Mashhad University of Medical Sciences

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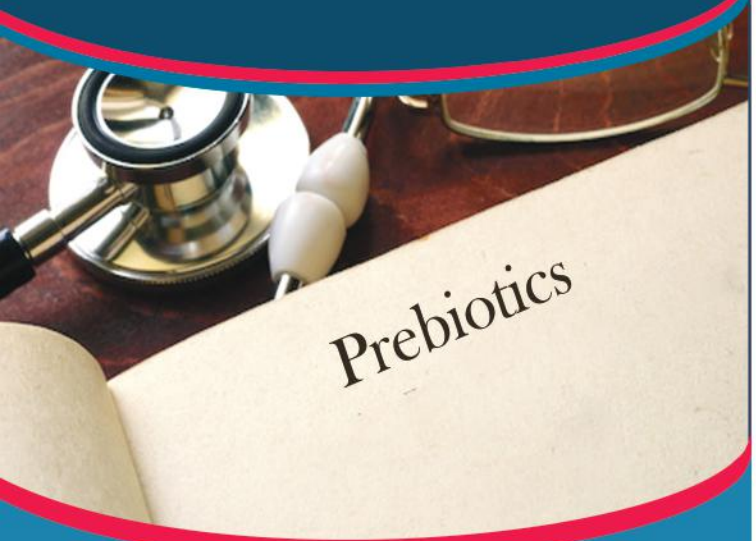
Prebiotics



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Nutritionist from the UK

Types of Prebiotics

There are many types of prebiotics. The majority of them are a subset of carbohydrate groups and are mostly oligosaccharide carbohydrates (OSCs). The relevant articles are mainly on OSCs, but there are also some pieces of evidence proving that prebiotics are not only carbohydrates.

Prebiotics play an important role in human health. They naturally exist in different dietary food products, including asparagus, sugar beet, garlic, chicory, onion, Jerusalem artichoke, wheat, honey, banana, barley, tomato, rye, soybean, human's and cow's milk, peas, beans, etc., and recently, seaweeds and microalgae . Because of their low concentration in foods, they are manufactured on industrial large scales. Some of the prebiotics are produced by using lactose, sucrose, and starch as raw material. Since most prebiotics are classified as GOS and FOS regarding industrial scale.

Prebiotic foods

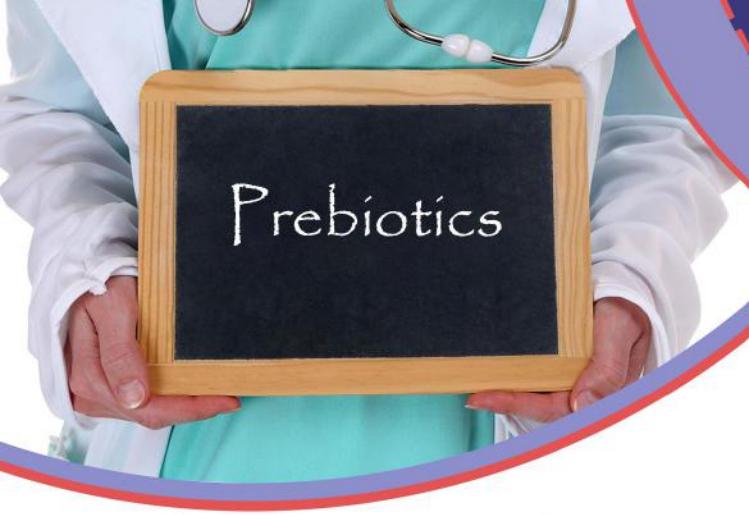
By including a variety of foods in their diet, people can ensure that they consume a range of prebiotics that may fuel various strains of bacteria. Prebiotics are in many high-fiber foods, including some fruits, vegetables, and whole grains some probiotic-rich foods may also contain prebiotics. Babies get access to prebiotics through the sugars in breast milk, and some infant formulas also contain prebiotics.

PREBIOTICS

How to Tell Good Fiber from Bad

Benefits of prebiotics

The benefits of prebiotics have links to the benefits of probiotics. Prebiotics may support a healthy gut, offering better digestive health, fewer antibiotic-related health problems, and other benefits. There is less research on prebiotics than on probiotics. As a result, the extent to which prebiotics improve health is unclear. Scientists are not yet entirely sure that they can strengthen the purported benefits of probiotics.



What is prebiotics?

Prebiotics are a group of nutrients that are degraded by gut microbiota. Their relationship with human overall health has been an area of increasing interest in recent years. They can feed the intestinal microbiota, and their degradation products are short-chain fatty acids that are released into blood circulation, consequently, affecting not only the gastrointestinal tracts but also other distant organs. Fructo-oligosaccharides and galacto-oligosaccharides are the two important groups of prebiotics with beneficial effects on human health. Since low quantities of fructo-oligosaccharides and galacto-oligosaccharides naturally exist in foods, scientists are attempting to produce prebiotics on an industrial scale

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Prebiotics

Considering the health benefits of prebiotics and their safety, as well as their production and storage advantages compared to probiotics, they seem to be fascinating candidates for promoting human health condition as a replacement or in association with probiotics.

This review discusses different aspects of prebiotics, including their crucial role in human well-being.

Prebiotics are considered by some to be non-digestible carbohydrates, that are not digested by the body but nourish the micro-organisms in the colon. They occur naturally in the diet and are found in foods such as garlic, bananas, oats, onions and leeks. This idea has been criticized by some due to its poor definition and some scientists prefer to use the term ‘microbiota accessible carbohydrates’, as they are fermentable dietary fiber that the microbes can use. However, foods containing prebiotics are also the components of a healthy diet and should therefore be consumed regularly.