

What's in a Name?

Labelling regulations are keeping beneficial resistant starch products with fibre claims off the Canadian market

Resistant starch products offer unique benefits to food processors worldwide, adding value to a wide range of low-moisture foods. Adding resistant starches to products gives them the ability to make specific claims for weight management, glycaemic management, energy management and digestive health. Lastly, and possibly most important to some consumers, it allows foods to be well tolerated in the gut.

To date there have been more than 120 clinical studies that support the salubrious physical effects of consumption of resistant starch products. This includes lipid oxidation (it helps your body burn more fat), caloric reduction, glycaemic reduction and lowered insulin response (when substituted for flours or digestible carbohydrates), as well as increased insulin sensitivity. In other words, consuming foods formulated with these resistant starches helps to maintain healthy blood sugar levels.

The science behind the addition of resistant starch products is also solid, with all research pointing to the fact that these ingredients have a positive effect on good digestive health. It supports beneficial bacteria suppressing harmful bacteria, acting as a prebiotic, if you will. It supports short chain fatty acid production (particularly butyrate) and reduces the production of ammonia and phenols by lowering intestinal pH. In short, resistant starch provides all of the physiological benefits of a range of fibres in the body and is well tolerated at high dose levels. A bit of icing on the cake? There is minimal change to the organoleptic qualities of foods formulated with this product.

Currently, resistant starch products are sold globally, including in Australia, the U.S., the EU and Japan. Processors are using them not only because of the documented benefits, but also because the product is declared as fibre. However, in Canada resistant starch products cannot be labelled as fibre – under current regulations they must be

declared as corn starch. And despite the fact that in other jurisdictions the resistant starch portion is counted as zero caloric contribution, here it's lumped in with carbohydrates.

Canadian companies that produce goods for the export market can already take advantage of the fibre claim. The ingredient is also showing up in imported products to the Canadian market. However, very few Canadian processors have yet shown an inclination to take advantage of the functional attributes of resistant starch without the ability to make a fibre claim. I suspect that with the increased attention recently being paid to glycaemic response this may change, but when it will happen is anyone's guess.

Resistant starch occurs in nature. It's a constituent of many plants and qualifies as fibre under the AOAC methods 985.29 and 991.43. When it's incorporated in processed foods, as part of the natural vegetable matter in the formula, it tests as fibre. Technically, as I understand the current regulations, it would be necessary to subtract the resistant starch

component from the empirically measured fibre content of a product if it were to be sold in the Canadian market.

So the question remains: What public purpose is served by limiting access of Canadian food processors to safe, effective and proven ingredients? National Starch has applied for approval of our resistant starch product, Hi-maize, as fibre in Canada. We've been working on this for quite a long time now, and we are confident that this will eventually happen. Some forward-looking types may want to look at formulating this ingredient into products today, but I can't promise that approval is imminent. And that, in a nutshell, is the problem. How many years should it take for new technology to be accessible in our own market?

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