## Chicory

## The Support Food

Chicory is one of among 36,000 plant species worldwide containing a class of compounds called fructo-oligosaccharides (FOS), or sometimes also called simply fructans, or non-digestible oligosaccharides. Other examples of sources of FOS are Jerusalem artichoke, burdock, dandelion, onions, garlic, dahlia, wheat, barley, and bananas. FOS have gained greater attention for their health-promoting benefits as *prebiotics*, which are substances that are able to reach the colon intact and there ferment as food for beneficial bacteria, which are known as *probiotics*. Prebiotics are therefore probiotic enhancers.

One FOS compound found naturally in chicory having excellent prebiotic activity, and with wide application in food processing, is inulin. Naturally occurring chicory root is considered a strong source of inulin, with concentrations of 13 - 20%, and is currently its best known source. Chicory processed as a food ingredient has inulin levels of over 90%. Inulin is a non-digestible, water-soluble, short-to-medium-chain polysaccharide (carbohydrate) fiber which is not affected by stomach acids; rather, it finds its way intact into the large intestine (colon) where it undergoes bacterial fermentation. In other words, it becomes food for beneficial intestinal flora, primarily of the bifidus, and to a lesser extent, lactobacillus species. Inulin comes to break down over time into short-chain fatty acids and literally encourages the growth of the intestinal flora that are essential for proper intestinal health. Chicory is therefore called a support food.

It has been said that the foundation of health begins in the colon. Chicory, in its role as a support food, therefore has numerous benefits for health. Increased intestinal fermentation results in better nutrient absorption from the foods we eat, and helps in the production of vitamins, primarily the B vitamins and vitamin K, and in the production of enzymes. By encouraging friendly bacteria, FOS fermentation helps to suppress other, harmful, bacterial species. Additional health benefits include alleviation of constipation or of diarrhea, and increasing the stool mass for better regularity, protecting the liver from the overwork of cleaning out a colon made toxic by putrefying matter, increasing the bioavailability of minerals, such as calcium, magnesium, phosphorus, potassium, iron, zinc, copper, and helping to regulate a balanced cholesterol level and blood pressure. Inulin fermentation increases the production of short-chain fatty acids, such as butyrate, which aid in the mucosal functioning of the intestinal tract (helpful against colitis and facilitates repair), in liver processing, and in the general metabolism of fats and carbohydrates. Friendly intestinal flora, particularly the bifidobacteria, are also immunomodulators—they help regulate a properly responding immune system.

Chicory, considered then a reserve carbohydrate and dietary fiber, is widely versatile—it can be used in desserts, beverages, cereals, nutritional bars, yogurts, bakery goods, and, since it is non-glycemic, as a sugar replacement, therefore is safe for diabetics. It actually helps to control the glucose intolerance of hyperglycemia. It nicely enhances the texture of food, which is why it is so commonly used. In addition to, and because of, all the health benefits already mentioned, it is also useful in weight management programs as it helps generate the heat of metabolism.

Chicory is an important ingredient in the FOS complex of our probiotic **Friendly Colonizer** formula, and in our superfood **Supremely Green**, our **Macro-Night**, and in all of our chocolates. Our chicory is non-GMO, contains no allergens, and has a glycemic index of 0. Chicory's health benefits, its texture, and its natural sweetness, its versatile contribution to other foods truly makes it an important support food of its own.