

My Top 10 High-Protein but Low-Calorie Food

Written by Nate McCallister via Medium Nov 7th, 2024 & Illumination

Nate also created spreadsheet: 50+ foods analyzed and organized in a spreadsheet

Quick Nerd Breakdown

Image created by the author showing calories per gram for macronutrients and alcohol. You need to know that one gram of protein is equal to four calories. So, 200 grams of protein per day means I will eat 800 calories of protein, leaving me with 1,600 calories from fats and carbohydrates (I don't drink alcohol right now, so that

isn't included). Roughly one-third of my calories will come from protein, so I should prioritize foods that get at least 33% of their calories from protein. Since I can't eat foods that have protein exclusively (fruits and vegetables have little to no protein but are important parts of any diet), I need to make sure that the protein foods I eat get even more than 33% of their calories from protein whenever possible. These foods aren't easy to find, so I wrote this article and spent so much time crunching all the numbers for us. I needed this for myself, so I figured sharing the byproduct of that research would benefit others like you. I decided to take it a step further and add a little more to this. I wanted to share which of the foods I studied I found to be the "best" and "worst" foods for hitting your protein goals without costing you too many calories. I am only analyzing the foods we commonly associate with being "protein-rich." Of course, many foods like fruits and vegetables get almost none of their calories from protein, so those will not be included.

The Worksheet

Just like I did in my previous post, where I rated protein sources by cost per gram and PDCAAS (digestibility), [I made a spreadsheet that you can view for free below](#). Much more data is included there that isn't mentioned in this article, such as digestibility score and cost per gram of protein. You can also filter the columns in whatever way you like. Since there are so many different brands and prices for each food item, I used a uniform system of selecting the best seller on Amazon.com. This isn't perfect, but it was important to maintain some form of consistency across all of the items. Different brands have variations, so be sure to use this worksheet as a useful shortcut but not a perfect answer key. The worksheet above shows various protein metrics like cost, cost per gram, calories, and percentage of calories from protein.

1 Gram Protein = 4 Calories

1 Gram Carbohydrate = 4 Calories

1 Gram Fat = 9 Calories

1 Gram Alcohol = 7 Calories

The 5 Worst “Calories from Protein” Options

Let’s start with the foods that have protein but in smaller percentages relative to total calories. I’ve ranked these based on a few variables beyond just the protein-to-calorie ratio. I’ve also factored in things like public perception (do people eat this often, thinking it’s an ideal food) and digestibility score.

***Note:** I am not saying “don’t eat these” or that they are bad for you. These are just things that are not great for maximizing protein and minimizing calories.*

#1 Nuts

***Why:** Low PDCAAS and sub 20% calories from protein.*

There is a reason that nuts are a staple in the backpacks of campers and hikers. They provide a ton of calories and take up very little space. While these contain protein and are a nice natural source, they are so high in fats that the percentage of calories from protein is skewed tremendously. They are also low on the protein digestibility index, so the protein you get from eating them will not be as efficiently utilized as that from other sources like meats, eggs, and cheese. I could have added many individual nut products here, but as a rule of thumb, you should assume that they are all low on the percentage of calories from protein scale. This includes various kinds of milk from nuts like Almonds and Cashews. Although it’s not a nut, if you’re one of the cow’s milk alternative-seeking people, know that oat milk is also very low in the percentage of calories from protein.

#2 Beans (Except Soy)

***Why:** Low PDCAAS and sub 20% calories from protein*

Again, I hate to pick on Mother Nature, but most things that grow but don’t breathe are not awesome calories from protein foods and are usually less efficiently digested. Beans are a power food, but they get most of their calories from carbohydrates. Soy is one of the exceptions to this rule and also has a high PDCAAS (the rating on how well the body actually digests and uses the protein) even compared to regular milk.

#3 Seeds

***Why:** Low PDCAAS and sub 20% calories from protein*

Like nuts, these are very calorically dense but consist mostly of fats rather than protein. Also, like beans and nuts, the digestibility of the protein from seeds is not as high as that of other protein sources.

#4 Many Proteins from Fast Food Sources



Nutrition Facts		
Amount per serving		
Calories	960	% Daily Value*
Total Fat	66 g	84.62%
Saturated Fat	26 g	130%
Trans Fat	3 g	
Cholesterol	155 mg	51.67%
Sodium	1540 mg	66.96%
Total Carbohydrate	36 g	13.09%
Dietary Fiber	1 g	3.57%
Total Sugars	7 g	
Protein	57 g	114%
Calcium	20 mg	1.54%
Iron	40 mg	222.22%
Potassium	750 mg	15.96%

Why: Calories added from all angles. Low quality, high fat cuts of meat.

I know this isn't a specific "food" per se, but it needed to be mentioned. We can get a lot of protein from meat products at places like Wendy's or McDonald's, but they do a tremendous job of crushing the protein-to-calorie ratio. For an extreme example, take a triple baconator. That is a lot of beef, and it will come in at a whopping 57 grams of protein. However, that is part of a 960-calorie burger (this isn't counting fries and a drink, mind you).

Screenshots taken and edited by the author showing the caloric breakdown of a baconator sandwich. The meatiest sandwich on the menu comes in at a measly 23.75% of calories from protein and costs over 1/3rd of the daily calories. I was careful using the word "many" and not "all" because there are actually decent protein-to-calorie ratio items at popular fast food chains if you know what to look for.

The Wendy's grilled chicken wrap actually hits a nice protein to calorie ratio of about 27% calories from protein. Focusing on chicken-based meals is ideal if you eat fast food. If you're really able to resist the siren's call of the tasty options on the menu, opting for grilled chicken will get you much closer to that 33% total calories from protein. For example, a grilled chicken sandwich from Wendy's has 321 calories and 26 grams of protein. This is 32.3% of the total calories from protein, which isn't bad at all.

Allergens*	
Egg	
Milk	
Wheat	
Calories	420
Total Fat	16g
Saturated Fat	5g
Trans Fat	0g
Cholesterol	70mg
Sodium	1170mg
Total Carbohydrate	42g
Dietary Fiber	2g
Total Sugars	2g
Protein	27g
Calcium	10% DV
Iron	20% DV
Potassium	10% DV

Energy (kcal)	321
Fat (g)	8.2
Saturated Fat (g)	1.6
Carbohydrate (g)	35
Sugars (g)	6.4
Fibre (g)	1.7
Protein (g)	26
Salt (g)	1.7

#5 Most Protein Bars

Why: Dense with calories from fats and carbs. Wide variation in quality, protein quantity and source of protein. Often pose as a health food when they are barely better than actual candy bars. Most protein bars are just Snickers bars hiding behind a few grams of protein. Some are far superior to others, but most of them are very dense in calories compared to their protein content. Don't

37.5% of Calories from Protein

get me wrong—protein bars are a big part of my weekly protein intake, but I'm very choosy about which ones I eat. Here are the two protein bars we have at home. The one on the left is what I eat, and the one on the right is what my wife eats.



Protein bars are great but they are not all created equal and it's not close. The plus side of protein bars is that the protein typically comes from whey or casein, which is nearly perfectly digested.

The 10 Best "Calories from Protein" Options

Alright, we've gotten the ones that aren't ideal out of the way. Now, let's get into the winners. I made this list longer because there are many good options here, and just including five seemed inappropriate.

#1 Whey Protein

Why: 80% or higher calories from protein. Perfect PDCAAS. Most affordable. Easiest to consume. Long shelf-life. This felt like a cop-out since it's so obvious, but I'd be doing a disservice to put this any lower than the top spot. Whey protein supplements vary, but most of them get at least 80% of their calories from protein. Also, whey protein is absorbed at the highest possible level. It's also the most affordable protein you can get. If anyone tries to tell bad mouth whey protein, tell them I said they are being dumb (don't actually).

#2 Chicken Breast

Why: 85% or higher calories from protein. Perfect PDCAAS.

I rarely choose chicken breast over chicken thighs since the tradeoff on macros to taste isn't worth it, but I'd be lying if I said chicken breast wasn't about as good as you can do regarding the top calories from protein foods. If you can stomach the bland taste or you can devise creative ways to squeeze some flavor out of it, chicken breast is the best protein source after whey protein. Many would argue that it's even better since it's not processed (don't get me started on that).

#3 Tuna (But also Most Fish)

Why: 80% or higher calories from protein. Perfect PDCAAS. Easy to consume with or without prep and can be stored in cans for long periods of time.

Affordable

Most fish are high in protein, but I'm including Tuna here because it's the most common, comes canned, and can be prepared in many ways. Tilapia is another great option but requires cooking, so it missed a spot on this list this time. *The next three items are the non-fat variations BUT I don't eat these. I gladly eat the fattier versions (2% or 5%) so I can actually enjoy the taste.

#4 Non-Fat Greek Yogurt*

Why: 60% or higher calories from protein. Perfect PDCAAS. Easy to eat with little to no prep. *Affordable.*

It is a powerful food loaded with probiotics and protein. Although I prefer Cottage Cheese over Greek yogurt, I had to rank the yogurt ahead of it because it has less sodium, and the benefits of the probiotics are tremendous.

#5 Non-Fat Cottage Cheese*

Why: 50% or higher calories from protein. Perfect PDCAAS. Easy to eat with little to no prep. *Affordable.*

My favorite food on this list is cottage cheese. I've eaten a cup daily for the past two months, and it's made hitting my caloric and macro goals so much easier.

I've Found My Perfect Muscle Building Lunch and Have Eaten for 60 Straight Days

It's \$6/Day and Packs 52 Grams of Protein and 441 Calories
entresource.medium.com

#6 Skim Milk*

Why: 88% or higher calories from protein. Perfect PDCAAS. Drinkable in seconds. Can add to many other foods.

Again, I prefer the "fattier" options, like 2%, over skim milk; there is no denying that skim milk is a tremendous source of protein with fewer calories. Mixing your whey protein with skim milk is a life hack.

#7 Egg Whites

Why: 80% or higher calories from protein. Perfect PDCAAS.

I prefer whole eggs (scrambled or hardboiled), but egg whites get almost 100% of their calories from protein. They are lower on the list because preparing them usually requires adding them to something else (like with a couple of whole eggs to make an omelet). Some people drink these straight or do weird things, like add chocolate syrup to them. I suggest that you resist that urge.

#8 Shrimp

Why: 80% or higher calories from protein. Perfect PDCAAS.

As long as they aren't fried or eaten with a cup of cocktail sauce, these are basically 100% protein. The problem is that without some flavor, these are tough to eat. Some old bay seasoning helps, but be careful not to overdo it.

#9 Ham

Why: 70% or higher calories from protein. Perfect PDCAAS. Underrated due to pork being seen as a fatty meat.

This is not to be confused with pork chops or other groups of pork, which often get far more calories from fat than protein.

Although there are a couple of foods I prefer to ham that I left off the top 10 (chicken thighs and ribeye steaks, for instance, are my actual favorite meats but didn't make the "cut" here), Ham is a nice add to this list because I think it gets an unfairly bad reputation since it's associated with one of the fattest animals on the planet.

#10 Turkey

Why: 60% or higher calories from protein. Perfect PDCAAS.

There are many turkey substitutes for popular meat products (sausage, burgers, bacon), but be careful with these since they often contain a lot of sodium.

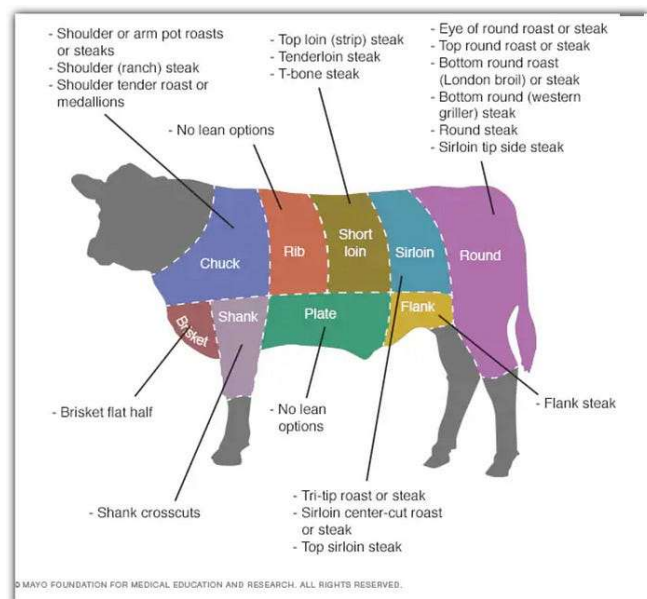
Foods That Didn't Make the "Cut"*

*That pun was accidental, but I would like credit for it. There are several items that are noticeably absent on this list that I felt merited being mentioned here and explained a bit. My three favorite meat products aren't on this list: steak, pork chops, and chicken thighs.

Although I eat these often, and they help me enjoy my diet enough to sustain it, they aren't dense enough in protein calories. If you like chicken, the breast is the more protein-dense portion. The ribeye is one of the fattiest cuts you can get if you like steak.

Image via the Mayo Foundation for Medical Education and Research showing the leanness of various cuts of beef. [\(Source\)](#)

If you want a leaner cut of steak, choose cuts that are graded "Choice" or "Select"



instead of “Prime,” as prime often has more fat.

Another item absent is whole eggs. Again, I eat these (actually daily), but they’re shockingly low in calories from protein, at just 28.57%. That isn’t bad, but it wasn’t good enough to make this list when we had to find a spot for egg whites first. The yolks in whole eggs are high in fat and make up a larger percentage of the egg’s mass. Again, folks, I am NOT suggesting that you only eat the leanest meat or that the fattier options are somehow bad or even less healthy. This is all about finding the most protein-dense foods possible.