

## **Probiotics, Prebiotics, and Nutraceuticals**

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“Let your food be your medicine and your medicine be your food”. This is a quote attributed to Hippocrates, the Father of Western Medicine which clearly establishes a linkage between diet and a person’s overall health and well-being. Although it was made over 2,400 years ago, it is just as true now as it was back then.

Every day, we are bombarded with advertisements making claims about the benefits of certain foods. Some are rich in fibre, while others are excellent sources of things we never even knew existed, and can’t pronounce when we see them on an ingredient line. We hear terms like “probiotics”, “prebiotics”, and “nutraceuticals” - words whose actual meanings and significance may not be all that obvious. In fact, when words fail to convey a specific concept, new ones are often made up to suit the intended purpose.

“Nutraceutical” is one such word. It combines “nutrition” and “pharmaceutical” to indicate a food that has both health and medical advantages. It is a word that didn’t exist until about twenty years ago. “Functional foods” is another term used to describe these foods. Nutraceuticals are typically foods which contain compounds having medicinal or therapeutical value.

Cranberries are an example of a food that not only tastes great, but is good for you as well. They contain Vitamin C along with a substance that prevents bacteria from adhering to the bladder wall where they could grow and promote infection. The acidity of cranberry juice also helps create an environment that can ward off infection. Blueberries have similar beneficial properties. In addition, cranberries and blueberries contain certain antioxidants which are quite attractive to researchers for their beneficial roles in the body.

“Probiotics” are living microorganisms which are considered to promote good health. Lactic acid bacteria and bifidobacteria are examples of probiotics. They are found in products such as yogurt to which cultures are added as part of the fermentation process. Once in the intestinal tract, they flourish to the point where potentially harmful bacteria that come along cannot grow due to the competition from these beneficial microorganisms.

“Prebiotics” are a more recent addition to our vocabulary and are substances which when consumed are not digested by us. Instead, they act as a nutrient source for the good probiotic bacteria. This encourages the probiotic bacteria to grow in a favourable environment, which in turn reduces the chances that harmful microorganisms may start to grow in our digestive tract.

Inulin is a prebiotic that has been widely used in processed foods. Essentially, it is a type of fibre obtained from the roots of plants such as chicory, Jerusalem artichoke, and even dandelions.

While all of this may seem like a lot of scientific mumbo-jumbo, it really isn't all that hard to adapt our diets to include such healthy food choices. Yogurts with live bacterial cultures are readily available in the dairy product sections of super-markets. Food processors are now using soluble fibres, such as inulin, in a number of their product formulations to promote healthier eating habits.

As always, you should consult your family doctor or health care professional to see which foods are right for you, and if there are any problems associated with eating any of these products.



**Cranberries are just one of the foods classed as “nutraceuticals”**