



## *Planet of the Gluten-Free Grains*

The following excerpt from *The Living Gluten-Free Answer Book* by Suzanne Bowland (Sourcebooks 2008) is used with permission from Sourcebooks, Inc. Copying/printing is prohibited.

### *What is amaranth?*

Today, along with other nutritious gluten-free grains like quinoa and teff, amaranth is enjoying a renaissance as a whole grain used in cooking, as well as a flour in gluten-free baking. Amaranth is a seed crop native to South America and was the essential food staple of the ancient Aztecs and Incas. This tiny seed is a nutritional powerhouse that contains each of the essential amino acids, in addition to boasting 6 grams of protein and 6 grams of dietary fiber in just one ¼ cup serving. Similar to quinoa, this South American supergrain lends itself well to culinary versatility. Amaranth can be used in a variety of ways, ranging from porridge and pilafs to casseroles and snacks. Consider taking some of your favorite rice, potato and pasta dishes and substituting amaranth for a new taste and texture sensation.

These tiny seeds remain miniscule even after cooking, but become soft and tender while maintaining a faint, appealing crunch. Amaranth does not fluff up like rice and quinoa when cooked, but maintains a hearty, dense quality that maintains moisture well and has a unique, golden shimmer.

It's common to see amaranth flour being incorporated into flour blends for gluten-free baking; the high protein content provides a stickiness that is beneficial. But amaranth is also widely used in commercial food products. For example, NuWorld Amaranth specializes in a variety of ready-to-eat amaranth foods.

### *What is buckwheat?*

It's easy to immediately assume that buckwheat is a grain that contains gluten because of the "wheat" in its name, but buckwheat is gluten-free and in fact has nothing to do with the wheat family. Indigenous to Russia, buckwheat is not a cereal grain as one might suspect, but rather an herb plant with edible, triangular seeds.

The flavor of buckwheat is robust and people tend to either love it or hate it from first taste.

Buckwheat comes in the form of groats or kernels that can be used creatively in a variety of recipes ranging from soups and casseroles to desserts and entrees. Groats come in fine, medium, and course versions. Mild in flavor, groats cook particularly fast and have a unique texture that is unlike other gluten-free grains; softly tender with just a hint of crunch, buckwheat groats cannot be compared to rice, quinoa, amaranth, or millet in terms of texture. For recipe ideas, visit The Birkett Mills at [www.thebirkettmill.com](http://www.thebirkettmill.com).

Seek out recipes that feature buckwheat groats coupled with flavors and imaginative ingredients that complement their mild flavor. Consider cream of buckwheat for a nutritious breakfast porridge. Toasted buckwheat, known as Kasha, is a popular dish in Eastern Europe, and the famous Japanese Soba noodles are made with buckwheat—however, beware, because these noodles commonly contain wheat flour.

High in protein and lysine, buckwheat is a nutritious gluten-free option that features an array of vitamins, including B and E, as well as minerals. Buckwheat can be ground into flour, either dark or light, and has a hearty flavor that gives buckwheat pancakes their unique flavor and aroma. Buckwheat flour can be used as a complementary flour to your gluten-free flour blend to impart protein and a rich flavor to your gluten-free baked goods.

## *What is Indian ricegrass / Montana?*

Indian ricegrass was once a food staple for Native Americans in the western region of the United States. Not related to rice, Indian ricegrass has the acronym IRG and is known in scientific terms as *Achnatherum hymenoides*. Valued by Native Americans for its drought resistance and nutritive properties, this resilient wild seed grass grew in dry and sandy soil in the prairies extending from Southern Manitoba, Canada, to the highlands of Southern California. Indian ricegrass has made a twenty-first-century agricultural comeback, sparked by the need to serve the growing gluten-free food industry with more flour options. Through years of extensive research and development, the grower collective of Amazing Grains based in Ronan, Montana, in connection with scientists at Montana State University, brought this old Native American staple to the marketplace.

Indian ricegrass has a hard seed coat and is planted in the fall. It usually takes one year to grow a large enough crop to yield a worthwhile harvest. The brownish green color of the grass is hearty and robust and its slightly woody scent brings flavor and aroma to gluten-free baking.

Indian ricegrass is the signature ingredient in all Montana™ products. It's high in protein and fiber and is combined with a proprietary blend of white rice flour and tapioca flour to create the company's All-Purpose Baking Flour Blend, which provides 7 grams of protein, 5 grams of dietary fiber, and 5 grams of insoluble fiber per 2/3 cup. The Montana™ Pure Baking Supplement (100% Indian ricegrass) provides 17 grams of protein, 24 grams of dietary fiber and 24 grams of insoluble fiber. Indian ricegrass as milled flour is a good option for helping to bring dietary fiber to the

gluten-free diet in the form of a baking supplement. However, Indian ricegrass in its whole seed form is not edible.

### *What are Job's tears?*

[a]One of the beautiful aspects of gluten-free living is that it can broaden your culinary horizons with strong international influences. Job's tears are another naturally gluten-free grain that may enjoy a renaissance in North America as the gluten-free food movement continues to gain predominance. Known in Japan as *hato mugi* and as *yimi* in Chinese, this beautiful gluten-free grain resembles large pearls of barley in the shape of a tear drop. While barley is often used in soups and stews, you can substitute Job's tears and never feel slighted. Although not as common as the other gluten-free grains, Job's tears are a traditional Eastern grain and deserve a try at least once on your gluten-free journey. With their delightfully tender texture and flavor that exudes a hint of corn, Job's tears will bring a twist of taste to your gluten-free adventures at home. These gluten-free pearls become creamy when cooked.

Job's tears have a sound nutritional profile and make a nice addition to your gluten-free cupboard. You can find Job's tears in Asian markets, health food stores, and via mail-order. This charismatic import fetches a higher price, but you may find the experience well worth the cost. Job 's tears are not as readily available as other gluten-free grains and you should check with the manufacturer regarding their manufacturing process of this grain to ensure no cross-contamination with wheat.

### *What is millet?*

Going on a gluten-free diet gives you the opportunity to explore ingredients you may never have otherwise discovered, and millet is one such ingredient. Millet is a food staple among populations in Asia and Africa, but is typically far off the radar of an American diet until becoming gluten-free brings it to your attention.

Often used in birdseed, millet is an ingredient that imparts nutritious properties and culinary versatility to gluten-free cuisine and baking. Bland in flavor and similar in appearance to corn meal, millet is well suited for adding sweet or savory flavors to a variety of dishes, including snacks. Millet is versatile in texture and can be fluffy for pilafs and moist and sticky for porridges and polenta. When used as flour, it adds texture and fiber to baked goods.

Millet comes in the following forms: hulled for cooking, grits/meal, flour, and even puffed for a unique cereal option. Millet is high in protein and features many nutrients including vitamin B, copper, iron, phosphorus, and manganese.

In her cookbook *Whole Grains Every Day Every Way*, Lorna Sass explores all of the gluten-free grains, but gives millet in particular some well-deserved attention. Sass' culinary flair makes this seemingly dull and flavorless ingredient take a commanding presence in an array of recipe suggestions, including using buttermilk and chives to create a savory alternative to mashed potatoes and coating puffed millet in chocolate for a sweet and crunchy delight.

## *What is quinoa?*

Well loved for its nutrition, taste, texture, and culinary versatility, quinoa is a gem in the repertoire of gluten-free grains. A time-honored food staple of South America and an essential food of the ancient Incas, quinoa is packed with cultural significance and history.

Scientifically speaking, quinoa is a seed, but it's commonly referred to in the generic sense as a grain, even as a "supergrain" because of its extraordinary health-promoting properties. From a nutritional perspective, quinoa can be considered near perfection. Similar to amaranth, quinoa has a good amount of protein, packing 6 grams of protein per 1/4 cup serving. Quinoa contains all eight amino acids, making it a complete protein.

These beautiful seeds, found in black, ivory, and red, expand to a volume four times their original size after cooking. Easy to cook and digest, quinoa will broaden your culinary horizons on a gluten-free diet. Its versatility will make your gluten-free food adventures exciting if you like its unique taste and texture. Often compared to Couscous (gluten!), quinoa cooks up light and fluffy like rice and can be substituted for any number of dishes. From soups and salads to side dishes, casseroles, and main entrees, quinoa will provide you with an abundance of creative options. Experiment! Try substituting quinoa for bulgur wheat in tabbouleh recipes. Or use quinoa for savory pilafs.

Quinoa flour is becoming more widely used in gluten-free baked goods. Look for quinoa flour in prepared baked goods and try to incorporate quinoa flour in your baking at home. Not only is this flour a nutritious option, it has favorable baking properties when you are looking to help replicate the gluten-effect.

## *What is ragi?*

Once again, a gluten-free diet has the power to bring international flavor, tradition, and culture into the North American gluten-free kitchen with ingredients that you may never have otherwise discovered. One of the lesser known gluten-free ingredients, ragi is a gluten-free cereal grass that is not regularly mentioned in the lineup of gluten-free grains that includes amaranth, buckwheat, millet, sorghum, quinoa, and teff. More commonly known as finger millet or African millet, ragi is a nutritious food staple that is native to Africa and has also been cultivated for centuries in India, dating as far back as 1000 BC. Its flavor has slightly bitter tone but pleasant to the palate, and while the texture can have a gritty quality, its fiber content is similar to flax meal and has a sticky, viscous quality that will bulk up your dish.

In Africa, ragi is used to make porridge to accompany other foods. Ragi flour is widely used in India to make the well-known bread or leavened pancakes known as *Dosa*, or the less-leavened version known as *Roti*. Ragi roti is a traditional breakfast food of India that is made using ragi flour, grated coconut, onions, and green chiles. This food is often modified to include various vegetables as a stuffing like carrots, peas, and cauliflower.

While ragi flour is common in other cultures, to procure some ragi flour for your gluten-free North American kitchen is more challenging. But if you're looking to

broaden your pantry's gluten-free ingredient profile, you may find the time well spent. Begin shopping for ragi flour in specialty Asian markets, spend some time online shopping for it, and browse Indian cuisine cookbooks for recipes utilizing this unique ingredient. As the gluten-free food industry continues to grow, ragi just might be an ingredient to watch.

### *What is sorghum?*

Not widely recognized in the United States, sorghum is the world's third largest grain crop. As a whole grain, sorghum is also known as *milo* or *kafir* and is a key ingredient in regions of India and Africa. Sorghum grains are small and bead-like with a beige color. Like millet, sorghum is bland and dry, but when cooked it's best paired with ingredients that have moisture—like tomatoes—or by adding flavorful oils. In the United States, sorghum is mostly known for its sweet taste when it's extracted from the stalk and made into syrup or sorghum molasses, but the gluten-free food movement is bringing this shy ingredient into fashion.

When gluten-free baking was in its infancy, flours and starches made from rice, tapioca flour, and potato starch were the pivotal ingredients. While rice flour, potato starch, and tapioca flour are still widely used in gluten-free baking, sorghum flour is capturing the spotlight as a primary ingredient due to its baking properties that resembles wheat flour. Known for its high protein and fiber content similar to that of whole wheat flour, sorghum flour helps replace the gluten with its own "stretchy" characteristics and binding abilities. When added to other foundational flours, sorghum flour helps create baking versatility—flour blends that utilize sorghum flour are trumping the traditional flour blends that first originated in the early days of gluten-free baking. Carol Fenster is a proponent of sorghum flour and uses it regularly in her baking with flour blends throughout her cookbooks. Fenster says that sorghum flour is one of her favorite flours to work with.

### *What is teff?*

A cereal grain indigenous to northern Africa (and a time-honored staple in Ethiopia), teff (or tef) is the smallest grain in the world, measuring approximately 1/32 inch in diameter. For such a small grain teff is a nutritional powerhouse, packing all 8 amino acids, 6 grams of protein and 6 grams of dietary fiber per ¼ cup serving. Plus, it's a favorable source of calcium and iron.

Teff comes in a variety of colors including black, brown, red, white, and ivory. As individually interesting as teff is in size, its flavor and texture are also unique. It has a mild, nutty flavor and when cooked it absorbs fragrant spices beautifully and takes on a texture similar to mashed potatoes. It lends itself well to creating savory hot porridges, polentas, and stews varying from sweet to savory. Teff is also favored as a finely ground flour that can be a nutritious addition to gluten-free flour blends for baking, as well as enhancing mixes designed for pancakes and waffles with protein and fiber.

The gluten-free Ethiopian flat-bread Injera is made with teff flour and has a taste and smell reminiscent of sour dough bread. With its flat, very-thin, pancake-like characteristics, this bread is often used as a "plate" upon which to spread savory sauces, stews, or mashes of legumes, then rolled up or folded over and eaten.

Tip: When considering eating Injera at a restaurant, always ask if they included wheat flour in the recipe because it is sometimes used in the United States to make this bread.

Gluten Free Kneads, a frozen cookie dough and focaccia company based in Austin, Texas, features teff flour in conjunction with amaranth flour in its Smart Flour® Blend.

The above excerpt from *The Living Gluten-Free Answer Book* by Suzanne Bowland (Sourcebooks 2008) is used with permission from Sourcebooks, Inc. Copying/printing is prohibited.