

FOOD SOURCES: LEAN PROTEIN

Protein is an essential nutrient which is needed for growth, repair, and support of body tissues. Protein is also needed to make hormones, enzymes, and immune cells.

The building blocks of protein are called amino acids. There are nine essential amino acids which can be obtained from plant or animal proteins.^{1,2} When choosing proteins, lean and clean are two guiding principles to follow. In following the “lean” principle, select proteins which contain little-to-no saturated fat, such as beans or skinless chicken breasts. For individuals who need to limit their fat intake because of high cholesterol or heart disease, choosing lean proteins is important.

In following the “clean” principle, it is strongly advised to purchase organic, non-GMO products for all protein sources to avoid herbicides, pesticides, and other chemicals. Reducing exposure to these chemicals is important for many aspects of health.

Most people should have a small amount of protein with every meal and snack to help regulate blood sugar and promote satiety. For personalized protein recommendations, talk to a Functional Medicine clinician.

Plant Proteins:

- **Grains:** quinoa, amaranth
- **Legumes:** dried beans, peas, lentils and pasta made from these
- **Nuts:** unsalted varieties of nuts including almonds, Brazil nuts, cashews, hazelnuts, macadamias, peanuts, pecans, pine nuts, pistachios, walnuts and butters made from these
- **Seeds:** pumpkin seeds, sesame seeds, sunflower seeds, chia seeds, flax seeds (and butters made from these)
- **Soy:** tofu, tempeh, soy yogurt, and “meat” alternatives*

**Some meat alternatives are highly processed and contain a considerable amount of salt and fat. Read food labels and select products with a minimal number of ingredients.*

Animal Proteins:

- **Beef or Bison (grass-fed preferred):** brisket, chuck arm, flank steak, bottom round, eye of the round, top round, sirloin, tenderloin, tip roast, top loin
- **Dairy:** low-fat cheese, fat-free cottage cheese, skim milk, fat-free or Greek yogurt
- **Eggs:** egg whites, hard boiled eggs
- **Fish:** (wild-caught preferred) cod, flounder, haddock, halibut, mahi-mahi, perch, pollock, salmon (chum, pink), sole, snapper, tilapia³
- **Lamb:** blade chop, foreshank, leg roast (shank half), loin chop, sirloin roast
- **Pork:** center cut chop, center cut loin roast, ham (90-95% lean), leg (shank half), tenderloin, Canadian bacon
- **Poultry:** skinless chicken or turkey
- **Seafood:** clams, crab, lobster, oysters, scallops, shrimp

References

1. U.S. Department of Health and Human Services and US Department of Agriculture. 2015-2020 Dietary Guidelines for Americans. 8th ed. [health.gov/dietaryguidelines/2015/resources/2015-2020_Dietary_Guidelines.pdf](https://www.health.gov/dietaryguidelines/2015/resources/2015-2020_Dietary_Guidelines.pdf). Updated December 2015. Accessed March 19, 2020.
2. National Academy of Sciences, Institute of Medicine, Food and Nutrition Board. Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids. www.nal.usda.gov/sites/default/files/fnic_uploads/energy_full_report.pdf. Accessed March 19, 2020.
3. Food and Drug Administration. Seafood Nutrition Facts. [https://www.fda.gov/files/food/published/Nutrition-Information-for-Cooked-Seafood-\(purchased-raw\)---Small-PDF-poster.pdf](https://www.fda.gov/files/food/published/Nutrition-Information-for-Cooked-Seafood-(purchased-raw)---Small-PDF-poster.pdf). Accessed March 19, 2020.



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