## Promotes Digestive Health

Strengthens Stomach Lining

> Lowers LDL Levels



# How to Choose An Effective Probiotic For Your Family

We've received many emails from our readers, asking about how to choose the right probiotics. In our quest for the most comprehensive information on probiotics, we reached out to an expert from Sabinsa Corporation, a global leader in manufacturing, supplying, and marketing of herbal extracts, **Mr. Shaheen Majeed**, President Worldwide.

Improves Immune Functions

> Deters Growth of Bad Bacteria

Helps Irritable Bowel Syndrome (IBS)



### EXCLUSIVE

# **Probiotics**



#### What are Probiotics

Probiotics are live microorganisms, usually bacteria found in the human gut that helps digestive processes to function properly and optimally by exerting various protective roles. Various strains of bacteria are in use to boost the population of those beneficial bacteria as probiotics, with *Lactobacillus*, *Bifidobacterium*, and yeast *Saccharomycesboulardiiare* being the most common.

Once viewed as mainly useful for digestive support, research has uncovered additional benefits such as immune health, mood support and mitigating IBS. It's also been found that the health benefits are determined by the strain of microorganisms they contain (identified by their genus, species, and strain level), which has opened the door to condition-specific probiotic products.

The human digestive tract contains about 400 different bacterial species that reduce the growth of harmful bacteria and promote a healthy digestive system. Two of the most widely known and characterized bacterial strains are Bacillus coagulans (earlier known as *Lactobacillus sporogenes*) and *Lactobacillus acidophilus*. These two strains are found in the digestive, urinary and genital systems, as well as in fermented foods and other dietary supplements, such as yogurt. Several studies have shown that *Lactobacillus* has been beneficial in a wide variety of diseases and conditions.

#### What is LactoSpore<sup>®</sup> and how safe is it

Health benefits and safety of a probiotic preparation largely depend on the strain, and not the species or genus, hence validating the safety aspects of a probiotic strain is vital.

LactoSpore<sup>\*</sup> is a clinically-validated, shelf-stable, commercial probiotic preparation from Sabinsa which contains L-(+)-lactic acid-producing bacteria called Bacillus coagulans MTCC 5856. These friendly bacteria have been found to do much more than supporting digestion. Several studies have suggested their supportive role in managing a wide range of health conditions.

LactoSpore® was found to be safe and well tolerated by healthy

individuals when ingested orally in a double-blind, placebocontrolled 30-day supplementation study.

#### How effective is it for Irritable Bowel Syndrome (IBS)

In a double-blind, randomized, placebo-controlled study 36 patients diagnosed with diarrhea-predominant irritable bowel syndrome (IBS-D) were randomized to receive LactoSpore<sup>\*</sup> tablets for 90 days. The first result was the evaluation of clinical symptoms of IBS and secondary efficacy measures involved Physician's global assessment and IBS quality of life. Subjects receiving LactoSpore<sup>\*</sup> showed a significant decrease in clinical symptoms, such as bloating, vomiting, diarrhea, abdominal pain, and stool frequency. Additionally, decreased disease severity and better IBS quality of life were reported.

#### Any health claims

Several studies on *Bacillus coagulans* are available in the literature which allows a variety of structure-function claims on GI tract and microflora therein. The clinical study referenced above-allowed *Bacillus coagulans* MTCC 5856 strain to obtain an approval as "Natural Health Product" in Canada by the NNHPD and approved health claim related to IBS, i.e. "helps relieve the abdominal pain associated with irritable bowel syndrome".

#### LactoSpore<sup>®</sup> is a viable probiotic in functional foods

A number of microorganisms from different groups (e.g., Lactobacillus, Bifidobacterium, Enterococcus) have been evaluated for their functional use. As demand for probiotics has grown, so has the range of delivery systems expanded into more types of functional foods. However, most of them lose the viability during the manufacturing and storage of functional food (baked food, beverages, fruit preserves) due to either high temperature or other manufacturing conditions inhospitable to many of these live bacteria. Hence, these probiotics require encapsulation via special processes to retain their viability during manufacturing, storage, and exposure to gastric acid and bile. They also require special handling during manufacturing, transportation, and storage, rendering them vulnerable to degradation in viability However, the spore-forming ability of Bacillus coagulans helps it to survive at high and low temperature and to show resistance against the harsh human gastric environment, which enables delivery of the probiotic benefits under a wide range of conditions and delivery systems.

In a recent study, the effect of the manufacturing process and storage conditions of baked food, beverages, and fruit preserves on the viability of LactoSpore<sup>®</sup> was evaluated. LactoSpore<sup>®</sup> was found to be stable during extremes: both baking and storage under frozen conditions. In general, this remarkable resistance to degradation during processing of food and supplementation formulations allows the use of LactoSpore<sup>®</sup> in a variety of processed foods, such as juices, gummies, coffee, tea, confectionary, and vegetable oils.