



SORGHUM CHECKOFF

Information

Gluten-Free Whole Grain Sorghum: An Excellent Source of Dietary Fiber

Whole grain gluten-free sorghum flour is an excellent source of dietary fiber with 6.6g/100g flour (1). Most Americans of all ages under-consume dietary fiber with an average intake of about 15 grams versus the 25 grams that are recommended (2). Concentrated sources of fiber include whole grains, dried peas and beans, vegetables, nuts and fruits. Fiber is intrinsic and intact only in plants.

Dietary fibers are non-digestible forms of carbohydrates and lignin. Dietary fiber can be classified as fermentable or non-fermentable---both forms are needed for good health. Along with helping provide satiety, a moderate amount of evidence suggests that dietary fibers from whole food sources protect against cardiovascular disease, obesity, and type 2 diabetes and is essential for optimal digestive health (3).

The 2010 Dietary Guidelines for Americans was careful to point out that increasing total grains was not recommended. However increased consumption of the proportion of whole grains to total grains was recommended because of the need to increase whole grain fiber (3). In particular, individuals with celiac disease may not consume enough dietary fiber and need gluten-free whole grains such as sorghum in their diets.

A recent study with adolescents (4) found that higher dietary fiber intakes, but not low saturated fat or cholesterol intakes, were associated with lower incidence of metabolic syndrome. Since metabolic syndrome in adolescence leads to a higher incidence of metabolic syndrome, type 2 diabetes, and cardiovascular disease in adulthood, teens are a major group in need of education about whole grains and other sources of dietary fiber.

The Nutrition Facts panel on food labels requires that the amount of dietary fiber per serving be shown. If a food product contains at least 2.5 g/serving, the label may state the food is a good source of fiber.

Based upon an extensive review of the evidence, the FDA recently approved a health claim for whole grains that permits manufacturers to state on foods: "Diets rich in whole grain foods and other plant foods and low in total fat, saturated fat, and cholesterol may reduce the risk of heart disease and some cancers" (5). In order to use the claim, the serving size must contain a specified amount of dietary fiber per serving. Four serving sizes are specified ranging from a 35 gram serving with 1.7 grams of fiber to a 55 gram serving with 3.0 grams of dietary fiber (5). Thus whole grain sorghum is an excellent source of dietary fiber.

1. USDA National Nutrient Database for Standard Reference, Release 24 (2011). Item # 20648.
2. http://www.cdc.gov/nchs/nhanes/nhanes2005-2006/nhanes05_06.htm
3. <http://www.cnpp.usda.gov/publications/dietaryguidelines/2010/dgac/report/d-5-carbohydrates.pdf>
4. Carlson JJ, Eisenmann JC, Norman GJ, Ortiz KA, Young. Dietary fiber and nutrient density are inversely associated with the Metabolic Syndrome in US adolescents. 2011. JADA, 111;1688.
5. <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/FoodLabelingNutrition/FoodLabelingGuide/ucm064919.htm>