

## Buckwheat: Embracing the Bold New Superfood

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If you heard someone mention buckwheat, what thoughts would come to mind? Maybe you never tried it before and know little about it. The name might not sound very appealing, but the powerhouse of nutrients that it contains sure are! The article will enlighten you on this amazing superfood and all that it has to offer to.



### But First...What is Buckwheat?

**Herbaceous Plant.** Buckwheat is a herbaceous plant (has non-woody stems) of the Polygonaceae family that is native to central Asia. Other plants in this family include rhubarb and sorrel.

**Pseudocereal.** Buckwheat is produces seeds that are eaten not belong to the grass family USDA still classifies it as a whole grain pseudocereals

**Gluten Free.** Despite its wheat and is gluten-free. Buckwheat can be eaten as has been removed), noodles, look and taste similar to steel-cut oats



a pseudocereal or a plant that like a cereal grain, but is does like most cereal grains. The whole grain. Other common include quinoa and amaranth. name, it does not contain any

groats (outer layer of the seed or flour. Buckwheat groats

Buckwheat is not called a superfood for nothing—it is packed to the brim with amazing nutrients:

**Protein & Essential Amino Acids.** Buckwheat contains protein that has a high biologic value, which means that it contains all 9 essential amino acids in proportions that are similar to the what the human body needs. This protein is hard to digest because of the presence of antinutrients (tannins, protease inhibitors, etc), BUT...Sprouting can help big time! When buckwheat is sprouted, its level of antinutrients decrease and it becomes easier to digest (protein included). Remember this sprouting tidbit for later!

**Low-Glycemic Carbohydrates.** Buckwheat is high in carbohydrates that come in the form of starch, otherwise known as complex carbs. These carbs rank low on the glycemic index (GI) scale, which means they are digested slowly and won't cause a spike in our blood sugar (high GI carbs are digested much quicker and cause a rapid and large release of blood sugar—no bueno).

**Fiber.** Buckwheat also contains resistant starch (type of carbohydrate), which is resistant to digestion and categorized as a type of fiber. Resistant starch acts as a prebiotic and feeds the

“good” bacteria in our gut. In response, these bacteria produce short-chain fatty acids (SCFAs). SCFAs are extremely important for gut health.

**High in Minerals.** Contains small amounts of B vitamins, folate, and vitamin K, BUT is high in many important minerals:

- A. Manganese
- B. Copper
- C. Magnesium
- D. Iron
- E. Phosphorus
- F. Zinc

**High in Phytochemicals (Beneficial Plant Compounds):** Buckwheat is rich in many biologically active plant compounds called polyphenols (can be broken down into two main classes: flavonoids and phenolic acids). Biologically active means that these compounds have therapeutic effects on our cells that help to prevent chronic disease. Polyphenols are responsible for many of buckwheat’s health benefits.

**Buckwheat’s high polyphenol content means that it has a high antioxidant capacity.** Buckwheat is higher in antioxidants than many other cereal grains, including barley, oats, wheat, and rye. The most important polyphenols (belong to the flavonoid group) found in buckwheat are:

**Rutin & Quercetin.** Out of most plant foods, the richest source of rutin is found in buckwheat. Rutin is converted into quercetin once it enters the bloodstream. Rutin has strong antioxidant properties and anti-inflammatory effects.

**Source of High-Quality, Complete Protein.** Athletes need to get an adequate amount of protein in their diet because it is used to repair and rebuild muscles and has many other important functions in the body. It is important to eat sources of protein that contain all 9 essential amino acids (our bodies cannot make these), otherwise known as a complete protein. Buckwheat contains all 9 essential amino acids, which makes it a high-quality, complete protein (this type of protein can be hard to come by in the vegan diet). It is rich in limiting amino acids like lysine and arginine, which are in shortest supply in plant-based diets.

**Lysine:** Lysine promotes healthy tissue growth and healing. It is also essential for carnitine production (helps convert fatty acids into energy) and is required for collagen formation. Lysine may be able to improve the sports performance by enhancing protein synthesis and tissue repair.

**Arginine:** Arginine is a conditionally essential amino acid that is involved in making protein, detoxifying ammonia (toxic byproduct leftover from protein digestion), and can be converted to glucose and used to produce energy. A study comparing wrestlers showed that supplementation with arginine caused a 5.8% increase in time to exhaustion during maximal incremental exercise.

**Good Source of Carbs to Fuel your Workout.** Buckwheat is made up of mostly carbohydrates. The most abundant carbohydrate in buckwheat is starch, otherwise known as a complex carb. Starch is produced by plants and is stored as energy. It is also a significant source of energy for humans. We also mentioned that buckwheat contains low-glycemic carbs, which means that the glucose released into your bloodstream is slow and sustained, which is perfect for endurance athletes.

**Less Fiber, which means Less Bloating & Tummy Upset.** Although Buckwheat does contain some fiber, it does not contain a high amount of it, which means that you can eat it before a workout without worrying about feeling bloated or having your stomach all out of whack. You can use buckwheat to fuel you without the uncomfortable tummy side effects!

**High Antioxidants Help Fight Inflammation.** Buckwheat contains rutin, which is a powerful antioxidant and anti-inflammatory agent. This means that rutin and quercetin may help fight off inflammation produced from exercising.

**Fights exercise-induced oxidative stress.** Rutin may also be able to help rid of the body of damaging free radicals produced from hard exercise. This equates to better recovery and a decreased risk of injury.

**Enhanced Endurance/Fights Exercise Fatigue.** Numerous studies show that the reason for exercise fatigue is related to the metabolism of free radicals. Buckwheat is rich in rutin, which can help to eliminate free radicals from the body with its powerful antioxidant properties. This means that rutin may help to delay fatigue brought on by strenuous exercise.

**Contain AA that Help to Form Collagen.** Buckwheat contains lysine, which plays a key role collagen formation. Collagen is a type of protein that helps with skin, bone, and connective tissue repair. It is also important in keeping our joints healthy, which can help prevent injury when exercising or overtraining.

### **How to Incorporate Buckwheat into your Diet**

There are many ways to eat buckwheat (groats, flour, noodles), BUT we have an extremely delicious, nutritious, and convenient option that will help make your busy life so much easier.

#### **Introducing Buckwheat OverNights!**

**What:** Sprouted Buckwheat comes in the flavors, wild blueberry banana, cinnamon apple, and chocolate goji berry.

**Why:** Full of amazing nutrients, bioactive plant compounds, may help to prevent chronic disease, and is fantastic option to fuel your workout! If buckwheat is sprouted, which means that it is much easier to digest and also helps to make it's nutrients more biologically available for us to absorb!

#### **Other Health Benefits:**

Buckwheat is considered to be a superfood, which means it is a food that is nutritionally dense and thought to have health benefits. It is also considered to be a functional food, which is one step above a superfood. Functional foods have scientifically proven, specific health benefits that go beyond their nutritional properties. Buckwheat is a functional food due to its high antioxidant content (rutin and quercitrin).

#### **May help prevent the development of chronic diseases, such as:**

- A. Cancer
- B. High cholesterol
- C. Neurological disorders
- D. Diabetes
- E. Heart disease

Buckwheat is also high in minerals that are great for the immune system, including manganese, magnesium, copper, and zinc.

Buckwheat might just be one of the most underrated grains of all time, although that could be partly due to the fact that it's not actually a grain at all, it's actually a fruit seed Buckwheat is an amazing superfood that is fantastic for athletes, those of us who enjoy exercising, or anyone who does any type of physical activity (should be everyone since physical activity is so important for our health!). It also has amazing health benefits that any person can take advantage of—whether you like to exercise or not. Overall, buckwheat's impressive nutritional profile and health benefits make it a great addition to a balanced and healthy diet. However, as with any food, it is essential to enjoy buckwheat as part of a varied and well-rounded eating plan.

## References

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