



III
Guides

Complete Plant Proteins

The best complete plant protein sources & how to pair plant foods to build complete proteins.

COMPLETE PROTEINS

What is it + why it matters

Whether you're thinking of going vegan, vegetarian, or want to practice Meatless Mondays, protein is likely on your mind.

Many people worry they won't meet their protein mark if they go plant-based. That's because many plant-based foods aren't complete proteins.

What are Complete Proteins?

Complete proteins are foods that contain all 9 essential amino acids, including:

- histadine
- isoleucine
- leucine
- lysine
- methionine
- phenylalanine
- threonine
- tryptophan
- valine

Proteins that come from animals sources like **fish, poultry, beef, pork, eggs, and dairy** are all **complete proteins**.

Some plant foods are complete proteins too. More on this on the next page!

What are Incomplete Proteins?

Incomplete proteins are foods that are **missing 1 or more essential amino acids**.

Plant foods that fall into the "incomplete" protein category include:

- Nuts & seeds
- Beans & legumes
- Certain whole grains, like rice, whole wheat, & oats

Luckily, you can build complete plant-based proteins by pairing complementary foods.



COMPLETE PLANT PROTEINS

As mentioned, **some plant foods are complete proteins on their own** -- meaning, they supply all 9 essential amino acids. Here are a few:

Quinoa

Technically a seed, quinoa cooks up like a grain, and is naturally gluten free. It makes a great sub for rice.

- 1 cup of cooked quinoa = 8 g protein & 222 calories
- Rich in magnesium, iron, zinc & fiber



Buckwheat

Another pseudograin that's naturally gluten free. Its hulled kernels (groats) are often made into an oatmeal-like porridge.

- 1 cup cooked buckwheat = 6 g protein & 155 calories
- Good source of magnesium, manganese, iron, phosphorus & copper



Amaranth

Yet another gluten free pseudograin that's a complete protein source.

- 1 cup cooked amaranth = 9 g protein & 251 calories
- Rich in manganese, magnesium, phosphorus, selenium & copper

Nutritional Yeast

A dried, deactivated yeast that adds a nutty, cheesy flavor to vegan foods.

- 1/4 cup of nutritional yeast = 8 g protein & 60 calories
- Excellent source of B vitamins, including folate, niacin, riboflavin, pyridoxine & vitamin B12



COMPLETE PLANT PROTEINS

continued...

Tofu

Tofu is condensed soymilk that's pressed down into blocks.

- 3 oz tofu = 8 g protein & 80 calories
- High in calcium, manganese, copper, selenium, iron, & vitamin A



Tempeh

Made from fermented soybeans combined with seeds or grains to form a compact cake.

- 3 oz tempeh = 11 g protein & 164 calories
- Good source of iron, calcium, manganese, phosphorus, & riboflavin (vitamin B2)



Edamame

Edamame is whole, immature soybeans, and they're packed with plant protein

- 1/2 cup edamame = 8 g protein & 90 calories
- Rich in folate (vitamin B9), magnesium, calcium, iron, phosphorus, vitamin K & fiber



COMPLETE PLANT PROTEINS

continued...

Chia seeds

A common egg substitute in vegan baking. When combined with liquid, chia seeds form a gel-like texture that's often used for pudding.

- 2 tbsp chia seeds = 5 g protein & 138 calories
- Rich in omega-3 fatty acids, iron, calcium, magnesium & selenium



Hemp seeds

Hemp seeds are extremely nutritious and come from the *Cannabis sativa* plant.

- 3 tbsp hems seeds = 10 g protein & 166 calories
- Rich in omega-3 & omega 6 fatty acids
- Good source of iron, phosphorus, potassium, magnesium & zinc



Spirulina

A type of blue-green algae that's rich in protein, vitamins, minerals & antioxidants.

- 1 tbsp spirulina = 4 g protein and 20 calories
- Good source of B vitamins, iron & copper



PAIRING INCOMPLETE PROTEINS

To build complete proteins

You can also pair incomplete proteins with complementary foods to fill in any gaps. Here are three plant food pairings that form complete proteins when combined:

Whole Grains + Nuts/Seeds

Examples:

- Whole grain toast with almond butter
- Oatmeal topped with pumpkin seeds
- Energy balls made with oats and nut butter



Whole Grains + Beans/Legumes

Examples:

- Black beans and rice
- Chili with rice crackers or whole wheat crackers
- Overnight oats topped with peanut butter



Beans/Legumes + Nuts/Seeds

Examples:

- Hummus topped with sesame seeds
- Lentil soup topped with walnuts
- Green salad topped with chickpeas and sunflower seeds



Keep in mind, your liver stores essential amino acids. So while **you can eat these foods at the same meal, you don't have to**. No need to get complicated! Just aim to eat the combos over the course of a day.

