



PROBIOTICS - YOUR "FRIENDLY BACTERIA"

When you go to the supermarket or visit a healthcare website, you may come across products that are labelled as "probiotics". Probiotics, which are also known as 'friendly bacteria', are available as conventional foods and dietary supplements. Recently, there has been growing interest in probiotics in general. Let us now look at what you should know when using probiotics.

What Are Probiotics?

Probiotics, as defined by the World Health Organization (WHO), are live microorganisms (bacteria, viruses and fungi) which, when administered in adequate amounts, confer a health benefit on the host. Probiotics are different from prebiotics, which are non-digestible food ingredients that selectively stimulate the growth and activity of bacterial species already in human's colons. When probiotics and prebiotics are mixed together, they form a synbiotic.

Where Can We Find Probiotics?

Foods such as yogurt, fermented and unfermented milk, miso, tempeh, some juices and soy beverages contain probiotics. Probiotics can also be found in commercial health supplements. Most often, they come from two groups of bacteria, Lactobacillus or Bifidobacterium. Within each group, there are different species (for example, Lactobacillus acidophilus and Bifidobacterium bifidus), and within each species, different strains.

The "Bacterial" Balancing Act

The world is full of microorganisms, and so are human's bodies. Friendly bacteria are vital to proper development of the immune system, to protect against disease causing agents, and to aid digestion and absorption of food and nutrients.

This bacterial "balancing act" can be thrown off in two major ways:

1. By antibiotics, when they kill friendly bacteria in the gut along with unfriendly bacteria. Some people use probiotics to try to offset side effects from antibiotics like gas, cramps, or diarrhoea.
2. "Unfriendly" microorganisms such as disease-causing bacteria, yeasts, fungi, and parasites can also upset the balance. Researchers are exploring if probiotics could halt these unfriendly agents and also suppress their growth and activity.



Do Probiotics Work?

There are some encouraging evidences from studies of specific probiotic formulations:

- To treat diarrhoea (especially from rotavirus and traveller's diarrhoea)
- To prevent and treat urinary tract infections
- To treat irritable bowel syndrome
- To reduce recurrence of bladder cancer
- To shorten an intestinal infection caused by *Clostridium difficile*
- To manage atopic dermatitis (eczema) in children

Many studies in children are still underway to determine if probiotics are useful in the treatment and prevention of diarrhoea, improving systemic immune responses, decreasing occurrence of respiratory infections etc. However, many medical experts also noted more research is needed in order to draw firmer conclusions regarding the effectiveness of probiotics.

Are Probiotics Safe?

Probiotics are generally tolerated by most people. Gastrointestinal upset including bloating and flatulence may occur but is usually mild and typically subsides with continued use. Probiotics have been used safely in infants and children at the appropriate amounts. However, there is insufficient reliable information available for use during pregnancy and breastfeeding.

Remember

- i) There are many products in the market. ALWAYS take health supplements and alternative medicines with care.
- ii) ALWAYS consult your health professionals before using any health or herbal supplements especially if you have existing medical conditions or are taking conventional medications.
- iii) Natural does not mean safe. An overdose of health supplements may be harmful.

The information in this leaflet is meant for educational purposes and should not be used as a substitute for medical diagnosis or treatment. Please seek your doctor's advice before starting any treatment or if you have any questions related to your health, physical fitness or medical condition.

Contents in this brochure are not to be quoted or reproduced without the permission of National University Hospital. Information is correct at time of printing (February 2007) and is subject to revision without notice.

National University Hospital

5 Lower Kent Ridge Road, Singapore 119074

Tel : 6779 5555 Fax : 6779 5678 Website : www.nuh.com.sg

This information leaflet is produced by



NUH Pharmacy Committee for Health
Supplement & Alternative Medicine