

The Super Six – The Benefits of Gluten-Free Whole Grains

Amaranth - seed

- Robust, nutty flavor
- High in lysine, an essential amino acid
- High in protein, fiber, calcium, iron, magnesium, phosphorus, potassium, zinc, B vitamins
- Sold as the seed, flour, or puffed
- The seed form can be added to soups, stews, casseroles, risottos, mixed with other grains, or cooked as a hot cereal
- Puffed amaranth can be eaten as cold cereal
- The flour should be mixed with other gluten-free grain flours when preparing breads, cakes or cookies

Buckwheat - fruit

- Triangular shape with black shell – the kernel inside the shell is known as a groat
- There are many forms of the groats available for purchase; roasted, unroasted, whole, ground, buckwheat bran, and as flour and baking mixes.
- Roasted groats are also known as Kasha
- High in protein, magnesium, zinc, phosphorus, potassium, niacin, riboflavin, B vitamins, and fiber
- May improve cholesterol and blood pressure
- Can be used as stuffing, side dish, and hot cereal or added to soups, casseroles, pilafs and homemade breakfast bars
- Look for pancake mixes that are labeled 100% pure buckwheat flour for increased nutrients.

Millet - seed

- Available in yellow, white, gray or red
- Yellow is the most common in North America and has a sweet, nutty flavor
- Good source of easily digestible protein
- Also provides thiamin, riboflavin, niacin, vitamin B6, folate, fiber, iron, magnesium, and zinc
- Puffed millet can be used as a breakfast cereal or crushed for use as a breading
- Whole millet can be boiled for a side dish, hot cereal or mixed with other grains to form a pilaf.

Sorghum - cereal grain

- Also known as milo
- High in phosphorus and potassium
- Also a good source of fiber, protein, thiamin, niacin, vitamin B6, and iron
- Can be used in casseroles, pilafs, stuffing, salads and soups or use in place of rice in rice pudding for increased nutrient content
- Sorghum flour is best when combined with bean or amaranth flours in baking.

Teff – grain from cereal grass

- Has a nutty, molasses-like flavor
- Since this grain is so small, the bran and germ make up a greater percentage of the grain. The germ and bran are where many of the nutrients are contained which is one reason teff is so nutrient-rich.
- High in calcium, iron, magnesium, thiamin and zinc
- Also a good source of fiber, protein and B vitamins
- Does not increase in size as it cooks so it is best mixed in with other foods such as soups, cereals and other grains
- Use in hot cereals, scones, pancakes, or veggie burgers
- Try mixing $\frac{1}{4}$ cup teff with 1 cup brown rice. Cook them as you would plain rice.

Quinoa - seed

- Comes in many colors such as purple, red, white, and black
- Is sold in several forms including seed, flakes, flour, and pasta
- Has more high-quality protein than all other grains or cereals. The protein in this grain is a complete protein meaning it contains all essential amino acids.
- High in iron, magnesium, phosphorus and zinc
- Also a good source of calcium, B vitamins and fiber
- Use to make “tabbouleh”, side dishes, hot cereal, or stuffing
- The flakes can be eaten as a cold cereal
- Use the pasta in place of rice pasta for increased nutrition

Helpful Information:

- All gluten-free grains must be labeled gluten-free.
- Rinse all grains well before cooking.
- Drink plenty of water (48-64 ounces per day) as you add more of these grains into your diet due to their high fiber content.
- Use a gluten-free cookbook when using gluten-free flours to make baked goods. To achieve good quality in the finished product, the amounts and mixtures of flours is important.
- Do not purchase these grains from bulk bins to prevent cross contamination.
- Cook all grains well and according to the package directions before eating them.

The Facts (1 cup cooked)

	Carbohydrates	Fiber	Protein	Iron (mg)	Magnesium (mg)	B vitamins	Calcium (mg)	Zinc (mg)
Amaranth	46 g	5 g	9 g	5.2	160	Folate (54mcg)& B6 (0.28mcg)	116	2.1
Buckwheat Groats	34 g	5 g	6 g	1.3	86	Niacin 1.6 mg	12	1.0
Millet	41 g	2 g	6 g	1.1	77	Thiamin (0.18mg)& Niacin (2.3mg)	5	1.6
Sorghum (whole grain)	46 g	4 g	7 g	2.2	106	Thiamin (0.21 mg)	8	1.1
Quinoa	39 g	5 g	8 g	2.8	118	Folate (78 mcg)	31	2.0
Teff	50 g	7 g	10 g	5.2	126	Folate (45 mcg)	123	2.8
Brown Rice(long grain)	52 g	3 g	6 g	1.1	79	Niacin (5.2 mcg)	6	1.2
White Rice (unenriched)	45 g	<1 g	4 g	0.3	19	Folate (5 mcg)	16	0.8

*All nutrition facts are based off of a serving size equaling 1 cup cooked except where specified.

*Percentages are based off of the Recommended Daily Values for a 2,000 calorie diet.

Adapted from: Gluten Free: The Definitive Resource Guide by Shelley Case, RD, 2016. www.shelleycase.com

Where Do I Find and Buy These Gluten-free Grains?

- Stores: Whole Foods, Trader Joe's, Wegmans, Hannafords, Costco, BJ's, Shaw's, Stop and Shop, other supermarket chains, and health food stores

www.ancientharvest.com – Selection of gluten free grains, grain blends, and pastas

www.bobsredmill.com (click on Gluten-free) - Gluten-free products from grains to flours to baking mixes.

www.mygerbs.com – Allergy-friendly seeds, flours, dried fruit, gluten-free grains, herbs and seasonings

www.nuts.com (click on gluten-free tab) – Certified gluten free flours, grains, baking mixes, nuts, seeds & snacks

www.quinoa.net – Quinoa-based flour, flakes, pasta, and polenta as well as black and red quinoa; offers many recipes, tips, and ideas for cooking with quinoa.

www.teffco.com – Teff and teff flour; recipes

Celiac Center, Beth Israel Deaconess Medical Center

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