



# FAST FACTS ABOUT ACIDOPHILUS PLUS

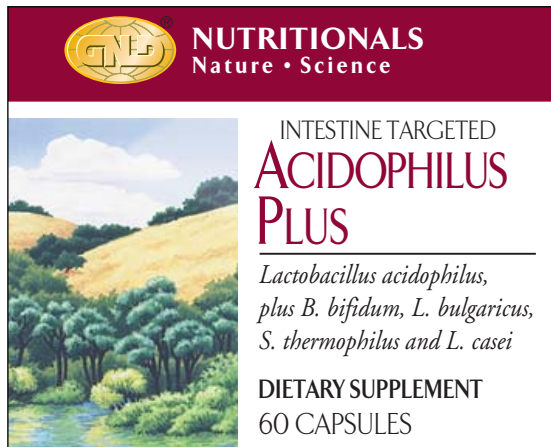
Beneficial (“good”) intestinal bacteria promote health, discourage the growth of disease-causing (“bad”) bacteria and pathogenic fungi, and improve the balance of microbes which normally inhabit our intestines. Many beneficial bacteria transform naturally occurring sugars, especially lactose, into lactic acid, promoting a more balanced and stable intestinal environment. As one of the most abundant sources of lactose is milk, these beneficial bacteria have been used for thousands of years to produce yogurt, cheese, and fermented milks. Both science and folklore support healthful roles for these foods. GNLD’s supplement of beneficial bacteria, Acidophilus Plus, combines potency with technology to guarantee that live organisms survive the stomach acid and reach the intestines to deliver five billion viable organisms capable of supporting optimal digestive tract function.

## WHY BENEFICIAL BACTERIA?

- Beneficial bacteria help maintain a healthy balance of a variety of microorganisms in the intestines.
- Beneficial bacteria help produce vitamins and, through an indirect mechanism, boost resistance to infection and disease.
- Cultured dairy products (yogurt, cheese, fermented milks), produced through the actions of beneficial bacteria, have been used throughout the world for centuries to support health.

## WHY GNLD ACIDOPHILUS PLUS?

- **Whole-food-derived.** Contains beneficial bacteria isolated from cultured dairy foods to support a healthful balance of microorganisms in the gastrointestinal tract.
- **Broad-spectrum.** Delivers five types of beneficial, lactic acid-producing bacteria: *Lactobacillus acidophilus*, *Lactobacillus bulgaricus*, *Lactobacillus casei*, *Bifidobacterium bifidum*, and *Streptococcus thermophilus*.
- **Concentrated.** As many beneficial bacteria as 10 servings of yogurt or five servings of acidophilus milk!
- **Potency guaranteed.** Each capsule is filled with five billion live organisms and protected for delivery to the intestines.
- **Active cultures.** Exclusive Gel-Gard protection system assures that the maximum number of live bacteria survive the stomach acid and reach the site of action, the intestines.
- **Convenient.** Each bottle contains a 60 day supply.



Supplement Facts	
Serving Size 1 Capsule	
Amount Per Serving	
Lactobacillus Proprietary Blend	104 mg*
Lactobacillus acidophilus; Bifidobacterium bifidum; Lactobacillus bulgaricus; Streptococcus thermophilus; Lactobacillus casei	
* Daily Value not established	
Other ingredients: Potato starch, gelatin, glucose, sodium alginate, water, magnesium stearate and titanium dioxide.	
	Lot #
907	Best If Used By

**SUGGESTED USE:** 1 capsule daily.

Intestinal lactobacilli aid normal digestive functions and promote healthy immune system responses.\*

\* This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

Filled with 5 billion beneficial lactobacilli, the contents of each capsule is shielded from harsh stomach acid by GNLD's unique "Gel-Gard" Enteric Protection System.

**Banded and packaged with safety seal for your protection. Do not use if either seal is missing or broken.**

**REFRIGERATE AFTER OPENING**

NOT SOLD IN RETAIL STORES  
Available Exclusively From GNLD Distributors

Distributed by: **GNLD International**  
Fremont, CA 94538 U.S.A.  
**Golden Neo-Life Diamite International, Ltd.**  
Bridgetown, Barbados, W.I.  
Kingston, Jamaica, W.I.

Leading edge nutrition since 1958. Made in U.S.A.



# THE ACIDOPHILUS STORY

## BENEFICIAL BACTERIA MAKE GOOD FOODS BETTER

Long before it became possible to see bacteria with the aid of microscopes, people used these minute organisms to produce cultured dairy products such as cheese, sour cream, and yogurt. Fermented milks have been safely consumed throughout the world for thousands of years, as evidenced by their depiction in Sumerian wall paintings dating back to 2500 B.C. and their mention in the Old Testament (Genesis 18:8). Yogurt consumption is part of the folklore of many long-lived populations, including the Ural Mountain people, many of whom live more than 100 years! Widely recognized as an important part of a healthy diet, cultured dairy products have grown in popularity, with more cultured dairy foods available today than ever before.

## FOOD SOURCES OF LACTOBACILLI\* FROM AROUND THE WORLD

Cultured Dairy Products	Beneficial Bacteria
Yogurt	<i>Streptococcus thermophilus</i> <i>Lactobacillus bulgaricus</i> <i>Lactobacillus acidophilus</i>
Buttermilk	<i>Lactobacillus lactis</i> <i>Streptococcus cremoris</i>
Sour cream	<i>Streptococcus cremoris</i>
Kefir	<i>Lactobacillus acidophilus</i> <i>Lactobacillus caucasicus</i>
Cheeses	<i>Lactobacillus acidophilus</i> <i>Lactobacillus brevis</i> <i>Lactobacillus casei</i> <i>Lactobacillus caucasicus</i> <i>Lactobacillus helveticus</i> <i>Lactobacillus lactis</i> <i>Lactobacillus plantarum</i> <i>Streptococcus cremoris</i> <i>Streptococcus faecium</i>
Cottage cheese	<i>Lactobacillus lactis</i> <i>Streptococcus cremoris</i>
Acidophilus milk	<i>Lactobacillus acidophilus</i>
Bulgaricus milk	<i>Lactobacillus bulgaricus</i>
Yakult	<i>Lactobacillus casei</i>
Bifidus milk	<i>Bifidobacterium bifidum</i> <i>Bifidobacterium longum</i>

\* Bacteria that produce lactic acid as an end product of milk fermentation.

## THE BIRTH OF PROBIOTICS

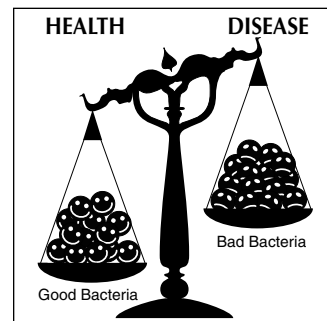
Most people are familiar with *antibiotics*, which physicians prescribe to combat strains of bacteria which cause disease. In contrast, other strains of bacteria promote health and are called *probiotics*, from the Greek meaning “for life.” Probiotics are live microbial supplements which beneficially affect the host by improving its intestinal balance. Although anecdotal

health claims for the regular consumption of cultured dairy products have circulated for centuries, only in this century have scientists begun to understand how these foods support health.

In 1908, Nobel Prize-winning scientist Elie Metchnikoff of the Pasteur Institute in Paris provided the first evidence that microorganisms may be responsible for the health-promoting effects of fermented milks. After observing that Bulgarian peasants lived to ripe, old ages, Metchnikoff became convinced that their health and longevity were linked to microbes in the soured milk they copiously drank. In his book *The Prolongation of Life*, he suggested that disease-causing (“bad”) bacteria could be eliminated by ingesting large amounts of Bulgarian sour milk, which contained a beneficial (“good”) bacterium later identified as *Lactobacillus bulgaricus*. These organisms were part of a group called *Lactobacilli*, or bacteria that produce lactic acid as an end product of milk fermentation.



## LACTIC ACID-PRODUCING BACTERIA TIP THE SCALES TOWARDS HEALTH



The human gastrointestinal tract is a diverse and complex ecosystem harboring more than 400 species of bacteria. Their importance is demonstrated by their impressive presence: The large intestine alone contains about 3.3 pounds (1.5 kilograms) of bacteria! This quantity of bacteria is not surprising given the tremendous effect of bacterial growth and metabolism on human health.

Not all bacteria are created or act equally, however. Some benefit the body and are required for optimal health, whereas others harm the body by producing toxins and even carcinogens. Those producing lactic acid promote health. By turning lactose (milk sugar) into lactic acid, they lower the pH of the colon and inhibit the growth of harmful bacteria. When lactic acid-producing bacteria are in short supply, undesirable bacteria can increase in number. The results can range from simple digestive discomfort to more serious gastrointestinal disease. Imbalance — a scarcity of “good” bacteria or a surplus of “bad” bacteria — can set the stage for a cascade of events that may ultimately trigger disease.



## EXAMPLES OF LACTIC-ACID PRODUCING (“GOOD”) BACTERIA

*Bifidobacterium bifidum*  
*Lactobacillus acidophilus*  
*Lactobacillus casei*  
*Lactobacillus bulgaricus*  
*Streptococcus thermophilus*

*Did you know...*...some good bacteria have names that sound like bad bacteria? *Streptococcus*, for instance, can be a beneficial bacterium, although most people think of strep throat when they hear the word. *Streptococcus* refers only to the *shape* of the bacterium, and has nothing to do with its ability to promote health or cause disease. (*Strept* means “twisted” and *coccus* means “round.”) *Streptococcus thermophilus*, *Streptococcus cremoris*, and *Streptococcus faecium* have been safely used for centuries to produce cultured dairy products.

## EXAMPLES OF POTENTIALLY PATHOGENIC (“BAD”) BACTERIA

*Clostridium botulinum*  
*Escherichia coli*  
*Salmonella typhimurium*  
*Shigella dysenteriae*

Normally, there is a **balance** among the various bacteria inhabiting the intestine. However, with the onset of disease or the use of antibiotics, this balance is upset and the Lactobacilli are among the first to become depleted.

## HOW BENEFICIAL BACTERIA PROMOTE HEALTH

Lactic acid-producing bacteria tend to healthfully combine with toxins (which may include cholesterol, heavy metals, and carcinogens) and bile acids. While this action prevents toxic products from being reabsorbed, it kills the microorganisms, which are then eliminated from the body as solid waste. This mechanism may help explain the increased longevity of people who regularly consume cultured dairy foods.

*Lactobacillus acidophilus* (“acid-loving, lactic acid-producing bacterium”), the most well-known bacterial hero, first gained attention as a dietary supplement in the 1920s. In 1935 the first results of clinical trials were published that showed that *acidophilus* normalized bowel function in patients with chronic constipation.

Since then, scientists have identified many other health benefits of lactic acid-producing bacteria, presumably resulting indirectly from their ability to:

- produce lactic acid, thereby increasing the acidity of the intestines and inhibiting bacterial villains such as *Clostridium*, *Salmonella*, *Shigella*, and *E. coli*.
- decrease the production of a variety of toxic or carcinogenic metabolites. For instance, *Lactobacillus acidophilus* can suppress the formation of cancer-causing amines and cancer-promoting enzymes in the intestines of humans and animals.
- aid absorption of minerals, especially calcium, due to increased intestinal acidity.
- use lactose, to which many people are intolerant, to produce lactic acid. Because cultured milk products are much lower in lactose, they are better tolerated than milk alone.

Additionally, Lactobacilli are capable of producing enzymes that break down lactose.

- produce a wide range of antibiotic substances (acidophilin, bacteriocin, etc.) which help control the level of pathogenic bacteria and fungi such as *Candida*.
- produce vitamins, especially B-vitamins and vitamin K.
- act as barriers to prevent pathogenic bacteria from colonizing the intestines.

Each strain of beneficial bacteria is unique: Each produces special enzymes, detoxifies different substances, and colonizes distinct territories in the intestines. For this reason, a broad spectrum of organisms is desirable.

Good bacteria increase the resistance to disease. When resistance is low, the content of lactic acid bacteria in the intestines is considerably lower than usual. A compelling demonstration of this fact was an experiment in which only 10 bad bacteria (*Salmonella*) were necessary to kill a guinea pig with an inadequate amount of beneficial microflora, but about a *trillion* cells were required to kill an animal with its full natural beneficial bacteria present!

## HEALTH BENEFITS OF BENEFICIAL BACTERIA

Scientific literature documents the healthful effects of cultured dairy products and/or probiotic supplements in a number of conditions:

- diarrhea
- constipation
- colitis (inflamed colon)
- gastroenteritis (inflamed stomach and intestines)
- infections with pathogenic bacteria and fungi (e.g., yeast infections, infections causing food poisoning, etc.)
- flatulence
- lactose intolerance
- impaired digestion
- cancer, especially colon cancer
- poor utilization of food nutrients

## THE PROBIOTIC GAP

The following factors can deplete good bacteria and upset their balance in the intestines:

- antibiotics, which can kill good as well as bad bacteria
- other drugs
- infections (bacterial, viral, and fungal)
- diet (highly processed, low-fiber foods)
- chronic diarrhea
- stress



The intestinal balance between good and bad bacteria in turn can affect:

- nutritional status
- efficacy of medications
- physiological function
- aging
- cancer
- immune response
- infection
- comfort

It is often difficult to obtain beneficial bacteria in foods alone. And even if live bacteria are present, you'd have to eat a lot of yogurt to consume enough bacteria to achieve an effect, especially considering the following:

- Due to pasteurization, most popular brands of yogurt do not contain live cultures.
- Laboratory tests of various cultured milk products have shown that the bacterial strains that are supposed to be there often are not present or are present in very low levels.
- Cooked foods do not contain live organisms. All cultured dairy products should be eaten raw to take advantage of any probiotic benefits.
- Beneficial bacteria cannot survive the acidic environment of the stomach. Therefore few live organisms make it to the intestines to exert their beneficial effects.

## ACIDOPHILUS PLUS SUPPORTS A HEALTHFUL BALANCE!

**Broad spectrum of organisms from the human food chain!** Eating many types of cultured milk products from around the world on a daily basis would be an ideal — but impractical — way to consume diverse microorganisms. To provide broad-spectrum support for the health of the gastrointestinal tract, GNLD has selected and isolated only the best strains used to prepare whole foods: European yogurt, *acidophilus*-fermented milk, *bifidus*-fermented milk, and Yakult, a popular Japanese fermented milk. The identity of all the strains is strictly and continuously controlled to insure that exactly the right strain is present every time. The product delivers five types of lactic acid-producing bacteria in a 1:1:1:1:1 ratio:

- *Lactobacillus acidophilus*
- *Lactobacillus bulgaricus*
- *Lactobacillus casei*
- *Bifidobacterium bifidum*
- *Streptococcus thermophilus*

**Convenient!** Whereas dairy products are limited in their shelf-life, GNLD's Acidophilus Plus has an extended shelf-life if stored as recommended (i.e., stored in a cool, dry place and refrigerated after opening). And while cultured dairy products can be inconvenient to transport, store, and sometimes, even locate, Acidophilus Plus is easy to take anywhere your busy lifestyle takes you! Taking just one capsule of Acidophilus Plus each day is a convenient way to help maintain a constant, healthful balance of intestinal flora.

**Potency guaranteed!** GNLD's bacterial strains are cultivated under strict conditions to guarantee high levels of active bacteria — much higher numbers than are found in a serving of cultured dairy foods! In fact, one capsule of Acidophilus Plus contains as many beneficial bacteria as 10 one-cup servings of yogurt or five 8-ounce servings of *acidophilus* milk! Maintaining gastrointestinal health requires the presence of between 100 million and one billion bacteria per day. Each capsule of Acidophilus Plus is filled with five billion viable beneficial bacteria.

**Targeted Delivery Technology!** Our exclusive Targeted Delivery Technology protects the beneficial bacteria from the harsh, acidic environment of the stomach and maximizes the number of live



bacteria that reaches the intestines. To produce Acidophilus Plus, diverse types of lactic acid-producing bacteria are specially processed together with gel-forming polysaccharides, which are insoluble in acidic conditions, and encapsulated in a hard-gelatin capsule. When the capsule encounters the acidic environment of the stomach, it dissolves, and the contents of the capsule form an insoluble matrix which protects the bacteria. When the stomach contents reach the intestines, the Gel-Gard matrix is dissolved, and the bacteria are released. The active cultures are delivered exactly where they must act to exert their healthful effects!