1) A BRIEF INTRODUCTION TO PROBIOTICS

Human beings, as all animals, play host too many types and high numbers of microbes. Microbes inhabit our skin, oral region, vaginal tracts, and throughout our gastrointestinal tract. There is an estimated about 1014 Microbes associated with our body. There are some 400 different species Living there weighing about 3.5 pounds.

What are Probiotics?

Probiotics were defined by a group of experts convened by the food and Agriculture Organization of the United Nations (FAO). Their original Definition of probiotics are: live microorganisms administered in adequate amounts which confer a beneficial health effect on the host. Most probiotics are bacteria, which are small, single-celled organisms. Probiotic is a term derived from two Greek words – “pro” and “biotic” which means “Promote life” or “for life”.

Where did the bacteria come from?

The friendly bacteria enter your system in a unique way – you ingest them as you made your way through your mother’s birth canal. She gave you even more of these friendly bacteria as she breast-fed you in the Months that followed. In fact, first milk called colostrums, which tends to be thicker and curd-like, is a rich source of these friendly bacteria.

Role of Probiotics in Gastrointestinal Tract

The microbes present in the gastrointestinal tract have the potential to act in a favorable, deleterious or neutral manner. Bacteria are not very prevalent in the stomach or upper part of the small intestine. The high acid and bile concentrations coupled with the rapid transit time of contents are not favorable to microbial growth. However, towards the lower part of the small intestine, microbes begin to attain higher populations (106 – 108/gram) and in the colon they constitute about 1011 – 1012 / gram of colon content.

The health value of probiotics are:

- Inhibits pathogenic invasion especially in the intestines.
- Enhances the function of our immune system.
- Encourages weight gain by promoting nitrogen retention; this is especially Important for children fed on formula milk.
- Promotes detoxification of the body.
- Counters allergy.
- Acts as a source of lactase, the enzyme needed to digest milk.
- They manufacture some of the B-vitamins including niacin (B3), Pyridoxine (B6), folic acid and biotin.
• Assists in the absorption of vitamins and minerals especially calcium which is vital at this stage for bone growth.
• Elevated blood cholesterol.