

**PROTEIN
EDITION**

NUTRITION

**RCHSD CLINICAL
NUTRITION
DEPARTMENT**

NEWS

Monica Wing, RD, CNSC, CLEC

What is protein and why is it a necessary nutrient in our diet? Proteins are one of three essential macronutrients, the other two being carbohydrates and fats. Protein is needed for many important roles in the body such as cell structure and building tissue, as well as utilization for energy, immune function, enzymes, transporting substances throughout the body, growth, and gene expression. Some protein-rich food sources are meat, fish, poultry, legumes, beans, soy, nuts, seeds, eggs, and dairy. Different foods contribute a variety of amino acids which are the building blocks of proteins. The human body cannot make its own essential amino acids that are necessary to function so we must obtain them from our diet. A complete protein contains all essential amino acids that our body needs and is found mainly in animal sources as well as soy. Most plant sources do not contain complete proteins, so it is important to eat a variety of foods that contain different amino acids. This includes legumes, nuts, seeds, whole grains, and vegetables.

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MILK

NAVIGATING THE EVERCHANGING DAIRY AISLE

Sierra Mirvis, RD, CNSC

Choosing a type of milk used to consist of deciding between fat contents, but now types and sources of milk vary greatly making it an even more challenging decision. Milk options now include: animal or plant based, sweetened or unsweetened, flavored or unflavored, and varying fat content. Calorie content will differ

greatly based on the amount of fat and whether a product is sweetened/flavored or unsweetened. The vitamin content depends on the amount of fortification used by each brand. Protein content will not vary as much between brands because it is determined by what the milk is made of ie: cow's milk, soy, rice etc. The protein content in the six types of milk listed above range

greatly with almond and rice milk containing the lowest amount of protein and soy milk, cow's milk, and pea protein milk containing the most protein per serving. Generally, plenty of protein is consumed from other sources in our diet. We do not necessarily need it from our milk consumption, but if your diet doesn't include a variety of other protein rich foods, you may want to opt for cow's milk, soy milk, or pea protein milk to get the most protein per serving.

Type of Milk	Calories	Protein	Calcium	Vitamin D
Cow's Milk 2%, Horizon	130	8 g	320 mg	4.5 mcg
Soy Milk: Silk Original	110	8 g	450 mg	3 mcg
Pea Protein Milk: Ripple	70	8 g	465 mg	6 mcg
Almond Milk: Silk Original	60	1 g	450 mg	2.5 mcg
Oat Milk: Oatly Whole	137	2.4 g	288 mg	3.6 mcg
Rice Milk, Rice Dream	120	1 g	390 mg	5 mcg

*Nutrient content will vary based on brands, refer to food labels on individual items for most accurate nutrient analysis



Markayla Stroubakis, RDN

PROTEIN POWDER

Protein powders derive from many different protein sources and may contain several different ingredients depending on the brand. A healthy adult needs about 0.85 grams of protein per kilogram of body weight. Most Americans get enough protein in their normal diet. Protein powders can be a part of a healthy diet if you so choose, but are usually not necessary.

Protein powder tips that may be useful:



·Collagen is a very trendy protein powder, but is not a complete protein as it does not contain all of the 9 essential amino acids. We need these from our diet since our body cannot produce them.

·Protein powder can be from an animal source, such as collagen, whey, or egg white or from a plant-based source such as soy, pea, brown rice, and many more.

·Protein powder is usually recommended as supplement, meaning it's not meant to be a replacement for food.

When looking for a protein powder, you may need to try several to find one that fits your flavor preference and that your body can tolerate. Many protein powders contain sugar alcohols which are difficult to digest and may not be tolerated well. Remember that protein powders tend to be more expensive than the food it is derived from and that just because a product is labeled as "plant-based" does not mean it is "healthier." Recent studies show that protein powders, especially organic, plant-based protein powders, may have toxic levels of heavy metals and other contaminants. The FDA does not regulate protein powders because they are considered a supplement so use with caution.

QUINOA AND BLACK BEAN TACO "MEAT"



Christa Jorgensen, MS, RD

Adapted from Minimalist Baker

Makes 6 Servings

Ingredients:

1 cup quinoa

2 cups low sodium vegetable broth

1 (15 oz) can black beans, drained and rinsed

½ cup salsa, homemade or canned

1 tablespoon nutritional yeast*

2 teaspoons ground cumin

2 teaspoons ground chili powder

½ teaspoon garlic powder

Salt to taste

½ teaspoon ground black pepper

1 tablespoon olive or avocado oil

*Nutritional Yeast is not the same as baker's yeast, if you cannot find nutritional yeast you may omit it

Instructions:

1. Add quinoa and vegetable broth to a medium saucepan and bring to a boil over medium-high heat. Then reduce heat to low, cover with a secure lid, and cook for 15-25 minutes, or until liquid is completely absorbed. Fluff with a fork, then crack lid and let rest for 10 minutes off heat.

2. Preheat oven to 375 degrees F.

3. Add cooked quinoa to a large mixing bowl and add remaining ingredients (black beans, salsa, nutritional yeast, cumin, chili powder, garlic powder, salt, pepper, and oil). Toss to combine. Then spread on a lightly greased (or parchment-lined) baking sheet.

4. Bake for 20-35 minutes, stirring/tossing once at the halfway point to ensure even baking. The quinoa is done when it's fragrant and golden brown. Be careful not to burn!

Nutrition facts per serving:

202 calories, 31 g carbohydrate, 9 g protein, 4.5 g fat, 0.6 g saturate fat, 0 g trans fat, 0 mg cholesterol, 218 mg sodium, 5 g fiber

SUSTAINABLE PROTEIN

Janet Salvador, RD, CLE

Looking for protein options that will not only sustain you but also sustain our environment?

Research indicates that sustainability helps support many areas including environmental, economic, health, and nutrition. The goal is to create sustainable diets that have low environmental impact, contribute to increased food security, and provide high-quality nutrition for current and future generations.

Animal protein sources like eggs, meat, and dairy are considered major contributors to greenhouse emissions and pollution. Many reports have shown that a diet high in animal protein and fat can have negative impacts on our health and environment.

Rice, corn, and wheat crops are heavily over-cultivated resulting in poor soil quality. This can cause increased need for chemical

fertilizers and pesticides versus the use of natural or more eco-friendly methods. Globally, governments have been changing policies and allowing local communities to promote healthy eco-friendly options.

The goal of a sustainable diet is to provide sufficient variety of foods using a flexible meal pattern. Some research models even boast about using a new My Plate method called the Planetary Health Plate. The method incorporates 30-50% of plant proteins starting from an early age. This way, all families can start to incorporate healthy, eco-friendly food choices to hopefully last a lifetime. Working to incorporate alternative protein sources can be a new exciting adventure and potentially improve the sustainability of our health and the planet.

Food Group	Grams protein	Plant Protein Examples
Grains	8 - 24 g per cup	Amaranth, buckwheat, millet, fonio, kamut, quinoa, spelt, teff, and, wild rice
Nuts and Seeds	10 - 31 g per 1/4 cup	Flax seed, hemp, sesame and walnuts
Algae	12 g per cup	Seaweed
Legumes and Beans	41 g per cup	Adzuku beans, black beans, lentils, fava beans, soy beans, bambara beans, cowpeas, marmara beans, and mung beans.

PACKING PROTEIN INTO SCHOOL LUNCH



Leigh Boerner, MPH, RD, IBCLC

It is important to include protein as part of a balanced meal. Protein helps you to feel satisfied and assists with balancing blood sugar levels. Whether you are packing lunches for school or for home virtual learning, consider these ideas:

- Greek Yogurt (add fruit, granola, or nuts and seeds)
- Freeze yogurt tubes to last until lunch time
- Cheese cubes (serve with fruit and crackers)
- Hard boiled eggs (may also be chopped and added to salads)
- Mini quiches
- Low fat cottage cheese
- Hummus added to a sandwich or served as a dip with vegetables and pita
- Beans are an excellent source of protein: add to a salad with corn, serve as a dip, add to a grain bowl with leftover rice and vegetables, or in a tortilla
- Sandwiches: meat, cheese, peanut butter or alternative nut butter. If sandwiches are coming back uneaten, pack deli meat slices, cheese slices, crackers for quick finger-food snacking.
- Change sandwiches up by packing ingredients into a pita pocket or a wrap.
- Edamame and chickpeas added to a grain bowl or salad

Peanut butter is a common favorite but if you are avoiding peanuts at school, then pack alternatives such as pumpkin seeds, sunflower seeds butter or soybean butter. Jerky is also a protein source but keep in mind that it is high in sodium.

Yasemin Unal, RD

CHICKPEA AND BEEF STEW OVER BULGUR PILAF

Servings: 6

Chickpea and Beef Stew Ingredients:

- 2-3 tablespoons olive oil
- 1 pound cubed stew meat - beef
- 1 large sweet onion - roughly chopped
- 1 large or 2-3 small tomatoes - diced; may replace with diced canned tomatoes
- 1 teaspoon table salt
- 1 teaspoon red pepper flakes
- 2 tablespoons of tomato paste
- 1/2 teaspoon ground cumin
- 1 teaspoon freshly ground black pepper
- 1 quart unsalted beef broth/stock – if not available, may use water instead
- 2 29-ounce cans chickpeas, drained

Bulgur Pilaf Ingredients:

- 2 cups dry bulgur pilaf
- 1 small onion, diced
- 1-2 tablespoon olive oil
- 2 teaspoon salt
- 4 cups water

Instructions:

1. Heat oil in a large heavy pot or Dutch oven over medium high/high heat. Add the cubed stew meat.
2. Sauté meat until it is almost brown; stir occasionally until all released water has evaporated. Add onions and stir.
3. Once onions have caramelized, add in tomato paste and keep stirring until the paste has melted in and coated the meat.
4. Add tomatoes, salt, and spices. Cook for a few more minutes, then add the chickpeas plus the stock, broth, and water.
5. Simmer for about one hour.
6. While stew is cooking, make the bulgur. On medium heat sauté the onions, salt, and olive oil in a medium pot. Once onions have caramelized, add in the bulgur and water. Reduce heat to simmer and cook the bulgur with the lid on the pot until the water has evaporated. This can take 30-45 minutes.
7. Serve the stew over bulgur pilaf. May sprinkle with fresh parsley for added flavor and color.

Nutrition facts per serving chickpea stew:

Calories: 410 kcal, dietary fiber: 13 g, protein: 32 g

Nutrition facts per serving bulgur:

Calories: 200 kcal, dietary Fiber: 6 g, protein: 6 g