

PROBIOTIC FACTS

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DAIRY SOURCES OF PROBIOTICS

Cultured Yogurt

Cultured Buttermilk

Kefir

Acidophilus Milk

Cheese with added probiotics

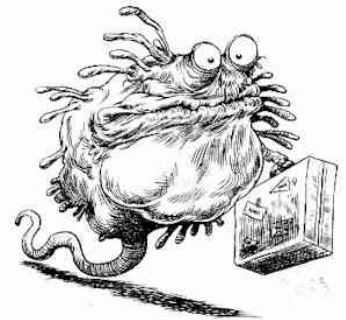
WHAT ARE PROBIOTICS?

The World Health Organization defines probiotics as “live microorganisms which when administered in adequate amounts confer a beneficial health effect to the host.” Probiotics are microorganisms that include many “good” bacterial and yeast strains such as *Lactobacillus*, *Bifidobacterium*, and *Saccharomyces cerevisiae*. (1)

Gut Bugs

Some, but not all, probiotics are similar to the natural bacteria that thrive in the digestive system. The lower small intestine and colon are home to about 100 trillion bacteria, or about 3 pounds of hard-working microorganisms. These gut bugs play an important role in our digestive health, immune health, and synthesis of some vitamins. (2)

Scientists have found that probiotic bacteria can thrive and function in the human digestive tract along with the existing microorganisms. There is concern, however, that some probiotic organisms do not survive the harsh environment of the stomach. However, cultured dairy foods may provide these bacteria some protection from stomach acid, allowing the bacteria to travel to the lower intestine where they can thrive. (2)



DAIRY: A PERFECT VEHICLE FOR FRIENDLY BACTERIA

A recent surge in popularity has placed probiotic bacteria in nontraditional foods from chocolate and breakfast cereal to energy bars and fruit smoothies. However, cultured dairy products are the most traditional source of probiotics and have been consumed for centuries. Dairy products may be the most desirable delivery system for probiotics for several reasons. (2)

Dairy foods can protect probiotic bacteria

Many bacteria are unable to survive the acidic environment of the stomach. Dairy products, such as milk, yogurt and cheese, can buffer stomach acid and increase the probiotic's chance for survival.

Refrigeration keeps probiotic bacteria stable and viable

Dairy foods are refrigerated to prevent spoilage. Probiotic bacteria in cultured dairy products benefit, as they remain the most stable in this storage condition.

Cultured dairy products are a complete, healthy package

It is well known that dairy foods contain a unique combination of nutrients that work together to improve health. Consumers now perceive health benefits not only from calcium, vitamin D, and protein in cultured dairy foods, but also from natural friendly bacteria.

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PROPOSED HEALTH BENEFITS

Numerous health claims are being made currently, however the science to support some of these claims needs to catch up. While probiotic research is limited in some areas, the evidence suggests potential benefits from adequate amounts of specific strains or combination of strains. These amounts are often much larger than one would consume from food.

Well-supported benefits of probiotics are (2, 3):

- Promote recovery from diarrhea caused by rotavirus, travel and antibiotics
- Produce lactase and can alleviate symptoms of lactose intolerance
- Help the gut heal in inflammatory bowel diseases
- Relieve constipation

Other possible health benefits, more research is needed (2, 3):

- Reduce cholesterol and blood pressure

- Treat *Helicobacter pylori*, a common cause of peptic ulcers
- Ease symptoms of irritable bowel syndrome
- Enhance immune health, including gastrointestinal
- Reduce risk of pathogenic infections
- Reduce risk of certain cancers
- Treat for food allergies
- Increase nutrient bioavailability
- Reduce incidence of dental caries
- Optimize effects of vaccines

CONSUMER REACTION TO THE TREND

Manufacturers are enthusiastically advertising probiotics: “strengthen your body’s defenses,” “take the two week challenge to regulate your digestive system.” The message about probiotics is prominent in the media and consumers are paying attention.

In a 2007 survey* of about 500 people:

- 58% were aware of potential digestive health benefits

- 54% were aware of potential immune system health benefits
- about 40% were already consuming products containing probiotics
- 45-48% were likely or somewhat likely to consume such products

*Survey conducted by the International Food Information Council, 2007.

HOW CAN INDUSTRY LEAD THE WAY?

In 2002 the Food and Agriculture Organization of the United Nations and the World Health Organization established “Guidelines for the Evaluation of Probiotics in Food.” The intent of these guidelines is to direct probiotic use in consumer products. Some of the highlighted guidelines from this report are (2):

- Probiotics must be identified by the specific genus, species and strain level

- Research must demonstrate probiotic function
- Safety of the microorganisms must be established
- Research must document a health benefit to the host
- The microorganism must remain alive at the required levels in the final product through the end of shelf life

REFERENCES

1. www.usprobiotics.org/basics accessed on February 13, 2008.

2. *Guidelines for the evaluation of probiotics in food.* Report of a Joint FAO/WHO Working Group, 2002.

3. www.dairycouncilofca.org/PDFs/probiotics.pdf

4. *Consumer attitudes toward functional foods/foods for health.* International Food Information Council Executive Summary 2007.

WHAT'S A CONSUMER TO DO?

Scientists are learning more every day about the health benefits of probiotics. Consumers need to seek out the advice of nutrition experts to learn more about the best choices of probiotic enriched dairy products for optimal gut health.

While cultured dairy foods may have additional health benefits it is important to remember that all dairy foods are nutrient-rich. Choose dairy every day for a complete package of nutrients.

