



Consumer Factsheet

Natural Resistant Starch – Rediscover An Old Fiber with Modern Health Benefits

Resistant starch, a naturally-occurring type of fiber, has been consumed for thousands of years and has recently been rediscovered as an important ingredient for maintaining health and wellness. The challenge is eating enough for optimum health benefits. Unprocessed foods are rich in resistant starch but as foods become more processed and convenient, the amount of resistant starch in our diets decreases. Most of us in the U.S. consume only 3 to 5 grams of resistant starch per day, which is far less than the 15 to 20 grams per day experts recommend for full health benefits. Becoming more familiar with resistant starch and its sources will help you easily incorporate this valuable fiber source into your diet via whole foods and natural resistant starch-enhanced processed foods.

Discovering Resistant Starch

Natural resistant starch is found in common foods such as legumes (beans and peas), grains, and even bananas. When cooked and served cold as in salads, several starches, including potatoes, pasta and rice, contain natural resistant starch. Natural resistant starch is also an ingredient with the brand name Hi-maize[®] resistant starch found in a growing number of foods on the supermarket shelf, such as bread, cereal and pasta. Hi-maize is all natural and made from corn. You'll be glad to know that when Hi-maize is added to your favorite foods, they retain their familiar taste and texture even with a fiber boost. And most people experience minimal or no digestive side effects from this type of fiber, even after consuming >40 grams fiber a day.

Resistant Starch – A Third Type of Fiber

Resistant starch is one of three main categories of fiber along with soluble fiber and insoluble fiber. It is important to have all three types in your diet as they provide various and different health benefits. Hi-maize resistant starch contributes some of the benefits of soluble fiber, some of the benefits of traditional insoluble fiber and, as you'll read below, some unique benefits as well.

The key to these benefits is the way resistant starch is digested. Resistant starch is simply starch that resists digestion in the small intestine and reaches the large intestine. In contrast, most other starches are digested and absorbed as sugar through the small intestine.

The Irresistible Health Benefits of Resistant Starch

Hundreds of scientific studies show including natural resistant starch in a healthy eating plan provides these **five** health benefits:

1. **Natural resistant starch helps with weight control.** Foods containing Hi-maize can help you maintain a healthy weight in several ways:
 - Foods containing Hi-maize often have fewer calories than their traditional counterparts. That's because the fiber from Hi-maize delivers only 2-3 calories/gram instead of the 4 calories/gram of other types of carbohydrates such as flour. For instance, substitute Hi-maize for some of the flour in a recipe and the overall calories in the dish will decline.
 - Fiber-rich foods help decrease your appetite and make you feel fuller.
 - Natural resistant starch may help your body burn more fat. A recent study showed Hi-maize changes the order in which the body burns food. Usually carbohydrates are used first, but resistant starch seems to move fat to the top of the list. This means fat is burned first before it has a chance to be stored.



Consumer Factsheet

2. **Resistant starch helps balance energy.** During the day, blood sugar levels change depending on what you eat. Many people experience these changes as swings in energy – an effect which is accentuated as you get older. For instance, immediately following a meal, rapidly rising blood sugar levels may make you feel like you have more energy. Then an hour or two later, when blood sugar levels fall, energy levels decline, which can make you feel sluggish, drowsy, less attentive, and hungry.
 - Eating foods with Hi-maize helps to moderate the swings in blood sugar and helps you avoid high increases in blood sugar or dramatic declines. This also helps to level out your blood sugar throughout the day, giving you more balanced energy in the hours between meals.
3. **Natural resistant starch helps maintain healthy blood sugar levels.** Hi-maize has been shown to increase insulin sensitivity in healthy people. Insulin sensitivity is your body's ability to use the insulin you make more effectively. Loss of insulin sensitivity (called insulin resistance) increases your risk of developing diseases, such as type 2 diabetes and heart and blood vessel diseases.
4. **Resistant starch promotes digestive health.** Eating natural resistant starch is important for maintaining a healthy colon. Consuming Hi-maize resistant starch:
 - Helps to keep you "regular" with a mild laxative effect
 - Encourages the growth of healthy bacteria in the bowel and discourages the growth of potentially harmful bacteria (called a "prebiotic fiber")
 - Helps to keep colon tissue healthy. When Hi-maize reaches the large intestine, it produces protective compounds called short-chain fatty acids. One of these, called **butyrate** (pronounced bew-tir-ate), is particularly important for colon health.
5. **Resistant starch is safe for those needing gluten-free foods.** Many grain-based products such as cereals, breads and pasta are made with wheat which includes the protein, gluten. A growing number of people are found to be gluten-intolerant. Derived from corn, natural resistant starch can act as a replacement for wheat products in foods that are required to be gluten-free. This is especially important for those suffering from Celiac disease or who have inflammatory bowel disease.

Eating well to maintain good health and wellness requires some effort. Increasing the amount of natural resistant starch you eat is one easy way to move a step closer to achieving your nutrition and health goals.

*For information on how to find foods with resistant starch, please visit www.resistantstarch.com for a copy of "**Add Natural Resistant Starch To A Healthy Eating Plan.**" There, you'll also find delicious, easy-to-make recipes and the latest scientific research on natural resistant starch.*