

Fibre: The Unsung Hero in the Food Marketing Tool Kit

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Thirteen slices of whole wheat bread, 10 cups of broccoli or 6 medium apples.¹ This is what it would take for a consumer to reach their suggested daily fibre intake of 25 grams as outlined by the World Health Organization.² Although consumers aren't coming close to those suggestions now, they're *trying*. In fact, 56% of consumers globally say they want more fibre in their diet.³

Decades of research have shown that diets higher in fibre are associated with a reduced risk for heart disease and diabetes^{4, 5} as well as gut health and healthy digestion.⁵ Instead of leaving it up to consumers to rely solely on whole grain bread, broccoli or apples, manufacturers have the opportunity to help consumers achieve these nutritional benefits with fibre-enriched food and beverage products.

In addition to their inherent health benefits, fibres provide the functionality to help meet demand for many other trending health and wellness claims. For example, some fibres can help rebalance bulk and mouthfeel in reduced-sugar products. This unique mix of inherent benefits *and* functionality make fibres key utility players for marketing "better-for-you" products.

Sugar and Calorie Reduction

According to a 2015 IFIC study, 55% of consumers are looking for sugar reduction.³ This trend leads many manufacturers to turn toward high potency sweeteners. When replacing sugars with high potency sweeteners, fibres can help maintain the sensory experience of a full-sugar product. Fibers including soluble corn fibre and polydextrose help rebalance bulk and mouthfeel in these formulations. Polydextrose is especially ideal for low-calorie and sugar-free formulations because it provides only 1kcal/gram.

Reducing Fat

Similar to reduced-sugar products, soluble corn fibre and polydextrose can also help reduce fat by rebalancing bulk and mouthfeel. Oat beta glucan is another fibre option that helps achieve a satisfying reduced-fat product. Its strong water binding and emulsifying properties thickens and stabilizes emulsions, which mimics the creamy mouthfeel and smooth texture associated with full-fat products.

Maintaining Healthy Blood Cholesterol

Several clinical studies have demonstrated that increasing intake of viscous soluble fibres like beta glucan can also help to reduce low-density lipoprotein (LDL) and total cholesterol^{6,7,8} when consumed as part of a heart-healthy diet. Overall, the data suggests that 3 g/day of beta glucan can lower LDL cholesterol by 3-5% and total cholesterol by 2-4%.^{6,7,8} Several countries allow health benefit claims or functional claims for beta glucan and cholesterol reduction.⁹

From "excellent source of fibre" to "less sugar" to "low fat" to "helps maintain healthy cholesterol," certain fibres give marketers the opportunity to add extra appeal to their package labels. By partnering with a supplier that has a full portfolio of fibre ingredients, food and beverage manufacturers are able to determine the option that will achieve the claims best suited for their target audience.

Emerald Gao is the Product Marketing Manager of Tate&Lyle APAC. She has brought with her in-depth experience in strategy development, Merge & Acquisition and B2B marketing. She is in charge of client facing marketing support, public relationship, market intelligence and other sales enabling marketing activities. To learn more about Tate & Lyle's fibre portfolio visit www.tateandlylefibres.com .

¹ United States Department of Agriculture www.ars.usda.gov/nutrientdata; USDA National Nutrient Database for Standard Reference Other Databases and Reports Dietary Supplement Ingredient Database Nutritive Value of Foods.

² The Joint WHO/FAO Expert Consultation on diet, nutrition and the prevention of chronic diseases: process, product and policy implications, http://www.who.int/nutrition/publications/public_health_nut9.pdf (accessed April 1, 2015).

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⁴ US Department of Health and Human Services, US Department of Agriculture: Dietary Guidelines for Americans, 2010, 7th Edition. Washington, DC, US Government Printing Office; 2010.

⁵ Institute of Medicine, Food and Nutrition Board. Dietary Reference Intakes: Energy, Carbohydrates, Fiber, Fat, Fatty Acids, Cholesterol, Protein and Amino Acids. Washington, DC: National Academies Press; 2002/2005.

⁶ Ripsin CM, Keenan JM, Jacobs DR, Jr., Elmer PJ, Welch RR, Van Horn L, et al. Oat products and lipid lowering. A meta-analysis. *J Am Med Assoc.* 1992;267(24):3317-25.

⁷ Brown L, Rosner B, Willett WW, Sacks FM. Cholesterol-lowering effects of dietary fibre: A meta-analysis. *American J Clin Nutr.* 1999;69(1):30-42

⁸ Whitehead A. Meta-analysis to quantify the effects of oat beta-glucan on cholesterol. MPS Research Unit, Department of Mathematics and Statistics, Lancaster University, UK. Unpublished. Reported by: *EFSA Journal.* 2010;8(12):1885.

⁹ EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA); Scientific Opinion on the substantiation of health claims related to beta-glucans from oats and barley and maintenance of normal blood LDL-cholesterol concentrations (ID 1236, 1299), increase in satiety leading to a reduction in energy intake (ID 851, 852), reduction of post-prandial glycaemic responses (ID 821, 824), and "digestive function" (ID 850) pursuant to Article 13(1) of Regulation (EC) No 1924/2006. *EFSA Journal.* 2011;9(6):2207