



Spirulina + Probiotics Formula For digestive system health

Do you have the following problems?

- ✓ Indigestion
- ✓ Constipation
- ✓ Abdominal Distention
- ✓ Irregular Bowel Movement
- ✓ Acne
- ✓ Smelly Fat
- ✓ Bad Breath
- ✓ Flatulence
- ✓ Diarrhea



Spirulina and Probiotics are two kinds of micro-organisms that can help maintain the function of gastrointestinal and digestive system, and resolve common problems of people with hectic lifestyle.^[1,2]

Probiotics Maintain Balance of Gut Microflora

The Food and Agriculture Organization of the United Nations and the World Health Organization defined probiotics as "Live microorganisms which when administered in adequate amounts confer a health benefit on the host".^[3-4] Probiotics (derived from Greek, meaning "for life") are live microorganisms that help balance intestinal microflora and improve health.^[1,3-4] Most often, the bacteria come from two groups, Lactobacillus or Bifidobacterium. Their main functions include:

★ Maintain Gastrointestinal Health

Probiotics can prevent and treat acute diarrhea caused by rotavirus in children. They can also prevent the occurrence of antibiotic-associated diarrhea caused by Clostridium difficile.^[1,3-5] The role of probiotics is closely related to the development of many gastroenterology diseases such as chronic gastritis, digestive tract ulcers and constipation.^[1,3-5] Probiotics can alleviate the symptoms of irritable bowel syndrome or prevent inflammation bowel diseases such as pouchitis.^[1,3-5] Some strains resist to acid and adhere to the cell wall of the stomach. They inhibit the growth of Helicobacter pylori which is a cause of peptic ulcers.^[1,3-5]

★ Suppress Bacteria Growth

Some strains of probiotics could acidify the urogenital system. It helps suppress the growth of pathogens and prevent vaginal infections. The "good" bacteria kick out the "bad" bacteria by competing for spaces and resources for colonization.^[6] Probiotics produce organic acids, free fatty acids, hydrogen peroxide, and bacteriocins. These can aid to inhibit pathogens.^[7]

★ Alleviate Allergy & Lactose Intolerance

Probiotics regulate the level of immunoglobulin E (IgE) to reduce the allergic responses.^[4] Researches show that they can prevent and manage atopic dermatitis (eczema) in children.^[1,3-5,7] Probiotics assist in gastrointestinal digestion by converting lactose to lactic acid. This can alleviate lactose intolerance.^[8]

Nutritious Spirulina for Multiple Benefits

Spirulina are a large number of cyanobacteria or blue-green algae. These algae are found in warm, alkaline waters around the world, especially of Mexico and Central Africa.^[2] The nutritional values of Spirulina have drawn attention over a few decades:

- ★ Contain high content of protein (60-70%), a source of many types of essential amino acids ^[2, 9, 10]
- ★ Consist of multivitamins, especially B12 and β-carotene.^[2,10-11] β-carotene is an antioxidant which could suppress the damage to cells by free radicals, slow down aging and chronic diseases. In human body, β-carotene is converted to pro-vitamin A which has beneficial effects to the eyes and skin. ^[11]
- ★ Rich in minerals, such as iron, magnesium and calcium ^[12]
- ★ Serve as a source for high content of EPA and gamma-linoleic acid ^[13]
- ★ Compose high content of DNA and RNA. Spirulina also contains phycocyanin. When combined with chlorophyll, they become antioxidants.^[2,14]

Probiotics	Spirulina
<ul style="list-style-type: none"> • Maintain gastrointestinal health^[1,3-5] • Relieve inflammatory intestinal discomforts^[1,3-5] • Suppress bacteria growth^[6] • Enhance immune system^[7] • Alleviate allergy responses^[1,3-5,7] • Relieve lactose intolerance^[8] 	<ul style="list-style-type: none"> • Reduce bad breath^[15] • Cleanse the gut and relieve constipation^[15] • Increase level of lactobacillus^[16-17] • Enhance nutrients absorption^[18] • Detoxification: Neutralize heavy metals and toxins for kidneys^[16-17]

Recommended daily dose:

Adults: Take 1-2 tablets 2 times daily.

Children aged of 6 years and up: Take 1 tablet 2 times daily.

References:

- National Center for Complementary and Alternative Medicine. Oral Probiotics: An Introduction (NCCAM). Last update: Nov 2011. Available at: <http://nccam.nih.gov/health/probiotics/introduction.htm>.
- Ciferri O. Spirulina, the edible microorganism. Microbiol Rev. 1983;47(4):551-78.
- Reid G, Jass J, Sebulsy MT, McCormick JK. Potential uses of probiotics in clinical practice. Clin Microbiol Rev. 2003;16(4):658-72.
- Gill HS, Guarner F. Probiotics and human health: a clinical perspective. Postgrad Med J. 2004;80(947):516-26.
- Ljungh A, Wadström T. Lactic Acid Bacteria as Probiotics. Curr Issues Intest Microbiol. 2006;7(2):73-90.
- Cribby S, Taylor M, Reid G. Vaginal microbiota and the use of probiotics. Interdiscip Perspect Infect Dis. 2008, doi: 10.1155/2008/256490.
- Kailasapathy K, Chin J. Survival and therapeutic potential of probiotic organisms with reference to Lactobacillus acidophilus and Bifidobacterium spp. Immunol Cell Biol. 2000;78(1):80-8.
- Kim HS, Gilliland SE. Lactobacillus acidophilus as a dietary adjunct for milk to aid lactose digestion in humans. J Dairy Sci. 1983;66:959-66.
- Williams PG. Nutritional composition of red meat. Research Online, University of Wollongong. 2007. Available at: <http://ro.uow.edu.au/hbspapers/48>.
- Kim CJ, Jung YH, Ko SR, Kim HI, Park YH, Oh HM. Raceway cultivation of Spirulina platensis using underground water. J Microbiol Biotechnol. 2007;17(5):853-7.
- Grune T, Lietz G, Palou A, Ross AC, Stahl W et al. Beta-Carotene is an important vitamin A source for humans. J Nutr. 2010;140(12): 2268S-85S.
- Tokuşoglu Ö, Ünal MK. Biomass Nutrient Profiles of Three Microalgae: Spirulina platensis, Chlorella vulgaris, and Isochrysis galbana. J Food Sci. 2003;68(4):1144-8.
- Cohen Z, Didi S, Heimer YM. Overproduction of gamma-Linolenic and Eicosapentaenoic Acids by Algae. Plant Physiol. 1992;98(2):569-72.
- Wolk CP. Physiology and cytological chemistry blue-green algae. Bacteriol Rev. 1973;37(1):32-101.
- CHLOROPHYLL: Uses, Side Effects, Interactions and Warnings – WebMD. Available at: <http://www.webmd.com/vitamins-supplements/ingredientmono-712-CHLOROPHYLL.aspx?activeIngredientId=712&activeIngredientName=CHLOROPHYLL>.
- Amha Belay. The potential application of Spirulina (Arthrospira) as a nutritional and therapeutic supplement in health management. JANA. 2002;5(2):27-48.
- Karkos PD, Leong SC, Karkos CD, Sivaji N, Assimakopoulos DA. Spirulina in clinical practice: evidence-based human applications. Evid Based Complement Alternat Med. 2011, doi:10.1093/ecam/nen058.
- Bhowmik D, Dubey J, Mehra S. Probiotic Efficiency of Spirulina platensis - Stimulating Growth of Lactic Acid Bacteria. WJDFS. 2009;4 (2):160-3

DISCLAIMER: This product is not registered under the Pharmacy and Poisons Ordinance or the Chinese Medicine Ordinance. Any claim made for it has not been subject to evaluation for such registration. This product is not intended to diagnose, treat or prevent any disease.
免責聲明：此產品沒有根據《藥劑業及毒藥條例》或《中醫藥條例》註冊。為此產品作出的任何聲稱亦沒有為進行該等註冊而接受評核。此產品並不供作診斷、治療或預防任何疾病之用。