

KANIWA pronounced kay-nyi-wa

Kaniwa is a small, grain-like food from the Andes Mountains in Peru. It is a new product to the United States but is expected to appeal to consumers of nutrient-rich foods like quinoa, teff, and amaranth. Like quinoa, teff, and amaranth, kaniwa is technically a seed that we cook and enjoy like a grain. An advantage of kaniwa over its more popular cousin quinoa is that it does not have saponins, a component that requires rinsing the quinoa well before it is cooked. Kaniwa is much smaller than quinoa, however, and may be better used adding to recipes rather than eating like a porridge.

Foods like blueberries, broccoli, and flaxseeds have been termed superfoods, and the latest food to join this category is kaniwa. However, its domestication is not complete, and non-uniformity of grain ripening is a limitation.

BUCKWHEAT

Buckwheat is a plant cultivated for its grain-like seeds, and also used as a cover crop. Buckwheat is not wheat, nor is it related to wheat. It is not a grain nor a cereal and is gluten-free. Instead, buckwheat is related to sorrel, knotweed, and rhubarb. The name 'buckwheat' or 'beech wheat' comes from its triangular seeds, which resemble the much larger seeds of the beech nut from the beech tree, and the fact that it is used like wheat.

In the northeastern United States, buckwheat was a common crop in the 18th and 19th centuries. Cultivation declined sharply in the 20th century due to the use of nitrogen fertilizer, to which maize and wheat respond strongly.

Buckwheat is derived from the seeds of a flowering plant. The triangular seeds, known as buckwheat groats, are frequently made into flour for use in noodles, crepes, and many gluten-free products on the market these days. Buckwheat is a good binding agent and, when soaked, becomes very gelatinous. Buckwheat is commonly found in raw food diet recipes.

AMARANTH

Amaranth has been cultivated as a grain for 8,000 years. The yield of grain amaranth is comparable to rice or maize.

It was a staple food of the Aztecs, and was used as an integral part of Aztec religious ceremonies. The cultivation of amaranth was banned by the conquistadores upon their conquest of the Aztec nation. Because the plant has continued to grow as a weed since that time, its genetic base has been largely maintained. Research on grain amaranth began in the US in the 1970s. By the end of the 1970s, a few thousand acres were being cultivated. Much of the grain currently grown is sold in health food shops.

In a raw form, grain amaranth has many nutrients. Unfortunately, however, raw amaranth grain is inedible to humans, and it cannot be digested by them. For amaranth grain to be edible to and digestible by humans, it has to be prepared and cooked like other grains. Cooked amaranth is a competing and promising source of nutrition when compared to wheat bread, higher in some nutrients and lower in others. Grain amaranth is also grown as a food crop in limited amounts in Mexico, where it is used to make a candy called *alegría* (Spanish for happiness) at festival times.

BARLEY

Barley, a member of the grass family, is a major cereal grain. Important uses include use as animal fodder, as a source of fermentable material for beer and certain distilled beverages, and as a component of various health foods. It is used in soups and stews, and in barley bread of various cultures. Barley grains are commonly made into malt in a traditional and ancient method of preparation.

In medieval Europe, bread made from barley and rye was peasant food, while wheat products were consumed by the upper classes. Potatoes largely replaced barley in Eastern Europe in the 19th century. In a 2007 ranking of cereal crops in the world, barley was fourth both in terms of quantity produced (136 million tons) and in area of cultivation (566,000 km²).

Barley is a widely adaptable crop. It is currently popular in temperate areas where it is grown as a summer crop and tropical areas where it is sown as a winter crop. Its germination time is one to three days. Barley grows under cool conditions, but is not particularly winter hardy.

QUINOA pronounced kēnwä

Quinoa is usually considered to be a whole grain but actually is a seed. It can be prepared like whole grains such as rice or barley.

Quinoa is a favorite whole grain for three reasons: First, it takes less time to cook than other whole grains – just 10 to 15 minutes. Second, quinoa tastes great on its own, unlike other grains such as millet or teff. Add a bit of olive oil, sea salt and lemon juice and - yum! Finally, of all the whole grains, quinoa has the highest protein content, so it's perfect for vegetarians and vegans.

Quinoa provides all **9 essential amino acids**, making it a complete protein. Quinoa is a **gluten-free** and **cholesterol-free** whole grain, is **kosher for passover**, and is almost always organic.

Culinary ethnologists will be interested to know that quinoa was a staple food for thousands of years in the Andes region of South America as one of just a few crops the ancient Incas cultivated at such high altitude.

MILLET

Millet is an ancient seed, originally cultivated in the dry climates of Africa and northern China since the Neolithic Era. (A few years ago, archaeologists discovered a 4000-year old bowl of millet noodles in northwestern China!) In time, millet spread throughout the world; the Romans and Gauls made porridge from it, and in the Middle Ages millet was more widely eaten than wheat. It is mentioned in the Old Testament as an ingredient for bread.

Today, millet continues to be a staple for a third of the world's population. Ground millet is used in flatbreads, such as Indian roti and Ethiopian and Eritrean injera (made from teff, a variety of millet). In Eastern Africa, millet is used to make beer. It is also an ingredient in Eastern European fermented drinks and porridges.

In America and Western Europe, millet has mostly been relegated to bird and livestock feed. However, interest in the grain has been growing, especially in gluten-free diets. It's nutritious – providing fiber, iron, B vitamins, manganese, phosphorus, and magnesium – and highly alkaline, making it easily digestible and soothing to the stomach.

There are many varieties of millet; the primary types are called pearl, foxtail, proso, and finger. Yellow proso is the kind most often found pre-packaged or in bulk bins at health food stores. (Do buy millet intended for human consumption, as the millet sold for pet food still has the undigestible outer hull.)

FARRO

Farro is a type of wheat that was among the first plants to be domesticated in the Middle East. It is low yielding and has been largely replaced over the centuries by other crops, but it remains as a relict species in mountainous areas of Europe and Asia. Farro grows in wild and cultivated varieties, and it is still a popular food in some areas of the world, notably Italy.

There is some confusion about the difference between farro, emmer, and spelt. According to the United States Department of Agriculture's Germplasm Resources Information Network (GRIN), farro is listed as a common name for *Triticum aestivum* L. subsp. *spelta*, or spelt, and *Triticum turgidum* L. subsp. *dicoccon*, also called emmer wheat. It has been suggested that the name "farro" was used in different parts of Italy to describe different types of wheat, leading to this confusion. When cooking, however, it is important to note that farro and spelt may not be interchangeable in all recipes, so it is important to use the grain that is called for.

Farro grows wild in the Fertile Crescent area of the Middle East. The seeds of wild farro self-propagate by digging into the soil with their awns, spiky filaments that can also be seen on the heads of emmer wheat. The awns expand and contract in reaction to changes in humidity, causing the seeds to burrow into the soil and grow. Farro grows well even in poor soils and is resistant to fungus.

BASMATI BROWN RICE

Brown Basmati Rice is the best food to be found on Earth. It provides protein and carbohydrates as well as B-vitamins which aid digestion. Sadly most Westerners eat white rice (and white bread and white pasta), which has had all the goodness (the husks) removed, leaving just the energy, but without the vitamins to digest it. This causes constipation and eventually the cancers and heart disease we are all dying from.

Apparently brown things were thought unclean to the white colonials who invaded the East. Basmati rice was traditionally used for special occasions and parties, because of its fragrant aroma, but I reckon that every meal should be special. It is said that the smell of basmati rice cooking will help to sell a house or create a convivial atmosphere. Maybe try also Jasmine Rice, but again, make sure it is brown, not white.

OATS

Oats were one of the earliest cultivated cereals. The ancient Greeks were the first people known to make porridge (cereal) from oats. In England, oats were considered inferior, but in Ireland and Scotland they were used in many kinds of porridges and baked goods.

Oats came to America with British immigrants in the 1600s, and in fact, the British Quaker influence inspired the name for “Quaker Oats.” Today oats are produced in many countries, but Minnesota, Wisconsin, South Dakota and central Canada lead in oat production in North America.

They contain vitamin E, several B-vitamins, calcium, magnesium and potassium. Oats also have some of the trace minerals selenium, copper, zinc, iron and manganese. They’re full of good-for-you phytochemicals and have both soluble and insoluble fiber. Oats have been found to benefit heart health, lower blood pressure, and can even help prevent diabetes as part as a high whole-grain diet.

Oat Groats are the starting point. This is the harvested “as-is” product. Whole oat groats are widely used as animal feed, but not so easily found for human consumption. Some health food stores carry them. Whole oat groats can be cooked or steamed, but because they’re a bigger grain than rice or even whole wheat kernels, take much longer to cook. Because they are “as-is”, they have the highest nutritional value of all forms of oats. They are digested very slowly, which reduces the glycemic load and makes them quite filling.

HARD RED WHEAT

Hard white wheat was developed from **hard red wheat** by eliminating the genes for bran color while preserving other desirable characteristics of red wheat. Depending on variety, red wheat has from one to three genes that give the bran its red cast; in contrast, white wheat has no major genes for bran color. The elimination of these genes results in fewer phenolic compounds and tannins in the bran, significantly reducing the bitter taste that some people experience in flour milled from red wheat. Nutritional composition is the same for red and white wheat.

Spring wheat is planted in April to May, makes a continuous growth and is harvested in August to early September. Winter wheat is planted in the fall. It makes a partial growth, becomes dormant during the cold winter months, resumes growth as the weather warms and is harvested in the early summer (June and July).

Flour from hard red winter wheat is often preferred for artisan breads.