

AlliPRO™

World's *FIRST* Complete PRE/PRO Biotic

THE NUMBERS

- ❑ During a normal human lifetime, some 60 tons of food will pass through the gastrointestinal system
- ❑ It is estimated that we consume 1 million times less healthy bacteria in our diet than our ancient ancestors
- ❑ The healthy intestinal tract contains more than 100 trillion microorganisms from some 400 different species
- ❑ The human body is estimated to contain 10 times more microorganisms than human body cells
- ❑ Antibiotic preparations can completely eliminate the friendly bacteria from the intestinal tract of some patients

IT'S AN ECOSYSTEM YOU WERE BORN WITH IT -- GET USED TO IT

While the idea of trillions of microorganisms cohabiting with us -- the average colon contains about four pounds of bacteria -- may not be the most settling of thoughts, the reality is, we'd be dead without them. Mothers pass on a load of these organisms to their babies in the birth canal, and from that moment on, the peaceful coexistence begins. And in a healthy, optimally functioning human body, that's exactly what it is -- a peaceful coexistence. The hundreds of species of bacteria work together in the digestive tract to

move the digestive process along.

Healthy microorganisms aid in digestion, absorption, and the production of significant amounts of B vitamins and enzymes. They help maintain a healthy immune system which, in turn, protects the body against everything from food poisoning and stomach ulcers to cancer. Perhaps most importantly, the healthy bacteria crowd out the harmful ones that, unfortunately, like to live there, too. Environmental factors, a poor diet, the overuse of antibiotics, and even age and stress can upset that peaceful coexistence, giving the harmful bacteria the upper hand.

INTESTINAL MICROFLORA: THE GOOD GUYS VS. THE BAD GUYS

The term "probiotic" -- literally meaning "for life" -- was introduced in the early 20th century by a Russian physician named Metchnikoff who believed long life and improved health were related to decreased gastrointestinal toxicity.

Friendly intestinal bacteria play a number of important roles in body functions. They promote healthy digestion. They enhance the bioavailability of nutrients. And they promote detoxification by inactivating and eliminating carcinogens, decreasing mutagenic compounds, decreasing ammonia and levels of nitrates and nitrites, and by enhancing liver function and cholesterol

metabolism.

There are two main categories of friendly bacteria in the digestive tract: lactobacilli (members of the lactic acid bacteria group), and bifidobacteria. Bifidobacteria, which live primarily in the colon, metabolize food by fermentation, creating a more acidic environment in the intestine (which inhibits the growth of the bad bacteria). Fermentation -- or pickling -- is actually an ancient method of preserving food that uses microbiologic ecosystems to promote beneficial organisms and suppress harmful organisms that cause putrefaction and rotting.

However, when this healthy balance of more good guys than bad guys is disrupted, "dysbiosis" results. This dysbiosis, or imbalance, can lead to dysfunction of the immune system and food intolerance, allergies like eczema, chronic inflammatory disease like arthritis, and even certain types of migraine. Why? Well, it's a complex process, but one of the big culprits is the bad bacteria that digest food by means of putrefaction or rotting. This releases ammonia and other toxins into the body.

PROBIOTICS: HELPING THE GOOD GUYS WIN

Probiosis is, quite literally, the reduction of dysbiosis. Today, the term probiotic is used to describe a group of dietary supplements whose aim is to help restore a healthy bacterial balance in the digestive tract.

Under optimal conditions, the body maintains this healthy balance on its own, but conditions are not usually optimal.

There are many factors that negatively influence the healthy microflora balance in the digestive tract, including age, stress, medicinal antibiotics as well as the large amount of antibiotics in the meats we eat, and radiation and chemotherapy. The chlorine found in most American drinking water can wipe out entire strains of friendly bacteria from our intestines. Even the use of non-steroidal anti-inflammatory drugs like many common over-the-counter painkillers can have an impact on this delicate balance.

Probiotic supplements contain mixtures of good bacteria. When these are introduced into the body, the pH levels in the intestines are reduced, and the activity of the bad, putrefactive bacteria is inhibited.

Benefits of probiotics are self-evident. By helping the digestive tract maintain a healthy ratio of good to bad bacteria, probiotics, in effect, help the body help itself. Healthy balances of intestinal microflora can prevent antibiotic-induced diarrhea, reduce the rate of infection after intestinal surgery, and protect against respiratory infections and eczema. Current studies are examining the possible uses of probiotics in helping to lower blood pressure and cholesterol, and in reducing the risks of cancer and kidney stones.

THE MICROFLORA -- IMMUNE SYSTEM CONNECTION

As beautifully evidenced in the amazing integration of our body systems, all the parts work together. One body system does not operate completely independent of another.

They all rely on each other to keep us healthy and functioning.

So it is also with the gastrointestinal and immune systems. The intestinal flora produce immune stimulating and regulating chemicals, vitamins, enzymes, and antioxidants. They communicate with the immune system through the lymphoid tissue (Peyer's patches) beneath the intestinal mucosa. When the microflora balance tips toward the bad, this communication can work against us.

Here's where a diet high in protein and animal saturated fatty acids really wreaks havoc. This type of diet stimulates the activity of the harmful organisms. When protein is metabolized by these harmful bacteria, a bunch of nitrogen waste products are the result. Toxins like ammonia, urea, phenols, nitrites, and nitrates are released into the body. Normally, the liver can detoxify these, but when there is a prolonged and heavy exposure (like the typical burger and large fries American diet), the liver is overloaded and can't completely cleanse them.

Balanced Probiotic

The specific goal of probiotic supplements is to introduce new microflora into the GI tract. However, each person's microflora environment is unique. Since the healthy bacteria work together in a synergistic fashion (complementing and strengthening each other), it is always a toss-up of sorts as to how the microflora in the probiotic supplement will interact with the body's existing microflora - or with each other, for that matter. Most probiotics are a sort of "cake mix" of dormant species of bacteria, each of which has been cultured separately without regard to compatibility. Again, it is a toss-up as to whether or not they will interact positively with

each other.

AlliPRO introduces a new concept in probiotic supplementation: Balanced Probiotic. The beauty of the Balanced Probiotic is that it is created through a process that involves the culturing of many bacteria together. This allows them to balance themselves out as they grow into their own ecosystem, so they enter the intestinal environment as an already healthy and balanced interdependent ecosystem, rather than as independent organisms.

This situation promotes processes of fermentation or pickling, which were found long ago to preserve foods and promote health. The colony in Balanced Probiotic works much like an optimally functioning microflora colony in the body itself. It's balanced in a way that suppresses the growth of harmful bacteria, mold, and other bad types of organisms that lead to rotting and putrefaction.

This is a concept known as competitive exclusion. A good analogy would be a well organized SWAT team cleaning up violent criminals that had taken over a neighborhood. Most probiotics are more like several groups of police recruits trained at different institutions, then suddenly thrown together to try to control the bad guys. Their effectiveness is greatly diminished because of the lack of common training.

AlliSURE®

It's no secret to anyone who has ever looked into or used dietary supplements that garlic is an amazing little plant. Garlic has natural antibiotic properties and is a good source of selenium, which helps maintain healthy immune response in the body. Researchers have zeroed in on the key component of garlic's effec-

tiveness in so many body functions and dysfunctions -- allicin, the sulfide that gives garlic its distinctive odor. Allicin has the ability to fight infections, lower blood pressure and cholesterol, and even help in the fight against cancer. It also helps lower blood sugar levels and keeps plaque from building up on artery walls. Allicin can act as a prebiotic - by reducing the presence of harmful organisms it creates an environment in which beneficial organisms can flourish. That makes AlliPRO, which contains AlliSURE® and Balanced Probiotic, a prebiotic/probiotic supplement.

Allicin comes from the odorless, sulfur-containing compound alliin found in the garlic bulb. This alliin is converted by the garlic enzyme allinase into allicin whenever the bulb is cut or processed in any way. Chemically, allicin contains sulfur-sulfur bonds that are responsible for most of the beneficial properties associated with it. In fact, this chemical structure is remarkably similar to that of penicillin. Long before pharmaceutical antibiotics were used, crushed garlic extracts were used to combat a wide range of infectious diseases, from dysentery and typhus to cholera, smallpox, and tuberculosis. At the level it is provided in AlliPRO, allicin selectively kills pathogenic organisms and leaves the beneficial ones intact. It also selectively inhibits enzymes that pathogens use to damage tissues.

While the potential health benefits of garlic extracts are significant, they are hard to realize in practice for a number of reasons. Allicin molecules are very reactive and have a short half-life, since they react vigorously with surrounding proteins, including the enzyme allinase. This drastically reduces the ability of allinase to continue reacting with alliin and thus produce more allicin. To

make matters worse, allinase is destroyed by stomach acid, which means it is not available to produce the beneficial allicin. One or more of these factors severely limits the benefits of garlic supplements.

Until now. AlliSURE® provides a 100% yield of allicin because it is allicin - it doesn't require activation by allinase, so its effectiveness is not limited by the presence of stomach acid. And the allicin of AlliSURE® is stabilized by a patented process, resulting in real activity that is available for prolonged periods of time.

IT'S A JUNGLE IN THERE

With trillions of microorganisms calling our bodies home, it certainly behooves us to try to keep the beneficial ones happy. A diet high in fiber and low in saturated animal fats, avoiding overuse of antibiotics, and the use of good prebiotic and probiotic supplements will all support a healthy balance of intestinal microflora.

The benefits of a healthy gastrointestinal tract are many. Among them are enhanced immunity, inhibition of cancer, improved bowel function, protection against food poisoning and stomach ulcers, and lower cholesterol.

CAUTIONS

These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease, but rather is a dietary supplement intended solely for nutritional support.

SOURCES

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