

# Benefits of Buckwheat



## GRAIN OR SEED?

Buckwheat is usually referred to as a whole grain. However, it is actually the seed of the fruit of the buckwheat plant, similar to rhubarb. Native to Northern Europe and Asia, buckwheat is a staple in Russia and Poland. Most Americans typically know buckwheat as a flour used in pancakes, since it is most commonly used as a gluten-free substitute for wheat.

Although there is “wheat” in the name, buckwheat and wheat are not related. Hulled kernels are called groats. When roasted, they are called kasha, and have a rich, nutty flavor.

## NUTRITION PROFILE

Buckwheat is most valued for its high-quality protein since it contains all of the essential amino acids for building proteins, including lysine, which is usually missing in grains. This protein profile makes buckwheat an potential substitute for meat in vegetarian diets. The protein and fiber combination helps with satiety and can assist with weight loss.

One cup cooked buckwheat groats provides 155 Calories, 6 grams of protein and 5 grams of dietary fiber.

Buckwheat is rich in flavonoids, particularly *rutin* and *quercetin*, plant compounds which help fight dangerous free radicals that can lead to disease. It is rich in B vitamins important for energy production, nerve health and the breakdown of fats. It is an excellent source of minerals like potassium for fluid and blood pressure balance, manganese, which activates digestive enzymes, copper for production of blood cells and magnesium to support bone health.

Like all plant foods, buckwheat contains no cholesterol.

## BUCKWHEAT AND YOUR HEALTH

Diets that contain buckwheat have been linked to lower risk of chronic disease, particularly heart disease, diabetes and cancer.

### **Heart Disease**

The flavonoid *rutin* has been shown to lower help reduce risk of heart attack and stroke by reducing LDL cholesterol and platelet clotting, and raising HDL cholesterol. Rutin may also help lower blood pressure.

### **Diabetes**

Buckwheat is high in dietary fiber which keeps blood sugars lower than wheat. The compound *chiro-inositol* helps make cells more sensitive to insulin. It contains resistant starch, which lowers the blood sugar response and the high magnesium affects insulin formation and release. High levels of magnesium are associated with reduced risk of type 2 diabetes.

### **Cancer**

A single cup of cooked buckwheat contains more than 20% of the daily fiber recommendation, which reduces risk of colon, stomach and breast cancers. Lignans, a type of antioxidant, defend against hormone-based cancers like breast cancer.



**Oregon State**  
University

stephanie.polizzi@oregonstate.edu  
631 Alder Street, Myrtle Point, OR 97458  
541-572-5263 ext 25291  
<http://extension.oregonstate.edu/coos>

**Digestion**

Because of buckwheat's high fiber content, it stimulates peristalsis, the muscle contraction of the intestines to move food through quickly. This is known to reduce irritable bowel syndrome (IBS) and diarrhea. Fiber also acts as an appetite suppressant. Buckwheat fiber is also a prebiotic for beneficial bacteria keeping our gut healthy.

**Immune Function**

Not only does buckwheat contain compounds (rutin) that defend against free radicals, this powerful seed also contains more antioxidants like tocopherols (vitamin E) and selenium than other grains. These compounds boost the action of vitamin C which protects organs, nerves and other tissues from oxidative damage.

**Gallstones**

Excess bile acid production increases risk of developing gallstones. Because the fiber in buckwheat helps move food more quickly through the digestive tract, this reduces the secretion of bile acids. Bile is essential for digesting fats.

A low-fat diet is also associated with reduced risk of gallstones. Substituting buckwheat for animal products that are high in saturated fat can also reduce risk of gallstones.

**Asthma**

Low levels of magnesium and vitamin E are associated with the development of childhood asthma. These nutrients found in buckwheat provide anti-inflammatory benefits.

**Bone Health**

Although calcium is associated with bone health, it cannot be absorbed without magnesium. Low levels of magnesium are associated with bone loss. Buckwheat is rich in magnesium, as well as selenium, which slows bone loss.

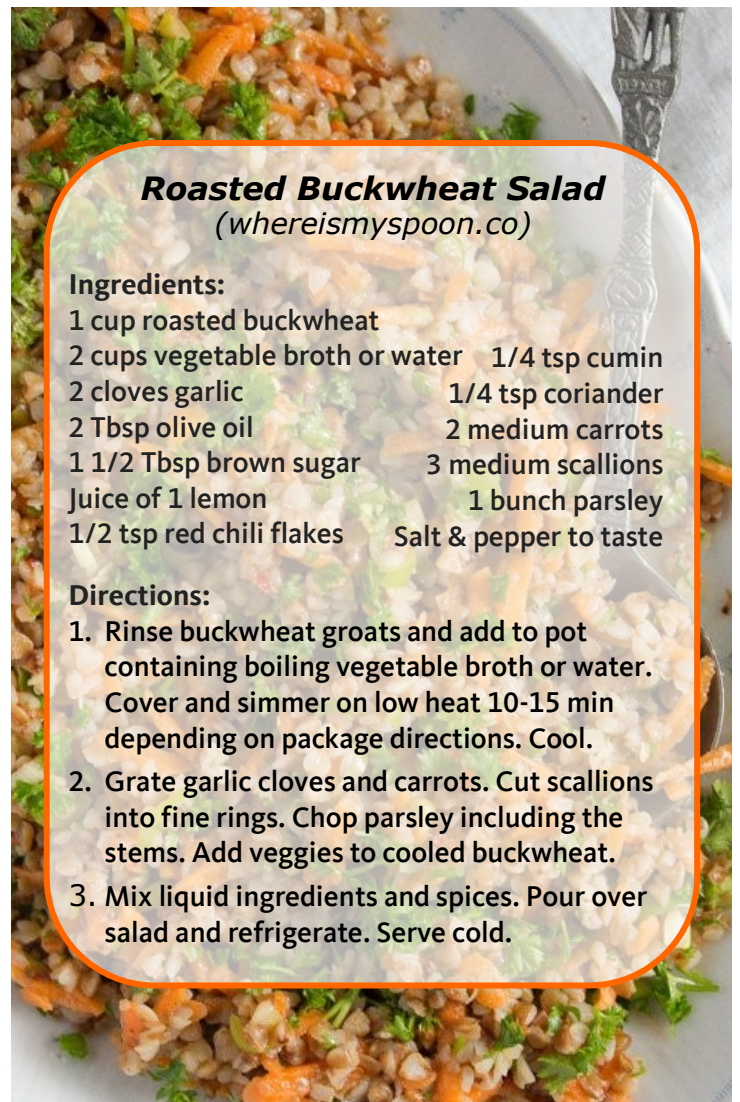
The copper and zinc in buckwheat are essential for the mineralization of bones and teeth. Zinc is also required for the activation of vitamin D, which helps absorb calcium into our bones.

**HOW TO ENJOY BUCKWHEAT**

Buckwheat is delicious as a hot breakfast cereal. Top with blueberries for a heart-healthy start to your day. It can be added to soups and stews or as a side dish instead of rice or pasta. Cool cooked buckwheat and use in summer salads with fruit or vegetables.

Buckwheat groats can be stored in airtight containers for up to a year. Flour is best refrigerated or frozen to prevent oxidation.

Buckwheat flour can be used in bread, muffin, crepe and pancake recipes, and in the making of soba noodles. It has a stronger flavor so if you're just starting out with buckwheat, begin with 25% and work your way to 50% substitution for other flours.



### **Roasted Buckwheat Salad** ([whereismyspoon.co](http://whereismyspoon.co))

**Ingredients:**

1 cup roasted buckwheat	
2 cups vegetable broth or water	1/4 tsp cumin
2 cloves garlic	1/4 tsp coriander
2 Tbsp olive oil	2 medium carrots
1 1/2 Tbsp brown sugar	3 medium scallions
Juice of 1 lemon	1 bunch parsley
1/2 tsp red chili flakes	Salt & pepper to taste

**Directions:**

1. Rinse buckwheat groats and add to pot containing boiling vegetable broth or water. Cover and simmer on low heat 10-15 min depending on package directions. Cool.
2. Grate garlic cloves and carrots. Cut scallions into fine rings. Chop parsley including the stems. Add veggies to cooled buckwheat.
3. Mix liquid ingredients and spices. Pour over salad and refrigerate. Serve cold.

**REFERENCES**

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Hsph.harvard.edu	Nutritionfacts.org
Lpi.oregonstate.edu	Whereismyspoon.co