

*NOTE: Some sentiments contained within "What We're Reading" articles may not strictly conform with Simple Again's nutritional outlook. We read articles containing opposing information all the time and derive our nutritional philosophies from the latest science, the opinions of experts worldwide and our anecdotal experiences in the field. We keep an open mind and a strong affinity for fact-based evidence to help make the world of nutrition "Simple Again" for you.*

Protein powder and bars are trendy supplements for bodybuilders to bulk up. But, is it really necessary for us regular folks to consume these products in order to lose weight and build muscle?

Our body changes every day as cells grow, divide and die—these processes depend on protein to supply vital building blocks to our cells. Because of this, you need to eat enough protein to maintain lean muscle mass and support other important body functions, which y



Step 1: Divide your weight in pounds by 2.2 to get your weight in kilograms.

Step 2: Multiply your weight in kilograms X 0.8 to get the amount (in grams) of protein you should be eating to maintain muscle mass.

Does this match your protein goal in the app?

If you exercise regularly—particularly if you log 1 hour or more of moderate to vigorous exercise several days per week—the International Society of Sports Nutrition recommends more protein. Their recommendation for an active person is to eat 1.2 to 2 grams of protein per kilogram of body weight on the days that you exercise. You can use the same steps above to calculate the amount of protein (in grams) you'd need on the days when you exercise.

For endurance activities (think swimming, biking, running), stick to 1.2 to 1.4 gram/kilogram.

For strength activities (think weight lifting), go with 1.4 to 2 grams/kilogram.

## GETTING PROTEIN FROM WHOLE FOODS

If you'd rather reach for real food to meet your protein needs, we're right there with you! Getting all your protein from food is super realistic. A sedentary woman weighing 127 pounds only needs a daily dose of about 46 grams of protein, which she can meet by eating 3 ounces of chicken breast, one large egg, a handful of almonds and a stick of string cheese.

You're probably saying, "I can eat that!" For most people, this amount of food daily is no biggie. Your own needs might be different, of course, but to help you plan your protein, here's a quick list of protein-rich foods you can reach for:

### ANIMAL SOURCES

Food (serving)	Cal	Pro (g)	Food (serving)	Cal	Pro (g)
Skinless chicken (3 oz)	141	28	Pinto beans (½ cup)	197	11
Steak (3 oz)	158	26	Lentils (½ cup)	101	9
Roasted turkey (3 oz)	135	25	Black beans (½ cup)	114	8
Lamb (3 oz)	172	23	Chickpeas (½ cup)	134	7
Pork (3 oz)	122	22	Black eyed peas (½ cup)	100	7
Salmon (3 oz)	155	22	Quinoa (½ cup)	111	4
Tuna (3 oz)	99	22	Green peas (½ cup)	59	4
Shrimp (3 oz)	101	20			
Lobster (3 oz)	76	16			
Scallops (3 oz)	75	14			

### PLANT SOURCES

### EGG & DAIRY

Food (serving)	Cal	Pro (g)	Food (serving)	Cal	Pro (g)
Greek yogurt (6 oz)	100	18	Peanuts (1 oz)	166	7
Cottage cheese, 1% fat (4 oz)	81	14	Peanut butter (1 oz)	188	7
Regular yogurt, nonfat (1 cup)	100	11	Almonds (1 oz)	163	6
Skim milk (1 cup)	86	8	Flax seeds (1 oz)	140	6
Mozzarella (1 oz)	72	7	Chia seeds (1 oz)	138	5
String cheese, non-fat (1 piece)	50	6	Walnuts (1 oz)	185	4
Large egg (1)	71	6			

### NUTS & SEEDS

Protein Charts courtesy of Today's Dietitian.

When it comes to protein, most of us don't need supplemental help and can easily meet our needs from a well-balanced diet, but if you have above-average protein needs and have a hard time getting enough from your diet, supplementation may be appropriate. You can sneak in additional protein with whole foods but, from a lifestyle perspective, there are a few reasons why protein supplements, in bar or powder form, may make sense:

1. **CONVENIENCE:** Protein powder and bars can provide a high-quality snack with approximately 20-30 grams of protein for refueling after a tough workout, or eating on the go.
2. **COST:** Depending on the protein supplement you buy, it may actually be more cost effective to use a supplement than purchase more pricey foods like meat and fish. Whey protein powder is about \$10-15/pound but also has a longer shelf life than fresh, protein-rich foods.
3. **FEASIBILITY:** Vegan diets rely on plant sources to supply protein and require eating a variety of foods since plant sources rarely contain all of the essential amino acids. For vegans who exercise intensely or strength train, protein supplements may be a useful.

## PROTEIN POWDER BASICS

When it comes to protein, quality matters. This is why scientists came up with the “protein digestibility corrected amino acid score” (PDCAAS)—yes, it’s a mouthful! This score tells you protein quality as measured by: 1) how “complete” the protein is and, 2) how easily digestible it is.

The PDCAAS scores protein sources from 0-1 with 1 being the highest. A score of 1 is assigned to egg white, which contains all 9 essential amino acids and is easily digested and absorbed. Ideally, your protein powder supplement should score as close to 1 as possible, but this depends on the source of protein it’s made from. Here are the 3 most common sources of protein that powers your powder:

1. Whey and casein (PDCAAS=1) are proteins extracted from milk that are “complete” proteins, easily absorbed by the body and relatively inexpensive. Plus, these milk proteins contain branched chain amino acids (BCAAs) to encourage muscle building during strength training. The downside is that this protein source is unsuitable for vegans and people with lactose intolerance or milk protein allergies.
2. Soy protein (PDCAAS= 1) is plant-based, contains all 9 essential amino acids and is inexpensive. Soy protein powder is a great alternative for vegans who can’t take whey or casein, but wouldn’t be ideal for those with soy allergies.
3. Other plant-based proteins: Pea (PDCAAS=0.69), rice (PDCAAS=0.47) and hemp (PDCAAS= 0.46) proteins score low on the PDCAAS because they don’t provide all 9 essential amino acids when taken as a stand-alone source, and the rice and hemp proteins are not readily digestible. For this reason, they are usually found together in a plant-based protein powder supplement mix. While these mixes can be hypoallergenic, we’d still suggest whey, casein and soy if you can stomach them.

## 3 Tips for Fueling with Protein Powder

1. Choose whey when possible. If you’re considering a protein supplement to increase muscle size and strength, whey is the way to go—as long as you don’t have milk intolerance. It’s an inexpensive, high-quality protein that is quickly usable by your muscles.
2. Log your protein supplements. Don’t forget that supplements (and the milk you mix it with) have calories, too, and can contribute to excess weight gain if you aren’t mindful.
3. Supplement with exercise in mind. Consuming protein powder alone won’t get you a lean, mean physique—you’ll still need to shape up with some push-up, squatting, and burpie fun.

## PROTEIN BAR BASICS

Like protein powder, bar supplements use the same sources listed above to add protein into a portable snack. Unlike powder, bars generally contain more calories, carbs, fat, and sodium for any given amount

of protein. However, this is because you're expected to mix powder supplements with milk to add in more of the other macros.! Bars provide a quick, mindless, no-mix way of getting post-workout nutrition. This table will help you visualize the basic nutritional differences (but really read the label):

	<b>Cal</b>	<b>Pro (g)</b>	<b>Carb (g)</b>	<b>Sugar (g)</b>	<b>Fat (g)</b>
<b>Bars</b>	200-300	15-30	15-40	5-20	5-10
<b>Powder*</b>	80-20	15-30	<10	1-5	<5

\*before mixing with milk

### 3 Tips for Fueling with Protein Bars

1. Read the ingredients. This is usually not a pretty place, but if you're going to eat it, then read it. Protein bars can hide processed fibers, sugar alcohols and artificial sweeteners. Make sure you're okay with these before biting.
2. Log your bar supplements. Some bars are meant to replace a whole meal, and they have the calories to do it. Logging bars helps you stay the course for your calorie goals.
3. Supplement with exercise in mind. Bars vary widely in the amount of carbs they contain. Choose higher-carb bars (20+ grams per serving) when you engaged in vigorous aerobic activities (running, swimming, biking), and lower-carb bars (<20 grams per serving) for non-aerobic activities.

No matter what source you choose to meet your protein goals, remember these 3 tips to help you get the most out of protein:

1. Spread protein out over all your meals. Protein-rich foods don't come cheap, but you can maximize your body's ability to digest, absorb and use protein by distributing it evenly throughout your meals and snacks. Just take the total grams of protein you need daily and divide it into the total number of meals and snacks you eat daily.
2. Eat protein immediately after a bout of exercise. Having a high-protein snack soon after exercise (ideally before the 1-hour mark) is best because this is when muscles are sensitive to nutrients that it can use to repair and grow.
3. Pair protein with carbs. This is especially important when you're refueling after aerobic exercise (like running) since protein is needed for muscle repair and carbs are needed to restock your muscles' energy stores. Remember, the macros like to work together.

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