intestines are a critical barrier that selectively allow absorption or promote the excretion of compounds, and their optimal function depends on a healthy microbiome. The most commonly used probiotics are *Lactobacilli* and *Bifidobacteria*. They effectively colonize the intestines, but after ingestion ends, their counts decline. Probiotics also reinforce the epithelial barrier, and they control permeability by mediating tight junction integrity.*

Each Capsule Contains		%DV
Probiotic Consortium	15 billion viable cells	†
Lactobacillus acidophilus (CUL-60))	
Lactobacillus acidophilus (CUL-21))	
Bifidobacterium bifidum (CUL-20)		
Bifidobacterium animalis subsp. lac	ctis (CUL-34)	
Lactobacillus salivarius (CUL-61)		
Lactobacillus paracasei (CUL-08)		
Lactobacillus plantarum (CUL-66)		
Lactobacillus casei (CUL-06)		
Lactobacillus fermentum (CUL-67)		
Lactobacillus gasseri (CUL-09)		
Bifidobacterium animalis subsp. lac	tis (CUL-62)	
Bifidobacterium breve (CUL-74)		
Streptococcus salivarius subsp. the	rmophilus (CUL-68)	
Lactobacillus acidophilus (NCFM®)		
Bifidobacterium animalis subsp. lac	tis (HN019)	
Lactobacillus rhamnosus (HN001)		

Other ingredients: Hypromellose, celllose, silica

Recommended intake

60 vegetable capsules

Adults, Adolescents and Children (6 years and older): One capsule taken once daily or as professionally directed. Take at least 2-3 hours before or after taking antibiotics.

Pack Size

Product Code PB34-60

NON DAIRY GLUTEN WEGAN NOFOS

NEW HLC MULTI STRAIN 50

Probiotic Supplement

15-strain probiotic combination

- Helps to reduce intestinal transit time*
- Helps support a healthy immune system*
- Supports gastrointestinal health*
- Supports a favorable gut flora*

HLC Multi Strain 50 capsules include 50 billion CFU from a combination of 15 probiotic strains. These research-driven strains were selected based on their ability to support gastrointestinal health and promote a favourable gut flora. HLC Multi Strain 50's probiotic consortium contains proprietary, human-sourced strains, and includes 8 strains of *Lactobacilli* and 6 strains of *Bifidobacteria. Saccharomyces cerevisiae* subsp. *boulardii* (CNCM-I-1079) live yeast cells are also provided for additional microflora support. In a recent placebo-controlled clinical trial, daily supplementation with 1.8 billion CFU of HN019 for two weeks supported gastrointestinal health by reducing intestinal transit time. Following supplementation, intestinal transit time was decreased by approximately 30%, which was associated with an approximate 35.8% reduction in occasional constipation.*

Each Capsule Contains		% DV
Probiotic Consortium	50 billion viable cells	†
Lactobacillus acidophilus (CUL-60)		
Lactobacillus acidophilus (CUL-21)		
Bifidobacterium animalis subsp. lact	is (CUL-34)	
Bifidobacterium bifidum (CUL-20)		
Bifidobacterium animalis subsp. lact	is (HN019)	
Bifidobacterium animalis subsp. lact	is (BL-04)	
Lactobacillus salivarius (CUL-61)		
Lactobacillus paracasei (CUL-08)		
Lactobacillus casei (CUL-06)		
Lactobacillus gasseri (CUL-09)		
Bifidobacterium breve (CUL-74)		
Lactobacillus plantarum (CUL-66)		
Lactobacillus acidophilus (NCFM®)		
Bifidobacterium animalis subsp. lact	is (CUL-62)	
Saccharomyces cerevisiae subsp. bo		

Other ingredients: Cellulose, hypromellose, silica

Recommended intake

One capsule taken daily or as professionally directed.

Pack Size	
30 Vegetable Capsules	

Product Code PB37-30

HLC REPLENISH CAPSULES

Probiotic Supplement

Rapid replenishment of intestinal microflora*

- · Provides live microorganisms that form part of a natural healthy gut flora*
- · Provides 100 billion CFU per dose from: Lactobacillus acidophilus, Lactobacillus acidophilus, Bifidobacterium bifidum, Bifidobacterium animalis subsp. lactis, Lactobacillus salivarius

HLC Replenish Capsules contain five strains of proprietary, humansourced probiotics that help promote gastrointestinal health in adults and children. In a randomized, placebo-controlled trial involving 52 adults, daily supplementation with CUL-60, CUL-21, CUL-20 and CUL-34 significantly improved quality of life and bowel habit satisfaction scores.*

Serving Size 1 Capsule Servings Per Container 14		
Amount per serving		%DV
HLC Consortium	100 billion viable cells	†
Lactobacillus acidophilus (CUL	-60)	
Lactobacillus acidophilus (CUL	-21)	
Bifidobacterium bifidum (CUL-	20)	
Bifidobacterium animalis subsp	. lactis (CUL-34)	
Lactobacillus salivarius (CUL-6	1)	

Other ingredients: Fructooligosaccharides (FOS), hypromellose, silica, vegetable magnesium stearate

Recommended intake

Adults and Children (6 years and older): One capsule taken daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.

Pack Size

14 vegetable capsules

Product Code PB26-14

HLC SYNBIOTIC INTENSIVE

Probiotic Supplement

High-dose formula promoting healthy gut flora*

- · Promotes optimal gastrointestinal and digestive health*
- Provides 150 billion CFU per day from two strains of Lactobacillus acidophilus, Bifidobacterium bifidum, Bifidobacterium animalis subsp. lactis, and Lactobacillus salivarius
- · Contains 10 g of fructooligosaccharides (FOS)

HLC Synbiotic Intensive is a combination of FOS and probiotics that supports a healthy intestinal microflora. The intestines contain more than 400 bacterial species, and bacterial balance is necessary for a healthy intestinal tract. Probiotics promote naturally healthy microflora composition and support intestinal function. Lactobacillus and Bifidobacterium promote optimal digestive health. Prebiotics, including FOS, are fermented by microbes in the colon. They increase short-chain fatty acid production, which provides energy to colon cells, and support healthy mucin levels to reinforce the epithelial barrier. Consequently, synbiotic products promote the growth of existing beneficial bacteria and supplemented probiotic strains. In a randomized, placebo-controlled trial involving 52 adults, daily probiotic supplementation supported optimal gastrointestinal health.*

Serving Size 1 Sachet (20 g) Servings Per Container 7		
Amount per serving		%DV
Calories	50	
Sodium	5 mg	<1%◆
Total Carbohydrate	18 g	6%◆
Dietary Fiber	10 g	41%♦
Sugars	8 g	†
HLC Consortium	150 billion viable cells	†
Lactobacillus acidophilus (CUL-60)		
Lactobacillus acidophilus (CUL-21)		
Bifidobacterium bifidum (CUL-20)		
Bifidobacterium animalis subsp. lactis	(CUL-34)	
Lactobacillus salivarius (CUL-61)		
Fructooligosaccharides (FOS)	10 g	†

Other ingredients: Apricot powder

Recommended intake

Adults: In a glass, add water to one sachet (20 g) and mix. Take once daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.

Pack Size

7 x 0.7 oz (20 g) sachets of powder [Net Wt 4.9 oz (140 g)]

Product Code PB08-7



HLC IMMUNOBIOTICS

Probiotic Supplement

Probiotic, nutrient and herbal immune-support formula*

- Promotes immune function*
- Provides antioxidant protection for optimal health*
- Promotes gastrointestinal health*
- Contains 25 billion CFU per daily dose of two strains of proprietary, human-sourced Lactobacillus acidophilus and Bifidobacterium bifidum, Bifidobacterium animalis subsp. lactis

HLC Immunobiotics is a highly concentrated probiotic formula that contains two strains of proprietary, human-sourced *Lactobacillus acidophilus, Bifidobacterium bifidum,* and *Bifidobacterium animalis* subsp. *lactis.* It also contains a variety of vitamins and essential minerals, as well as zinc and echinacea, which help promote immune function. Vitamin C and CoQ_{10} provide antioxidants for overall health. This unique formula helps to maintain healthy flora in the gastrointestinal tract and supports optimal immune health. HLC probiotic strains, which have been studied in randomized, double-blind, placebo-controlled trials, have strong epithelial adherence and a high tolerance for stomach acid.*

SUPPLEMENT FACTS			
Serving Size 1 Capsule			
Servings Per Container 30			
Amount per serving			%DV
Vitamin C (ascorbic acid)	125	mg	208%
Vitamin D (cholecalciferol)	500	IU	125%
Thiamin (thiamin mononitrate)	4.2	mg	280%
Riboflavin	4.8	mg	282%
Niacin (niacinamide)	18	mg	90%
Vitamin B ₆ (pyridoxine hydrochloride)	6	mg	300%
Folic acid	400	mcg	100%
Vitamin B ₁₂ (cyanocobalamin)	10	mcg	167%
Biotin	200	mcg	67%
Pantothenic acid (calcium d-pantothenat	e) 12	mg	120%
Zinc (zinc citrate)	7.5	mg	50%
Selenium (sodium selenite)	100	mcg	143%
Coenzyme Q_{10} (yeast fermentation)	30	mg	+
Guarana (<i>Paullinia cupana</i>) seed std. ext (11-13% caffeine) (equivalent to 420 r		mg)	t
Yeast (Saccharomyces cerevisiae) std. ex (70% beta-1,3-glucans)	dract 60	mg	+
European elder (Sambucus nigra) fruit juice (equivalent to 0.45 ml fruit juice / 525 ml		mg	†
Echinacea (<i>Echinacea purpurea</i>) root std. ex (4% polyphenols) (equivalent to 120-39		mg cea root)	+
Propolis resin (from honey bee hive)	30	mg	†
HLC Consortium	12.5 billion viable	cells	†
Lactobacillus acidophilus (CUL-60)			
Lactobacillus acidophilus (CUL-21)			
Bifidobacterium bifidum (CUL-20)			
Bifidobacterium animalis subsp. lactis (CUL-34)		
† % Daily Value (DV) not established			

Other ingredients: Hypromellose, cellulose, silica, vegetable magnesium stearate

Recommended intake

Adults: One capsule taken two times daily with meals, a few hours before or after taking antibiotics, or as professionally directed.

Pack Size	Product Code
30 vegetable capsules	PB23-30

HLC IMMUNITY + PRO

Vitamin and Probiotic Supplement

Support for gastrointestinal, immune, skin and bone health*

- · Helps to maintain immune function, healthy skin and proper muscle function*
- · Helps in the maintenance of bones, cartilage, teeth and gums, and provides support for healthy glucose metabolism*
- · Contains probiotics that temporarily modify gut flora and support gastrointestinal health*
- Provides 2 billion CFU per serving from: Lactobacillus acidophilus (CUL-60), Lactobacillus acidophilus (CUL-21), Bifidobacterium animalis subsp. lactis (CUL-34), Bifidobacterium bifidum (CUL-20)
- Includes 7 vitamins and 5 essential minerals

HLC Immunity + Pro is a combination of proprietary, human-sourced probiotics, vitamins and minerals that supports optimal health. Approximately 80% of the body's immunologically active cells are located in gut-associated lymphoid tissue, demonstrating an important interaction between the intestines and the immune system. The intestinal microflora composition is relatively steady, although it can be altered by diet, stress, and age. Zinc maintains immune health by stimulating the proliferation of lymphocytes and increasing their phagocytic activity. Zinc is especially necessary for T cell proliferation as a cofactor for thymulin, a hormone involved in T cell differentiation and function. Zinc also promotes skin health as it is required for epithelial cell proliferation. Magnesium and vitamin C maintain bones and teeth by stimulating boneforming osteoblasts and by producing collagen, respectively. B vitamins mediate macronutrient metabolism, while chromium helps support glucose metabolism.*

Serving Size 1 Sachet (8.42 g)			
Servings Per Container 30			
Amount per serving			%DV
Calories	20		
Sodium	55	mg	2%
Total Carbohydrate		g	2%♦
Sugars	5	g	†
Vitamin C (ascorbic acid)	1000		1667%
Thiamin (thiamin hydrochloride)	0.38	mg	25%
Riboflavin (riboflavin-5-phosphate sodium)	0.43	mg	25%
Niacin	5	mg	25%
Vitamin B ₆ (pyridoxine hydrochloride)	10	mg	500%
Folic acid	12.5	mcg	3%
Vitamin B ₁₂ (cyanocobalamin)	25	mcg	417%
Pantothenic acid (calcium <i>d</i> -pantothenate)	2.5	mg	25%
Calcium (calcium carbonate			
calcium phosphate tribasic)	50		5%
Phosphorus (calcium phosphate tribasic)	13	mg	1%
Magnesium (magnesium hydroxide	00		4 5 0/
carbonate)	60		15%
Zinc (zinc ascorbate)		mg	13%
Manganese (manganese gluconate)		mg	25%
Chromium [chromium (III) polynicotinate]	10	mcg	8%
Potassium (potassium bicarbonate / carbonate)	100	ma	3%
		0	
	2 billion viable	cells	†
Lactobacillus acidophilus (CUL-60)			
Lactobacillus acidophilus (CUL-21)	24)		
Bifidobacterium animalis subsp. lactis (CUL-	34)		
Bifidobacterium bifidum (CUL-20)			

† % Daily Value (DV) not established

Other ingredients: D-fructose, citric acid, DL-malic acid, natural orange flavor, sodium bicarbonate, orange juice powder, maltodextrin (potato), silica, L-tartaric acid, glycine, annatto extract, beta-carotene

Recommended intake

Adults: In a glass, add water to one sachet of powder and mix. One sachet taken daily with a meal, a few hours before or after taking other medications, or as professionally directed.

Pack Size

Product Code

30-0.3 oz (8.42 g) sachets of powder VM54-30 [Net Wt 8.9 oz (253 g)]

HLC MINDLINX CAPSULES

Probiotic Supplement

Probiotics to support gastrointestinal health in adults and children*

- Contains *L. rhamnosus*, a probiotic that has shown exorphin-degrading activity *in vitro*
- Provides 24 billion CFU per daily dose
- Includes 500 mg of L-glutamine per daily dose

HLC MindLinx Capsules contain a combination of five proprietary, human-sourced probiotics and the amino acid L-glutamine. Included in this probiotic blend is *L. rhamnosus*, a strain that has demonstrated exorphin-degrading activity *in vitro*. Exorphins are peptides produced during the digestion of certain foods, including wheat and dairy products. *L. rhamnosus* has been shown to eliminate exorphins from wheat and milk in intestinally-stimulated conditions. This strain has been combined with four proprietary, research-driven strains to support gastrointestinal health and contribute to a favorable gut flora.

Serving Size 1 Capsule Servings Per Container 60		
Amount per serving		%DV
HLC Consortium	12 billion viable cells	†
Lactobacillus acidophilus (CUL-60)		
Lactobacillus acidophilus (CUL-21)		
Bifidobacterium bifidum (CUL-20)		
Bifidobacterium animalis subsp. lactis	(CUL-34)	
Lactobacillus rhamnosus (CUL-63)		
L-Glutamine	250 mg	†

Other ingredients: Hypromellose, silica, vegetable magnesium stearate

Recommended intake

60 vegetable capsules

Adults: One capsule taken twice daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.

Pack Size

Product Code PB19-60

HLC MINDLINX POWDER

Probiotic Supplement

Supports gastrointestinal health in adults*

- Contains *L. rhamnosus*, a probiotic that has shown exorphin-degrading activity in vitro*
- Provides 24 billion CFU per daily dose
- Includes 1000 mg of L-glutamine and 500 mg of fructooligosaccharides (FOS) per daily dose
- Great-tasting apricot flavor

HLC MindLinx Powder provides a combination of five proprietary, human-sourced probiotics, plus the amino acid L-glutamine and FOS in a delicious apricot-flavored powder. This probiotic blend includes *L. rhamnosus*, a strain that has demonstrated exorphin-degrading activity in vitro. Exorphins are peptides produced during the digestion of certain foods, including wheat and dairy products. In intestinallystimulated conditions, *L. rhamnosus* has been shown to extensively eliminate exorphins from wheat and milk. This probiotic helps to support gastrointestinal health and contribute to a favorable gut flora along with four other proprietary, research-driven strains.*

Serving Size ¹ /4 Teaspoon (1 g) Servings Per Container 60		
Amount per serving		%DV
HLC Consortium	12 billion viable cells	†
Lactobacillus acidophilus (CUL-60)		
Lactobacillus acidophilus (CUL-21)		
Bifidobacterium bifidum (CUL-20)		
Bifidobacterium animalis subsp. lactis	(CUL-34)	
Lactobacillus rhamnosus (CUL-63)		
L-Glutamine	500 mg	†
Fructooligosaccharides (FOS)	250 mg	+

Other ingredients: Apricot powder

Recommended intake

Adults: In a glass, add water to $\frac{1}{4}$ teaspoon (1 g) and mix. Take twice daily with a meal, or as professionally directed.

Pack Size Nt Wt 2.1 oz (60 g) Product Code PB20-60



HLC URITOL MAINTENANCE

Probiotic Supplement

Promotes urinary tract health*

- Supports a healthy microflora balance*
- Provides antioxidants to promote optimal health*
- Provides 2.5 billion CFU per serving from a combination of two
 Lactobacillus acidophilus strains
- Includes 195 mg of cranberry fruit extract and 60 mg of vitamin C per serving

HLC Uritol Maintenance provides two strains of proprietary, humansourced *Lactobacillus acidophilu s* formulated to support urinary tract health. The microbial species that inhabit the vaginal tract help maintain urogenital health. Research suggests that the intestinal and urogenital microbial flora have a central role in maintaining health and well-being. The probiotic organisms present in HLC Uritol Maintenance support a healthy microflora. Vitamin C is an important aqueous antioxidant, and cranberry fruit extract provides polyphenols to further promote optimal urinary tract health. HLC probiotic strains, which have been studied in randomized, double-blind, placebo-controlled trials, have strong epithelial adherence and a high tolerance for stomach acid.*

SUPPLEMENT FACTS Serving Size 1 Capsule Servings Per Container 30		
Amount per serving		%DV
Vitamin C (ascorbic acid)	60 mg	100%
Cranberry (<i>Vaccinium macrocarpon</i>) fruit extract (36:1) (equivalent to 7 g of fresh fruit)	195 mg	t
HLC Consortium	2.5 billion viable cells	†
Lactobacillus acidophilus (CUL-60) Lactobacillus acidophilus (CUL-21)		

Other ingredients: Fructose, hypromellose, cellulose, silica, vegetable magnesium stearate

Recommended intake

30 vegetable capsules

Adults: One capsule taken daily with half a glass of water before breakfast, at least 2-3 hours before or after taking antibiotics, or as professionally directed.

Pack Size

Product Code

PB18-30

NON DAIRY GLUTEN WEGAN NOFOS

HLC COLON-IZER

Probiotic Supplement

Intensive probiotic formula

- Promotes a healthy gut microflora*
- · Supports optimal digestive health*
- Contains 40 billion CFU per serving from a combination of five proprietary, human-sourced probiotics
- Contains 2.5 g of butyric acid and 2 g of L-glutamine per serving

HLC Colon-izer is a highly concentrated probiotic powder that provides two strains of proprietary, human-sourced *Lactobacillus acidophilus*, *Bifidobacterium bifidum*, and two strains of *Bifidobacterium animalis* subsp. *lactis*. It has been specially formulated to maintain healthy flora in the gastrointestinal tract. Butyric acid is a short-chain fatty acid representing the end-product of intestinal microbial fermentation of dietary fiber. It is an important energy source for intestinal epithelial cells and helps maintain colonic homeostasis. Glutamine also modulates gastrointestinal health.*

Serving Size 6 g Servings Per Container 1		
Amount per serving		%DV
Calories	20	
Calcium (calcium butyrate)	310 mg	31%
HLC Consortium Lactobacillus acidophilus (CUL-60) Lactobacillus acidophilus (CUL-21) Bifidobacterium bifidum (CUL-20) Bifidobacterium animalis subsp. lactis (CU Bifidobacterium animalis subsp. lactis (CU		t
Butyric acid (calcium/magnesium butyrate) 2.5 g	†
L-Glutamine	2 g	†

Recommended intake

Adults: Administer entire contents (6 g) as one dose, at least 2-3 hours before or after taking antibiotics, or as professionally directed.

Pack Size Nt Wt 0.2 oz (6 g)

Product Code PB05-6



*These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.



HLC MATERNITY (PREVIOUSLY HLC PERINATE)

Probiotic Supplement

Probiotic support for pregnant women*

- 10 billion CFU per capsule
- Temporarily modifies gut flora*
- · Suitable for use during pregnancy and neonatal period*

Healthy intestinal bacteria are just as important to infants as to adults. Microflora composition remains relatively unchanged after infancy; thus the acquisition of a beneficial flora potential in the newborn can be significantly enhanced if the mother also takes a probiotic during pregnancy. Additionally, probiotics will help support the intestinal function of the mother during the pregnancy period.*

SUPPLEMENT FACTS Serving Size 1 Capsule Servings Per Container 30		
Amount per serving		%DV
HLC Consortium	10 billion viable cells	†
Bifidobacterium bifidum (CUL-20)		
Bifidobacterium animalis subsp. la	ctis (CUL-34)	
Lactobacillus salivarius (CUL-61)		
Lactobacillus paracasei (CUL-08)		

Other ingredients: Maltodextrin, hypromellose

Recommended intake

30 vegetable capsules

Women: One capsule taken daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.

Pack Size

Product Code PB29-30



SUPPORT UPPER RESPIRATORY TRACT HEALTH WITH HLC FIT FOR SCHOOL*



GLUTEN FREE ↔ CONSECTARIAN NOFOS **HLC Fit For School** supports children's upper respiratory tract health and immune function using a unique combination of research-driven probiotic strains and vitamin C.* Each delicious blackcurrant-flavored chewable tablet provides 12.5 billion CFU of proprietary strains, plus 50 mg of vitamin C – the same formulation shown to help maintain schoolchildren's immune health in a recent clinical trial.* HLC Fit For School also includes additional immune support with 1000 IU of vitamin D per tablet.*



A Trusted Seroyal Brand

pharmax Condition-specific support Comprehensive range in convenient formats

HLC probiotics are available in an array of potencies and formulas for individualized treatment plans.

Human Lactic Commensal (HLC) Probiotics Comparison Chart

PRODUCT	PRIMARY INDICATIONS	VIABLE CELLS (CFU) PER DOSAGE UNIT	STRAINS	OTHER ACTIVE INGREDIENTS	FOS	RECOMMENDED DOSE
DAILY PROBIOTIC						
HLC Maintenance (capsules)	Lower-potency, encapsulated probiotic blend for general digestive support*	2.5 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21) B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34)		Yes	Adults and Children (6 years and older): One capsule taken 1-2 times daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.
HLC High Potency Capsules	Probiotic and prebiotic formula for enhanced microflora support and G.I. function*	10 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21) B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34)		Yes	Adults and Children (6 years and older): One capsule taken 1-2 times daily with meals, at least 2-3 hours before or after taking antibiotics, or as professionally directed.
HLC High Potency Powder	Probiotic and prebiotic formula for enhanced microflora support and G.I. function; convenient powder*	10 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21) B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34)		Yes	Adults and Children: In a glass, add water to 1/3 teaspoon (1 g) and mix. Take once daily with a meal or as professionally directed.
HLC Multi Strain	Moderate-potency probiotic formula featuring 16 different strains for broad- spectrum G.I. support*	15 billion	L acidophilus (CUL-60) L acidophilus (CUL-21) B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34) L. salivarius (CUL-61) L. paracasei (CUL-68) L. casei (CUL-66) L. casei (CUL-66) L. fermentum (CUL-67) L. gasseri (CUL-69) B. animalis subsp. lactis (CUL-62) B. breve (CUL-74) Streptococcus salivarius subsp. thermophilus (CUL-68) L. acidophilus (NCFM [*]) B. animalis subsp. lactis (HN019) L. rhamnosus (HN001)		No	Adults, Adolescents and Children (6 years and older): One capsule taken once daily or as professionally directed. Take at least 2-3 hours before or after taking antibiotics.
HLC Intensive Capsules	High-potency probiotic formula for microflora balance and G.I. health support*	25 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21) B. bifidum (CUL-20) B. animal subsp. lactis (CUL-34)		No	Adults and Children (6 years and older): One capsule taken daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.
HLC Intensive Powder	High-potency probiotic formula for microflora balance and G.I. health support; convenient powder*	25 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21) B. bifidum (CUL-20) B. animal subsp. lactis (CUL-34)		No	Adults, adolescents and children (3 years and older): In a glass, add water or milk to one scoop of HLC Intensive Powder and mix. Take once daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.
NEW HLC Multi Strain 50	Maximal delivery of 15 different probiotics for broad-spectrum G.I. support*	50 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21) B. animalis subsp. lactis (CUL-34) B. birlidum (CUL-20) B. animalis subsp. lactis (HN019) L. grasseri (CUL-09) L. gaalivarius (CUL-61) L. paracasei (CUL-08) L. casei (CUL-06) B. breve (CUL-74) L. plantarum (CUL-66) L. acidophilus (NCFM*) B. animalis subsp. lactis (CUL-62) Saccharomyces cerevisiae subsp. boulardii (CNCM-I-1079)		No	One capsule taken daily or as professionally directed.
HLC Replenish Capsules	Highest potency probiotic capsule for broad-spectrum support*	100 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21) B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34) L. salivarius (CUL-61)		Yes	Adults and Children (6 years and older): One capsule daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.
HLC Synbiotic Intensive (powder)	Highest potency probiotic powder for broad-spectrum support	150 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21) B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34) L. salivarius (CUL-61)		Yes	Adults: In a glass, add water to one sachet (20 g) and mix. Take once daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.

These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.

		VIABLE CELLS		071150		
PRODUCT	PRIMARY INDICATIONS	(CFU) PER DOSAGE UNIT	STRAINS	OTHER ACTIVE INGREDIENTS	FOS	RECOMMENDED DOSE
IMMUNE FUNCTION		•	ontanto			
HLC Immunity + Pro (powder)	Vitamin and immune support*	2 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21) B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34)	Complex nutrient blend	No	Adults: In a glass, add water to one sachet of powder and mix. One sachet taken daily with a meal, a few hours before or after taking other medications, or as professionally directed.
HLC Immunobiotics (capsules)	Immune support*	12.5 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21) B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34)	Complex nutrient blend	No	Adults: One capsule taken two times daily with meals, a few hours before or after taking antibiotics, or as professionally directed.
PREGNANCY & CHILD	SUPPORT					
HLC Toddler + Pro (powder)	Probiotic and vitamin supplement to support support a healthy gut flora in children*	2.5 billion	B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34) L. salivarius (CUL-61) L. paracasei (CUL-08)	Multivitamin and mineral blend, transgalacto- ligosaccharides, fruit blend	Yes	Children (1-5 years): In a glass, add water or milk to one scoop (1 g) of HLC Toddler + Pro and mix. Take once daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.
HLC Neonate (powder)	Lower-potency probiotic specifically formulated to support G.I. health in children*	3 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21) L. paracasei (CUL-08) B. animalis subsp. lactis (CUL-62)		No	Children (1-4 years): Add one level scoop (100 mg) of HLC Neonate powder into a single daily feeding of expressed breast or formula milk or as professionally directed. Take at least 2-3 hours before or after taking antibiotics.
HLC Child (chewable tablets)	Child-specific chewable probiotic to support G.I. health*	4 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21) B. biritidum (CUL-20) B. animalis subsp. lactis (CUL-34) L. salivarius (CUL-61) L. paracasei (CUL-08)		No	Children (4 years and older): Chew one tablet 1-2 times daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.
HLC Maternity (capsules) (previously HLC Perinate)	Support pregnant women and children*	10 billion	B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34) L. salivarius (CUL-61) L. paracasei (CUL-08)		No	Women: One capsule taken daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.
HLC Maternity + Pro (capsules + softgels)	Probiotic specifically formulated for pregnant women; with vitamins, minerals & omega-3 fatty acids for additional support*	10 billion	B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34) L. salivarius (CUL-61) L. paracasei (CUL-08)	Multivitamin and mineral blend, DHA & EPA with beta carotene and vitamin E	No	Women (19 years and older): One serrated strip, containing one capsule and one softgel, taken once daily with a meal or as professionally directed. Take a few hours before or after taking other medications, and at least 2-3 hours before or after taking antibiotics.
HLC Baby B (powder)	Supports breast-fed infants*	10 billion	B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34) L. salivarius (CUL-61) L. paracasei (CUL-08)	GOS	No	Children (1-4 years): In a glass, add water or milk to one scoop of HLC Baby B and mix. Take once daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.
HLC Baby F (powder)	Support formula-fed infants*	10 billion	B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34) L. salivarius (CUL-61) L. paracasei (CUL-08)	GOS	Yes	Children (1-4 years): In a glass, add water or milk to one scoop of HLC Baby F and mix. Take once daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.
HLC Child + Multi (chewable tablets)	Multivitamin and daily probiotic specifically formulated for children*	12.5 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21) B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34)	Various vitamins	No	Children (4 years and older): One chewable tablet taken daily with a meal or as professionally directed. Take at least 2 -3 hours before or after taking antibiotics or other medication.
NEW HLC Fit For School (chewable tablets)	Children's immune support formula*	12.5 billion	L. acidophilus (CUL-21) L. acidophilus (CUL-50) B. animalis subsp. lactis (CUL-34) B. bifidum (CUL-20)		No	Adolescents and Children (4 years and older): One chewable tablet taken daily or as professionally directed.
EXORPHIN DEGRADIN	IG (in vitro)					
HLC MindLinx Capsules	Exorphin degrading capacity in intestinally- simulated conditions*	12 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21) B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34) L. rhamnosus (CUL-63)	L-glutamine	No	Adults: One capsule taken twice daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.
HLC MindLinx Powder	Exorphin degrading capacity in intestinally- simulated conditions*	12 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21) B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34) L. rhamnosus (CUL-63)	L-glutamine	Yes	Adults: In a glass, add water to 1/4 teaspoon (1 g) and mix. Take twice daily with a meal, or as professionally directed.
URINARY SUPPORT						
HLC Uritol Maintenance (capsules)	Helps support urinary tract health*	2.5 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21)	Vitamin C, cranberry fruit extract (36:1)	No	Adults: One capsule taken daily with half a glass of water before breakfast, at least 2-3 hours before or after taking antibiotics, or as professionally directed.
COLON SUPPORT						
HLC Colon-izer (powder)	High-potency probiotic formula for colon and G.I. support*	40 billion	L. acidophilus (CUL-60) L. acidophilus (CUL-21) B. bifidum (CUL-20) B. animalis subsp. lactis (CUL-34) B. animalis subsp. lactis (CUL-69)	Butyric acid, L-glutamine	No	Adults: Administer entire contents (6 g) as one dose, at least 2-3 hours before or after taking antibiotics, or as professionally directed.

SUPPORTS DAILY DIGESTIVE HEALTH*



NEW



A Trusted Seroyal Brand

HLC Multi Strain 50 provides complete support for daily digestive health, with 50 billion CFU from a combination of 15 thoroughly-researched probiotics.*

A healthy gastrointestinal tract is a key factor in both digestive and immune function, as it acts as the first line of defense for the immune system. **HLC Multi Strain 50** includes *Bifidobacterium animalis* subsp. *lactis* (HN019) which has been clinically evaluated for the reduction of intestinal transit time, as well as BL-04 and NCFM[®] strains, which have been studied for their immune health benefits. *Saccharomyces cerevisiae* subsp. *boulardii* live yeast cells are also included to help maintain optimal gut flora composition.*

HLC Multi Strain 50 is ideal for vegans and free of added gluten.



HLC MATERNITY + PRO

Vitamin and Probiotic Supplement

Nutritional and intestinal support for pregnant women*

- Promotes a healthy gut microflora balance and optimal immune function*
- Supports the development of the brain, eyes and nerves
- · Supports the formation of healthy red blood cells*
- Provides 10 billion CFU from a combination of
- four proprietary, human-sourced strains
- Includes over 20 vitamins and essential minerals

HLC Maternity + Pro includes human-sourced probiotic strains to promote optimal gastrointestinal and digestive health. The acquisition of a beneficial flora in the newborn may be supported if the mother takes a probiotic during pregnancy. Additionally, probiotics will help support the intestinal function of the mother during the pregnancy period. The strains in HLC Maternity + Pro are proprietary and provide strong epithelial adherence and a naturally high tolerance to stomach acid. *

HLC Maternity + Pro also includes more than 20 essential vitamins, minerals and antioxidants that aid in the development and maintenance of healthy skin, tissue, bones, cartilage, teeth and gums. It also provides magnesium to support proper muscle function. Beta carotene supports the development and maintenance of bones, eyesight and immune function. Folic acid supports healthy red blood cell formation and also supports healthy neural tube formation, when taken prior to becoming pregnant and in early pregnancy, in conjunction with a healthy diet and exercise program. Iodine supports normal thyroid function, and zinc supports optimal immune health. Chromium supports already healthy glucose metabolism, and the B vitamins, molybdenum, and magnesium support macronutrient metabolism. Each softgel capsule contains 200 mg of DHA and 45 mg of EPA, essential omega-3 fatty acids that promote cognitive health and brain function.*

SUPPLEMENT FACTS Serving Size 1 Vegetable Capsule Servings Per Container 28 % DV fo % DV for Pregnant & Lactating Women Adult Amount per serving Women 150 mg Vitamin C (ascorbic acid) 250% 250% Vitamin D (cholecalciferol) 1000 IU 250% 250% Vitamin K₁ (phylloquinone) 75 mcg 94% + 2.2 mg 129% 147% Thiamin (thiamin mononitrate) 2.8 mg Riboflavin 165% 140% Niacin (niacinamide) 32 mg 160% 160% Vitamin B₆ (pyridoxine hydrochloride) 2.8 mg 140% 112% 800 mcg 200% 100% Folic acid Vitamin B₁₂ (cyanocobalamin) 10 mcg 167% 125% 100 mcg Biotin 33% 33% Pantothenic acid (calcium *d*-pantothenate) 12 mg 120% 120% 120 mg Calcium (calcium carbonate) 12% 9% 16 mg Iron (ferrous fumarate) 89% 89% 150 mcg 100% 100% lodine (potassium iodide) 56.25 mg 14% 13% Magnesium (magnesium oxide) 67% 67% Zinc (zinc citrate) 10 mg 55 mcg Selenium (selenomethionine) 79% t 1 mg 50% Copper [copper (II) citrate] 50% 100% Manganese (manganese gluconate) 2 mg + Chromium 33% [chromium (III) polynicotinate] 40 mcg + 50 mcg Molybdenum [sodium molybdate (VI)] 67% t N-Acetyl-L-Cysteine 20 mg + 10 billion viable cells **HLC Consortium** + + Bifidobacterium bifidum (CUL-20) Bifidobacterium animalis subsp. lactis (CUL-34) Lactobacillus salivarius (CUL-61) Lactobacillus paracasei (CUL-08) t % Daily Value (DV) not established

Other ingredients: Hypromellose, silica, vegetable magnesium stearate

Serving Size 1 Softgel Capsule Servings Per Container 28			
Amount per serving		% DV for Adult Women	% DV for Pregnant & Lactating Women
Calories	5		
Calories from Fat	5		
Total Fat	0.5 g	< 1%◆	+
Vitamin A (100% as beta-carotene)	4000 IU	80%	50%
Vitamin E (<i>d</i> -alpha tocopheryl acetate)	15 IU	50%	50%
Docosahexaenoic acid (DHA)	200 mg	+	+
Eicosapentaenoic acid (EPA) (DHA & EPA provided as tuna oil)	45 mg	†	†

Other ingredients: Fish gelatin, glycerin

Recommended intake

Women (19 years and older): One serrated strip, containing one capsule and one softgel, taken once daily with a meal or as professionally directed. Take a few hours before or after taking other medications, and at least 2-3 hours before or after taking antibiotics.

Pack Size

Vitamins, Minerals & Probiotics: 28 vegetable capsules + High DHA Omega-3 Fatty Acids: 28 soft-gel capsules

Product Code PB30-28



HLC BABY B

Probiotic Supplement for Breast-Fed Babies

Support for breast-fed babies*

- Helps to promote skin health*
- · May help to reduce incidence of skin sensitivity*
- 10 billion CFU per serving

HLC Baby B probiotic formula for infants provides *Lactobacillus* salivarius, *Lactobacillus paracasei*, *Bifidobacterium bifidum* and *Bifidobacterium animalis* subsp. *lactis*, which may help to promote immune function and skin health in infants. HLC Baby B powder dissolves easily into milk or water, and is free of gluten and soy. Ideal for vegetarian infants.*

	%DV
10 billion viable cells	+
:UL-34)	
	10 billion viable cells CUL-34)

Other ingredients: Transgalactooligosaccharides (GOS) (from milk) Contains: Milk

Recommended intake

Children (1-4 years): In a glass, add water or milk to one scoop of HLC Baby B and mix. Take once daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.

Pack Size

Net wt 0.2 oz (6 g)

Product Code PB28-6

NON GLUTEN DEGETARIAN NO FOS

HLC BABY F

Probiotic Supplement for Formula-Fed Babies

Support for formula-fed babies*

- Helps to promote skin health*
- May help to reduce incidence of skin sensitivity*
- 10 billion CFU per serving

With added prebiotic fibers

- · Contains FOS and GOS, a prebiotic fiber similar
- to oligosaccharides naturally within breast milk
- FOS and GOS support mucosal immunity*

HLC Baby F is a probiotic supplement for infants that provides Lactobacillus salivarius, Lactobacillus paracasei, Bifidobacterium bifidum and Bifidobacterium animalis subsp. lactis, which may help to promote immune function and skin health in infants. HLC Baby F contains galactooligosaccharides (GOS), a type of prebiotic fiber similar to oligosaccharides ocurring naturally within breast milk that may help to support a healthy gastrointestinal microflora in infants. Fructooligosaccharides (FOS) are also included for additional prebiotic fiber content. Dissolves easily into milk or water, and is free of gluten and soy. Ideal for vegetarian infants.

Serving Size 1 Scoop (1.1 g) Servings Per Container 60		
Amount per serving		%DV
Total Carbohydrate	1 g	†
HLC Consortium	10 billion viable cells	+
Bifidobacterium bifidum (CUL-20)		
Bifidobacterium animalis subsp. lacti	s (CUL-34)	
Lactobacillus salivarius (CUL-61)		
Lactobacillus paracasei (CUL-08)		

Other ingredients: Transgalactooligosaccharides (GOS) (from milk), fructooligosaccharides (FOS) Contains: Milk

Recommended intake

Children (1-4 years): In a glass, add water or milk to one scoop of HLC Baby F and mix. Take once daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed

Pack Size Net wt 2.3 oz (66 g) Product Code PB27-66

NON GLUTEN GMO FREE® VEGETARIAN

HLC CHILD

Probiotic Supplement

Probiotic formula for children

- Maintains healthy gut microflora*
- $\ensuremath{\cdot}$ Supports digestive health and function*
- Provides 4 billion CFU of Lactobacillus acidophilus, Bifidobacterium bifidum, Lactobacillus paracasei, Lactobacillus salivarius, and Bifidobacterium animalis subsp. lactis per serving
- Provided in a delicious, natural blackcurrant-flavored chewable tablet

HLC Child probiotic formula is a unique combination of probiotics, including *Lactobacillus acidophilus*, *Bifidobacterium bifidum*, *Lactobacillus paracasei*, *Lactobacillus salivarius*, and *Bifidobacterium animalis subsp. lactis*, which help maintain a child's healthy gut flora. Probiotics influence the intestinal microbiota, modulate the immune response, and support skin health. Double-blind, placebo-controlled clinical studies indicate that HLC Probiotics, support gastrointestinal health and digestive function.*

Amount per serving		%DV
Total Carbohydrate	<1 g	<1%◆
HLC Consortium	4 billion viable cells	†
Lactobacillus acidophilus (CUL-60)		
Lactobacillus acidophilus (CUL-21)		
Bifidobacterium bifidum (CUL-20)		
Bifidobacterium animalis subsp. lactis	(CUL-34)	
Lactobacillus salivarius (CUL-61)		
Lactobacillus paracasei (CUL-08)		

Other ingredients: Sorbitol, xylitol, natural blackcurrant flavor, silica, magnesium stearate

Recommended intake

Children (4 years or older): Chew one tablet 1-2 times daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.

Pack Size 30 chewable tablets Product Code PB21-30

NON DAIRY GLUTEN GMO FREE FREE CON NO FOS

HLC CHILD + MULTI

Vitamin and Probiotic Supplement

Children's vitamin and probiotic support*

- Contains 12.5 billion CFU of research-driven probiotic strains and vitamins essential to overall health and wellbeing*
- Supports optimal digestive health*
- Promotes a healthy immune system*
- Supports normal energy production*
- Provided in a delicious, natural blackcurrant-flavored chewable tablet

HLC Child + Multi contains two strains of *Lactobacillus acidophilus*, *Bifidobacterium bifidum*, and *Bifidobacterium animalis* subsp. *lactis*, which help maintain a child's healthy gut flora. Among these strains are researchdriven probiotics that have been studied in randomized, double-blind, placebo-controlled human trials. HLC Child + Multi also utilizes proprietary, human-sourced microflora bacterial strains that adhere to the human intestinal epithelium and have a natural tolerance to stomach acid.*

HLC Child + Multi also contains the essential vitamins A, B, C, D, E, and K. Vitamin A helps to maintain skin health and immune function. It also supports normal eyesight and night vision and the formation of healthy bones and teeth. Niacin, thiamine, and biotin support normal energy production, while pantothenic acid promotes the formation of the neurotransmitter acetylcholine in the brain. Riboflavin supports vitamin B₆ and folate, which promote normal amino acid metabolism and DNA synthesis, respectively. Folic acid and vitamin B₁₂ promote healthy red blood cell production. The antioxidant vitamins C and E support optimal immune health, and vitamin D supports optimal immune function and bone health. Vitamin K supports optimal bone and cardiovascular health.

SUPPLEMENT FACTS			
Serving Size 1 Tablet			
Servings Per Container 30			
Amount per serving			%DV
Vitamin A (vitamin A acetate)	1333	IU	27%
Vitamin C (ascorbic acid)	100	mg	167%
Vitamin D (cholecalciferol)	500	IU	125%
Vitamin E (d-alpha tocopheryl acetate)	30	IU	100%
Vitamin K1 (phylloquinone)	25	mcg	31%
Thiamin (thiamin mononitrate)	1.4	mg	93%
Riboflavin	1.6	mg	94%
Niacin (niacinamide)	7.5	mg	38%
Vitamin B ₆ (pyridoxine hydrochloride)	2	mg	100%
Folic acid	200	mcg	50%
Vitamin B ₁₂ (cyanocobalamin)	50	mcg	833%
Biotin	150	mcg	50%
Pantothenic acid (calcium d-pantothenat	e) 6	mg	60%
HLC Consortium	2.5 billion viable	cells	†
Lactobacillus acidophilus (CUL-60)			
Lactobacillus acidophilus (CUL-21)			
Bifidobacterium bifidum (CUL-20)			
Bifidobacterium animalis subsp. lactis (0	CUL-34)		

Other ingredients: Xylitol, natural blackcurrant flavor, silica, vegetable magnesium stearate, thaumatin

Recommended intake

Children (4 years and older): One chewable tablet taken daily with a meal or as professionally directed. Take at least 2 -3 hours before or after taking antibiotics or other medication.

Pack Size 30 chewable tablets Product Code PB24-30

NON DAIRY GLUTEN GMO FREE FREE CONSTRAINT NOFOS

NEW HLC FIT FOR SCHOOL

Probiotic Supplement

Children's immune support formula*

- Supports upper respiratory tract health*
- May help promote immune function in children*
- Includes 12.5 billion CFU of proprietary probiotic strains
- Provides 50 mg of the antioxidant nutrient vitamin C
- and 1000 IU of vitamin D per serving
- Chewable tablets with a delicious natural blackcurrant flavor

HLC Fit For School includes a combination of research-driven, probiotic strains and vitamin C that helps to support upper respiratory tract health and immune function in children. In a recent clinical trial, 57 schoolchildren were randomized to receive either a placebo tablet or HLC Fit For School's probiotic formula plus 50 mg of vitamin C daily for 6 months. Children in the probiotic plus vitamin C group had a significant improvement in upper respiratory immune health. These results are consistent with other studies that have found that *Lactobacillus acidophilus* and *Bifidobacterium animalis* subsp. *lactis* help maintain upper respiratory tract health. HLC Fit For School also includes additional immune support with 1000 IU of vitamin D per serving.*

SUPPLEMENT FACTS			
Serving Size 1 Tablet Servings Per Container 30			
Amount per serving			%DV
Vitamin C (ascorbic acid)	50	mg	83%
Vitamin D₃ (cholecalciferol)	1000	IU	250%
HLC Consortium	12.5 billion viable	cells	†
Lactobacillus acidophilus (CUL-21)			
Lactobacillus acidophilus (CUL-60)			
Bifidobacterium animalis subsp. lactis	s (CUL-34)		
Bifidobacterium bifidum (CUL-20)			

Other ingredients: Xylitol, blackcurrant fruit extract, sorbitol, natural blackcurrant flavor, silica, magnesium stearate

Recommended intake

Adolescents and children (4 years and older): One chewable tablet taken daily or as professionally directed.

Pack Size

30 chewable tablets

Product Code PB36-30



HLC NEONATE

Probiotic Supplement

Supports healthy gut flora in young children*

- Promotes gastrointestinal health*
- Includes 3 billion CFU per day from a combination of two strains of Lactobacillus acidophilus, Lactobacillus paracasei, and Bifidobacterium animalis subsp. lactis

HLC Neonate is a combination of four strains of proprietary, human-sourced probiotics that promotes intestinal health in young children. The human intestinal tract contains more than 400 bacterial species, and a healthy bacterial balance is necessary for a healthy gastrointestinal tract. Probiotics promote the presence of beneficial bacteria, and strengthen the epithelial barrier. Probiotics transiently impact the host's microflora, as once their ingestion ends, they decline in numbers. As the microflora composition in children is relatively unchanged after infancy, it significantly depends on the diet.*

SUPPLEMENT FACTS Serving Size 1 Scoop (100 mg) Servings Per Container 60		
Amount per serving		%DV
HLC Consortium	3 billion viable cells	†
Lactobacillus acidophilus (CUL-60))	
Lactobacillus acidophilus (CUL-21))	
Lactobacillus paracasei (CUL-08)		
Bifidobacterium animalis subsp. lac	tis (CUL-62)	
† % Daily Value (DV) not established		

Other ingredient: Lactose monohydrate (milk)

Recommended intake

Children (1-4 years): Add one level scoop (100 mg) of HLC Neonate powder into a single daily feeding of expressed breast or formula milk or as professionally directed. Take at least 2-3 hours before or after taking antibiotics.

Pack Size Nt Wt 0.2 oz (6 g) Product Code PB10-6

NON GLUTEN WEGETARIAN NOFOS

HLC TODDLER + PRO

Vitamin and Probiotic Supplement

Support for a healthy gut microflora in children*

- · Promotes optimal intestinal health*
- Supports the development and maintenance of tissue, bones, cartilage, teeth and gums*
- Supports immune health*
- Provides 2.5 billion CFU from a combination of four proprietary, humansourced strains

HLC Toddler + Pro provides a unique consortium of proprietary, humansourced probiotic strains to support optimal digestive and intestinal health in children. The probiotic strains used provide strong epithelial adherence and a naturally high tolerance to stomach acid. In addition, over 10 vitamins are included to further promote optimal health. Vitamin C supports tissue health, and vitamin A promotes night vision and healthy eyesight. Vitamin D promotes bone and tissue health. Riboflavin, vitamin B₆, and pantothenic support healthy tissue formation, and folate and vitamin B₁₂ support the formation of healthy red blood cells. Vitamin E is an antioxidant that promotes optimal health.*

Amount per serving		%DV for Children 1-3 Years	%DV for Children 4+ Years
Total Carbohydrate	<1 g	t	<1%◆
Vitamin A (vitamin A acetate)	1333 IU	53%	27%
Vitamin C (ascorbic acid)	40 mg	100%	67%
Vitamin D (cholecalciferol)	200 IU	50%	50%
Vitamin E (d-alpha tocopheryl acetate)	9 IU	90%	30%
Vitamin K1 (phylloquinone)	30 mcg	+	38%
Thiamin (thiamin mononitrate)	0.55 mg	79%	37%
Riboflavin	0.7 mg	88%	41%
Niacin (niacinamide)	8 mg	89%	40%
Vitamin B ₆ (pyridoxine hydrochloride)	0.7 mg	100%	35%
Folic acid	100 mcg	50%	25%
Vitamin B ₁₂ (methylcobalamin)	1.25 mcg	42%	21%
Biotin	25 mcg	17%	8%
Pantothenic acid (calcium d-pantothena	ite) 3 mg	60%	30%
HLC Consortium 2.5 billion Bifidobacterium bifidum (CUL-20)	n viable cells	†	†
Bifidobacterium animalis subsp. lactis (CUL-34)		
Lactobacillus salivarius (CUL-61)			
Lactobacillus paracasei (CUL-08)			

Other ingredients: Fructooligosaccharides (FOS), transgalactooligosaccharides, fruit blend (strawberry, blackberry, blackcurrant, bilberry, elderberry), xylitol, natural strawberry flavor Contains: Milk

Recommended intake

Children (1–5 years): In a glass, add water or milk to one scoop (1 g) of HLC Toddler + Pro and mix. Take once daily with a meal, at least 2-3 hours before or after taking antibiotics, or as professionally directed.

Pack Size

Product Code PB31-60





GET AN EARLY START ON SKIN AND DIGESTIVE HEALTH*

pharmax

A Trusted Seroyal Brand

The *NEW* HLC Baby product family supports optimal microflora composition and gastrointestinal health using a combination of research-driven probiotic strains.

HLC Baby B (for breast-fed babies) and **HLC Baby F** (for formula-fed babies) each provide 10 billion CFU of proprietary, human-sourced strains. Research indicates that probiotic supplementation from birth to six months helps support infant immune development, which is an important factor for skin health.*

HLC Baby B includes additional microflora support from galactooligosaccharides (GOS), a prebiotic fiber similar to the oligosaccharides in breast milk.* HLC Baby F contains GOS and fructooligosaccharides (FOS).



*These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.



PROBIOTIC CLINICAL TRIALS

Safe and effective strains reflecting the latest evidencebased research from human trials

Pharmax HLC probiotic strains have been proven over the last 30 years to be effective in supporting intestinal balance. This section provides a detailed overview of the latest trials conducted on human-derived HLC probiotic strains, specifically the results from research that studied HLC probiotics and their effect in reducing skin sensitivity in young children and reducing occasional GI symptoms.*

WHERE NUTRITIONAL SCIENCE COMES TO LIFE.

The Swansea Baby Trial Probiotics in the Prevention of Skin Sensitivity: A Randomised Controlled Trial (Allen at al., 2014)

Probiotic supplementation was found to safely and effectively reduce incidence of skin sensitivity. In a randomized, double-blind, placebo-controlled, parallel group trial, 454 pregnant women at 36 weeks of gestation were assigned to either the probiotic capsule treatment group (10 billion CFU from *Lactobacillus salivarius* CUL61, *Lactobacillus paracasei* CUL08, *Bifidobacterium animalis* subsp. *lactis* CUL34 and *Bifidobacterium bifidum* CUL20) or the placebo capsule group. Participants supplemented daily until giving birth; participants' infants then began daily supplementation until 6 months of age. Skin sensitivity was evaluated at 6 months and 2 years of age. In comparison with the infant participants in the placebo group, participants in the probiotic group experienced a statistically significant 57% decrease in skin sensitivity.

57% decrease in skin sensitivity*

Skin Sensitivity at 2 Years	
Placebo Group	12.10%
Probiotic Group	5.30%



The Sheffield Trial

Clinical Trial: a Multistrain Probiotic Preparation Significantly Reduces Intestinal Discomfort in a Double-Blind Placebo-Controlled Study

(Williams et al., 2008)

Probiotic supplementation was found to decrease the number of days with intestinal discomfort, while improving satisfaction with bowel habits and overall quality of life. This eight-week, doubleblind, randomized, placebo-controlled study was conducted using 52 participants, who were randomized to either the placebo capsule group or the probiotic capsule group (25 billion CFU from *Lactobacillus acidophilus* CUL60 and CUL 21, *Bifidobacterium animalis* subsp. *lactis* CUL34, and *Bifidobacterium bifidum* CUL20). Participants scored their intestinal discomfort (including bloating, satisfaction with bowel habits, and quality of life) at baseline and every two weeks during supplementation. In the probiotic group, satisfaction with bowel habits significantly improved in just six weeks, and quality of life scores improved after eight weeks of supplementation.*

- 22% decrease in days with intestinal discomfort*
- 32% improvement in satisfaction with bowel habits*

Intestinal Discomfort Scores	Probiotic Group	Placebo Group
Before Supplementation	282.68	252.08
At 8 Weeks of Probiotic Supplementation	150.23	172
% Change at Week 8	133.39	80.66



Bloating Symptom Severity Scores	Probiotic Group	Placebo Group
Before Supplementation	48.54	46.71
2 Weeks After End of Probiotic Supplementation	36.65	39.27
% Change at Week 10	12.04	7.52



Satisfaction With Bowel Habits	Probiotic Group
Before Supplementation	73.39
At 8 Weeks of Probiotic Supplementation	39.65



"These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.

Days with Intestinal Discomfort	Before Supplementation	2 Weeks After End of Probiotic Supplementation
Placebo Group	42.67	32.14
Probiotic Group	48.64	28.27
% Change at Week 10	12.04	7.52



NOTES



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