



Build Strength Through a Healthy Diet

What comes to mind when you think of the word “strength”?

Is it how much weight you can lift? Is it how fast and far you can run, jump, swim, or bike? When it comes to athletic performance — and life, in general — physical strength is important. It’s also important to consider that strength can apply to your mental and emotional well-being, your focus, and in your day-to-day discipline practice.

A healthy diet can influence all of these things. The foods we choose impact our bodies and our brains. Over the next few months, we’ll be sharing some nutrition tips and tricks to help you optimize health and strength, but today, let’s start with the basics. Let’s learn more about the nutrients that support strength, and how you can use a healthy diet to your advantage.

Note: Much of the information in this article (and in articles to come) is based on information from Strength: The Field Manual, a guide developed to provide information and tools to develop strength in your life. The guide was created by Dr. Michael Roussell, PhD, a published author, researcher, and speaker.

NUTRIENTS FOR SUPPORTING STRENGTH

PROTEIN: Protein is a fundamental nutrient for strength,^{1,2,3} as it provides the building blocks to build and repair muscle and other body tissues.⁴ Additionally, it supports brain function and the immune system.⁵ While many Americans eat enough to meet their minimal requirement for protein, it’s less clear if we’re eating an optimal amount of protein for good health.^{6,7} Since athletes generally have higher protein needs than less active individuals,⁸ getting enough is even more important.

IRON: Iron carries the oxygen you breathe to each of the cells in your body.⁹ It also plays an important role in brain and nervous system function.⁹ Not getting enough iron can impact athletic performance, causing overall fatigue and muscle weakness.

FUN FACT: “Heme” iron is found in animal foods and is absorbed better by the body compared to “non-heme” iron, found in plant foods.^{12,13}

Chronically not getting enough iron can have impacts on heart health and growth.^{10,11}

B VITAMINS: Among other important actions, these vitamins participate in the chemical reactions that convert the foods you eat into a form of energy the body can use.¹⁴ While they don’t necessarily give us energy, they help us use energy!

ZINC: Zinc plays an important role in a maintaining a healthy immune system. It is also found in high concentrations in the brain, where it is needed for proper growth and strengthening of communication among neurons. This makes it another nutrient that is critical for strength.^{15, 16, 17, 18} Physically demanding workouts can increase your body’s need for zinc, so it’s important to get enough.^{19, 20}

SELENIUM: Although this nutrient is needed in small amounts, it influences a variety of bodily organs and systems, including the thyroid gland and liver, as well as the immune, cardiovascular, and digestive systems.²¹

HOW DO YOU GET THESE NUTRIENTS?

A , balanced diet with enough, but not too much, energy (aka calories) that includes high-quality protein and other nutrient-dense foods is a core for building strength.^{22, 23} Planning a healthy diet doesn’t have to be overwhelming or complicated. In the rest of this series, we’ll provide a variety of strategies and ideas to help improve your nutrition. The key is choosing foods that offer a variety of nutrients. Beef is prime example of such foods. Beef is not only an excellent source of protein, but did you know that offers the other key strength nutrients mentioned above? A 3 oz serving of beef is high (≥20% DV) in zinc, vitamin B₁₂, niacin (vitamin B₃), vitamin B₆ and selenium. Beef is also a good source (14% DV) of iron (the better-absorbed “heme” form) and riboflavin (vitamin B₂).²⁴ Few typical “protein foods” measure up to beef’s supply of the strength-building nutrients. Take a look at this chart below²⁵ to compare:

Percent Daily Value* of Key Nutrients that Support Strength in Common Protein Foods

| | Large Scrambled Egg | 3 ounces Chicken Thigh Meat, Cooked | 3 ounces Chicken Breast Meat, Cooked | 1/2 cup Quinoa, Cooked | 3 ounces Beef, Cooked (composite of retail cuts) |
|------------------------------|---------------------|-------------------------------------|--------------------------------------|------------------------|--|
| Protein | 12% | 42% | 53% | 8% | 51% |
| Zinc | 4% | 11% | 6% | 7% | 39% |
| Iron | 4% | 5% | 5% | 8% | 14% |
| Vitamin B ₂ | 8% | 6% | 5% | 0% | 41% |
| Riboflavin (B ₂) | 13% | 11% | 6% | 6% | 14% |
| Niacin (B ₃) | <1% | 26% | 59% | 2% | 25% |
| Vitamin B ₆ | 4% | 20% | 26% | 6% | 24% |
| Selenium | 20% | 33% | 34% | 4% | 38% |

*The Daily Value (DV) refers to the amount of a nutrient needed for a healthy adult on a 2,000-calorie diet. The %DV is the percent of a nutrient’s Daily Value provided by a serving of food.

Source: US Department of Agriculture, Agricultural Research Service, Nutrient Data Laboratory; USDA National Nutrient Database for Standard Reference, Legacy. Version Current: April 2018. Internet: /neal/bhnr/nc/ndl; NDB #s: scrambled egg - 01332, chicken thigh meat - 05098, chicken breast meat - 05064, quinoa - 20137, beef - 13364

Stay tuned for additional practical ideas and suggestions for fueling your body with strength in mind.

References on next page.

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For more information on Beef as a source of strength, scan this code.



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