Quinoa – A Versatile and Nutrient-Rich Whole Grain

Quinoa is a native grain crop originating in the South American Andes, and is known for its nutty flavor and fluffy texture₁. It is part of the chenopod genus, which includes spinach and beets. After the crop is harvested, processing is required to remove the bitter saponin compounds from the grain. In nature saponins serve to protect the plant from pests and predators and are thus mildly toxic to humans. In South America, quinoa saponins are used to launder clothing₂.



Storage and Preparation Methods:

Quinoa should be stored in plastic or

glass in a cool, dark, dry cabinet. It keeps for approximately 1 year if stored using this method. If stored in the refrigerator in glass or plastic, it may keep for longer than 1 year₃.

Most pre-packaged quinoa has been pre-rinsed, but the package should be double-checked to ensure this. In this case, only a brief rinse is required. If preparing un-rinsed quinoa, it is important to remove the saponins by soaking for a minimum of 3 hours, followed by rinsing in a fine metal strainer for at least 3 minutes. If a fine metal strainer is not available, line a strainer or colander with cheesecloth and rinse several times for 3 minutes

each4.

Add 1 part quinoa to $1\frac{3}{4}$ to 2 parts water. Broth or milk could also be used as cooking liquid. Bring the grain and liquid to a simmer and reduce to low heat. Cook, covered for 30-35 minutes or until fluffy_{4, 5, 6}. Serve plain or add to recipes. Quinoa may be added to soup, salad, or stir-fry dishes, used to make a breakfast cereal, or eaten plain.

Nutritional properties: Quinoa is high in protein and fat relative to other grains₇. It provides all of the essential amino acids and is a good source of fiber, folate, magnesium, iron, phosphorus, and vitamin E.

1 cup provides 220 calories, grams of protein, 39 grams of carbohydrate, 3.5 grams of fat, 3.3 grams of polyunsaturated fat, 5 grams of fiber, 78 mg of folate, 118 mg of magnesium, 2.8 mg of iron, 281 mg of phosphorus, 318 mg of potassium, and 1.2 mg of vitamin E $_{8}$

Product Availability: Quinoa is available in most large supermarkets, particularly in those that carry bulk food items or have a 'natural foods' section.

Populations That May Use or Benefit From Consuming Quinoa:

Quinoa is an excellent whole grain option for individuals who:

- Adhere to a gluten-free or gluten-reduced diet
- Seek to add fiber to their diets whether it be for intestinal health, blood lipid management, or other reasons
- Simply seek to add more variety to their diets
- Are vegetarian or vegan and in need of a high protein grain

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References

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