



SUSTAGRAIN®

■ Sustagrain®: The All-Natural, Highest Fiber Whole Grain With 3x the Fiber of Oats

What Is Sustagrain?

Ardent Mills® Sustagrain is a proprietary, identity-preserved, waxy, hullless barley. It offers flexibility, functionality and special nutritional benefits for product developers who are formulating to meet pressing health and wellness concerns. With dietary fiber making up more than 50% of its carbohydrates—and 40% of that in the form of cholesterol-lowering soluble fiber—Sustagrain can be a potent tool for heart health. In fact, the U.S. Food and Drug Administration has approved a heart-health label claim for soluble fiber from barley foods.

Digestive Health, Low GI

Sustagrain's benefits go beyond the heart. Whole grain fiber is key for digestive health, blood sugar management and

increased satiety, and with three to nine times the fiber of other cereal grains, Sustagrain is even more beneficial. When it comes to glycemic index (GI), high-fiber, low-starch Sustagrain ranks among the lowest of commercially available grains, smoothing out spikes in blood glucose and insulin responses that may play a role in the development of Type 2 diabetes.

Sustagrain is a superior choice for whole grain and high-fiber applications, and is available as a fine flour and flakes. Sustagrain boosts the fiber in breads, rice blends, hot and ready-to-eat (RTE) cereals, baked goods, bars, and more.

For technical assistance in formulating with Sustagrain, please e-mail info@ardentmills.com.



Fine Flour



Flakes

Applications	Benefits			
		Whole Oats	Whole Wheat	Sustagrain
Breads	3-9 Times More Fiber			✓
Side Dishes	Highest Level of Soluble Fiber			✓
Baked Goods	Half the Starch			✓
Hot Cereals	Increased Satiety			✓
Cereal/Energy Bars	Improves Digestive Health	✓	✓	✓
Soups	Lowers Cholesterol	✓		✓
Nutraceuticals	Contains Natural Antioxidants	✓	✓	✓
Pastas	Lowest Glucose Response			✓
Tortillas				
Meat Products				

Physical Properties: Sustagrain is available as a fine flour and flakes. It is tan in color.

Storage: Store in a clean, cool and dry area, away from spices and other aromatic materials. Recommended storage conditions are $\leq 75^{\circ}\text{F}$ and $\leq 50\%$ relative humidity. Sustagrain is a raw agricultural product and must be thoroughly cooked before eating.

Shelf Life: 12 months at recommended storage conditions and using good sanitary practices.

Bag Code Identification: Ardent Mills codes all bagged flour. Each bag is identified with the origin mill, month, day, year and shift packed.

Kosher Status : Rabbinical Authority: Kof-K. Kosher Certification: Parve.

Packaging: Available in 50-lb., multi-wall paper bags and totes.

Information and Services: For a list of distributors in your area or for any other assistance, please e-mail info@ardentmills.com.

Nutritional Properties: Sustagrain is a high-fiber whole grain from proprietary varieties of waxy, hull-less barley.

Ingredients Declaration:
Ingredients: whole grain barley (Sustagrain®)

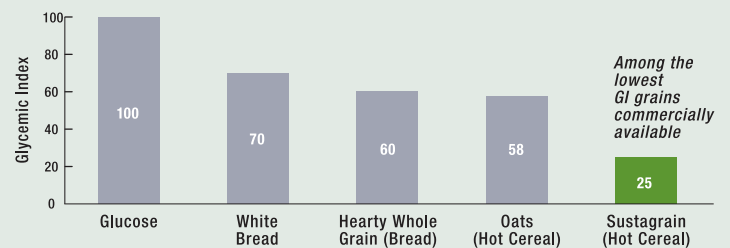
Sustagrain Nutritional Data:

Reported on a 100g Basis

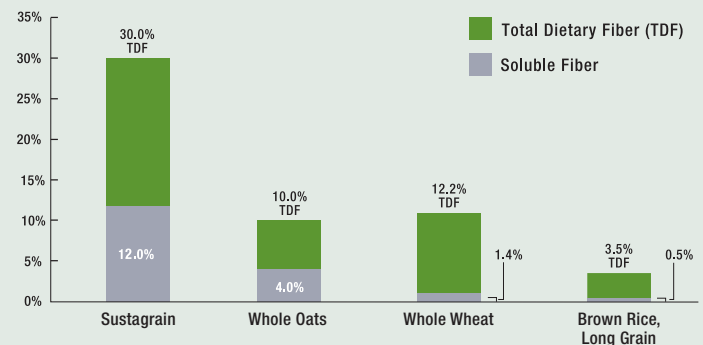
Calories	392	Vitamin A	0IU
Calories from Fat	60	Vitamin C	0mg
Fat	6.7g	Calcium	33mg
Saturated Fat	1.7g	Iron	5.1mg
Cholesterol	0g	Vitamin B1 (Thiamin)	0.3mg
Carbohydrates	64.6g	Vitamin B2 (Riboflavin)	0.2mg
Total Dietary Fiber	30.6g	Vitamin B3 (Niacin)	4.6mg
Soluble Fiber	12.6g	Potassium	519mg
Protein	18.2g	Zinc	2.8mg
Sodium	12mg		

Source: Ardent Mills and U.S. Department of Agriculture, Agricultural Research Service 2010. USDA National Nutrient Database for Standard Reference, Release 23. Nutrient Data Laboratory. <http://www.nal.usda.gov/fnic/foodcomp/search1>.

GLYCEMIC INDEX (GI) COMPARISON



SUSTAGRAIN VS. TRADITIONAL GRAIN SOURCES: Analysis of total dietary fiber components



Sources: USDA National Nutrient Database for Standard Reference, Release 23; J Agric Food Chem, 2010, 49: 2437; Cereal Chem, 1999, 76: 788; Cereal Chem, 2000, 77: 673; and Ardent Mills.