

VEGAN KETO protein guide

Protein serves myriad functions in the human body and is crucial for health. Under typical dietary conditions, consuming adequate protein is not usually a concern. However, a vegan ketogenic diet severely limits, or entirely omits, many protein-rich foods. Grains and starchy legumes, which typically contribute a significant amount of protein to a vegan diet, need to be mostly, if not entirely, avoided due to their high carb content, and while most foods contain some amount of protein, in many, the amount is quite minimal. To make a vegan ketogenic diet healthy and sustainable, it's prudent to put some focus on your protein intake. Those unsure what their protein intake should be can determine their macronutrient requirements with the [ruled.me keto calculator](#).

Meal planning, and your approach to meal planning, will likely impact your ability to meet your protein needs while staying within your carb limit. A helpful approach is to prioritize protein when planning your meals. Choose the protein-rich items you wish to include in your day and the amounts of these needed to fall 5-10g below your protein goal. Tally up the net carbs for these items, and see how many carbs you have remaining to make enjoyable and nutritionally well-balanced meals for the day. Make changes to your protein choices if needed. The charts within this guide are designed to help you with this planning. More guidance with regards to carb limits and how to decide yours, can be found in the *Macronutrients: Carbohydrates* section of [Vegan Keto Basics](#), an excerpt from [Keto for Vegans: Book 1](#).

As a vegan following a ketogenic diet, most of your protein needs will be met by consuming soy and soy products, lupini beans and lupin products, nuts and seeds, and their butters and flours, certain higher-protein vegetables and mushrooms, and other items such as protein powders, very low-carb plant-based meats, pea-isolate products, and nutritional yeast. Those with a higher carb limit may be able to include small amounts of starchy legumes. The following sections provide an overview of the protein-rich foods available to those following a vegan keto diet. These sections complement the charts included in this guide.

SOYBEANS & SOY PRODUCTS



Soybeans, both yellow and black, are an excellent addition to a ketogenic diet, packed with protein, vitamins, minerals, and fiber while being very low in net carbs. Canned (e.g. Eden) and jarred (e.g. Biona) soybeans are available. However, the net carb data on these products varies substantially from national nutritional data for soybeans cooked from dry. If cooking soybeans from dry, I highly recommend using a pressure cooker (e.g. an Instant Pot). Soybeans take much longer to cook than other beans. In my experience, it takes about 50-60 minutes to pressure cook unsoaked soybeans to a soft texture, and 30-35 minutes to cook ones soaked overnight. Soybeans can be used in soups, stews, curries, and are great on salads or made into hummus or other types of dips and spreads.

Tofu comes in various densities and the net carbs differ by type and brand. Firmer tofus are typically higher in protein and lower in net carbs. In the US and Canada (and possibly elsewhere), weight given on tofu packaging is pressed weight, as is nutritional data on labels. For reference, by my calculation, an 85g serving of extra-firm tofu weighs about 105g unpressed. Silken tofus tend to be higher in net carbs than

non-silken varieties, though Mori-Nu have 0g net carb options. Due to the large variation in tofu data, when tracking, I suggest using label data supplemented with national data to get a clear picture of both your macronutrient and micronutrient intake. If you'd like to know [how to combine national and label data in Cronometer](#) (a tracking program), the linked document will take you through the steps.

Soymilk and tempeh products also show a great deal of variation in net carb content. Check the labels of various brands to see which are the lowest in net carbs. Soymilk and other plant-based milks are typically fortified with vitamins and minerals that can be lacking in a vegan diet, making them a great tool for meeting nutritional needs.

Longtime vegans are likely familiar with textured vegetable protein (TVP). For those who are not, this is a dry product that is hydrated and used similarly to ground meat. It can be added to low-carb marinara for Bolognese, fried with oil and spices for taco/wrap filling, or put in savory pies or stew-like dishes. Recently, pea-based TVPs have become increasingly available. Pea-based TVP is typically higher in protein and lower in net carbs than soy-based TVP, so worth looking out for.

Soybean and edamame-based pastas are a decent substitute for regular pasta, though the texture is a bit different. Textures vary by brand/types, so try a few and see which ones you like most (if any). Low-carb pastas made with vital wheat gluten can also be found and are another protein-rich pasta option, though you may find them rather rubbery in texture. Chickpea and lentil pastas may be accessible in small portions for those with a higher carb limit.

LUPINI BEANS & DERIVATIVES



Brined lupini beans, which is how these beans are most commonly prepared and sold, can be eaten as a snack or added to other dishes, such as salads. They can also be blended up into sauces and

made into hummus. They are unique in taste and texture - very firm and quite salty. You may find them to be an acquired taste.

Macro-wise, lupini beans are an oddity. The data on product labels varies significantly. Some products will be super low in net carbs (e.g. Brami and Unico) and others rather high (e.g. Cento). The reason for this isn't clear, but I suspect classification of fiber is the culprit. There is no national nutritional data for brined lupini beans. 65g of lupini beans cooked from dry provides 10g protein and 4.5g net carbs. Cooking lupini beans from dry is not an easy or common task.

There are a few products on the market made with lupini beans. Ground/flaked lupin is one. This product can make for a decent rice alternative. The granules are small and remain firm once cooked. I find combining it with riced cauliflower makes for a better overall texture. In the US, Brami makes a lupin hummus. Recently, a lupin-based pasta and "rice" made by Kaizen became available in the US and Canada. Reviews of this product are mixed. Lupin flour is a great high-protein flour that can be used in baking. It behaves similarly to chickpea flour.

NUTS & SEEDS



Nuts and seeds, especially hemp hearts, pumpkin seeds, chia seeds, and flax seeds, are great protein sources to include in a vegan ketogenic diet. In addition to being protein-rich, they are valuable sources of healthy whole-food fats, vitamins, minerals, and fiber.

Unless you were an avid nut and seed consumer pre-keto, you may find yourself eating a lot more nuts/seeds than you have in the past.

Being generous with your nut/seed intake will help you meet your protein needs, but do be aware that they are a high fat/calorie food.

Nuts and seeds can be sprinkled on salads, stir fries, stews, or curries or blended with plant-based milks to make vegan cheeses. They can also be used to make crackers and granolas. Nut/seed butters are great additions to sauces, dressings, and smoothies, as well as their more typical application of being spread on keto bread or crackers. Nut and seeds flours can be used to make keto-friendly baked goods.

Cashews have not been included in the charts due to their higher carb content. For those interested, 25g of cashews contains roughly 5g protein and 6.5g net carbs. Those with a higher carb limit may find they are able to include cashews in their ketogenic diet.

For some items in the nut and seed category, I have listed both national nutritional data (grey boxes) and brand data (colored boxes). This is because product labels for these items consistently show much lower net carbs. It's up to you which data you prefer to use. The data for sunflower seed butter (i.e. Sunbutter) is also brand specific. The national data looks to contain added sugar, making it an inaccurate representation of sugar-free products on the market.

Brazil nuts are a great low-carb nut and a valuable source of selenium. A single nut contains the daily requirement. Consuming 35g of Brazil nuts daily, would far exceed the safe upper limit of selenium intake.

The data I've given for peanuts is for dry-roasted ones. The national data for oil-roasted peanuts shows them as lower in net carbs. However, product labels often show oil-roasted peanuts to have roughly the same net carbs as dry-roasted ones. Conversely, label data often shows tahini to have much lower net carbs than the national database entry suggests, so it can be worthwhile to check your labels.

Nut/seed data given in the charts is for raw foods, and measurement approximations are for whole shelled items, unless stated otherwise.

VEGETABLES & MUSHROOMS



While it's true that all vegetable, fruit, and mushroom consumption will contribute some protein to your diet, most of these foods have very little protein and contain more net carbs than protein. This limits them as significant protein sources on a ketogenic diet. Expect your

intake of these foods to typically contribute 5-15g of protein to your overall requirement. Those with a higher carb limit will have the option of getting more of their protein from these sources.

The vegetables and mushrooms listed in the charts are common foods that have more protein per practically consumable quantity than other items. Foods that are less common, not typically eaten in large amounts, or that are especially low in protein are not listed. This does not mean they should be avoided. Please enjoy a wide variety of foods.

The data provided in the charts is for edible components of raw foods unless stated otherwise. Cup measurements are for chopped items and whole-food measurement (e.g. stalks) are for medium-sized items as per national nutritional database's definitions.

Oddly, prior to October 2019, when the USDA made changes to its database, 60g of kale contained 2.5g protein and 3g net carbs.

OTHER ITEMS

Protein powders, plant-based meats, and pea-isolate products can be very helpful additions to a vegan ketogenic diet, and while there is a great deal of stigma around highly-processed foods, these particular foods are rich sources of protein, and plant-based meats are often fortified with vitamins and minerals that may lack in a vegan diet. When choosing a protein powder look for one with no more than 2g

net carbs per 20g of protein. When choosing plant-based meats, aim for those with very low amounts of carbs so you have plenty of your carb limit available for other nutritious and delicious whole foods.

Nutritional yeast is a great source of protein and B vitamins. The net carbs in nutritional yeast can vary a lot depending on the medium on which it has been grown. Check your labels and compare your options.

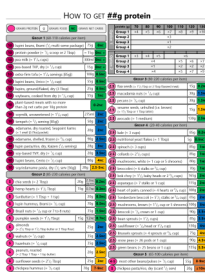
Vital wheat gluten can be used to make seitan and low-carb breads. Seitan and keto-friendly breads can also be purchased. Storebought seitan is often not low in carbs. Look for keto-friendly seitan recipes.

Starchy beans and pulses are quite high in net carbs and difficult to fit into a ketogenic diet. However, those with a higher carb limit may find they are able to enjoy small amounts. The data given in the charts is for canned beans when available and beans cooked from dry otherwise.

Additional protein sources that you can look out for include:

- protein yogurts (including soy)
- keto-friendly wraps, breads, crackers, and cereals/granolas
- alternative types of "tofu," e.g. pumpkin seed and hemp seed tofu
- low-carb protein chips (e.g. BeyondChipz)

THE CHARTS



The charts that follow are designed to help you with meal planning, and are focused on the protein content of foods. The first chart groups protein sources by food type, while the second chart groups foods by protein content. In both charts, numbers are rounded for ease of use. For most items, protein and net carb numbers are rounded to the nearest 0.5g, unless under 0.5g. Grams of food are rounded to the nearest 5g.

Cup and spoon measurements are approximate and provided to help you visualize the practical amount of food, and to allow those who prefer not to weigh foods to also make use of the charts. The color coding of the net carbs aligns with the consumption guidance in my [Vegan Keto Food List](#). Please note that these charts are meant to provide insight and guidance only. Eat quantities of these foods as is practical for you (i.e. no need to get hung up on numerical precision).

The "How to..." chart page contains two tables that provide guidance on how you could go about meeting your protein needs using the range of foods available. Find your approximate protein requirement across the top of the table, and see how many items you should choose from each group to meet this requirement. Note that choosing items as suggested will leave you 7.5g short of your total protein requirement. The assumption is that you will obtain the remaining protein from other foods eaten alongside the protein-focused foods selected. The Option 1 table contains a greater number of Group 1 items. Group 1 contains primarily legumes and processed food items. The Option 2 table contains more items from Groups 2 to 4, especially when protein needs are higher. Groups 2 to 4 are primarily nuts, seeds, and vegetables. Option 1 may be more ideal for those with a lower carb limit, especially if protein needs are high. Option 2 may be more ideal for those limiting legumes and/or processed foods. Depending on choices, Option 2 is more likely to contain more fat/calories and more net carbs. Group 5 is not included in these tables. If desired, 1 item from Group 5 can be exchanged for 2 items from Group 4.

CONCLUSION

A sustainable diet must be both enjoyable and nutritionally sound. Getting sufficient protein on a regular basis is essential for your overall health. When adopting a diet that restricts food groups, it's wise to become familiar with how to best nourish yourself under these new conditions. I hope this protein guide empowers you to adopt a vegan ketogenic diet responsibly and with your long-term health in mind.

VEGAN KETO protein sources

SOY & SOY PRODUCTS

10	extra-firm tofu (≈ 1 1/4 servings [85g])	100g	0.5NC
10	soybeans, cooked from dry (≈ 1/3 cup)	55g	1NC
10	soymilk, unsweetened (≈ 1 1/4 cup)	275ml	2NC
10	tempeh (≈ 2/3 serving [85g])	50g	2NC
10	edamame, dry roasted, Seapoint Farms (≈ 1 small [0.79oz] packet)	20g	2NC
10	edamame, shelled, frozen (≈ 2/3 cup)	90g	2.5NC
10	soy-based TVP, dry (≈ 1/4 cup)	20g	3.5NC
10	soy/edamame pasta, dry (1/2 serv [56g])	28g	2.5-5NC
10	yuba/bean curd sheets (≈ 1/2 serv [85g])	40g	0-4NC

LUPINI BEANS & LUPIN PRODUCTS

10	lupini beans, Brami (1/2 multi-serve package)	75g	0NC
10	lupini beans, Unico (≈ 1/3 cup)	55g	0.5NC
10	lupins, ground/flaked, dry (3 Tbsp)	25g	0.5NC
10	lupin flour, Lupina (≈ scant 1/4 cup)	25g	1NC
10	lupin pasta/rice, dry, Kaizen (1/2 serving)	28g	3NC
10	lupini beans, Cento (≈ 1/2 cup)	80g	4NC
5	lupin hummus, Brami (≈ 1/3 cup)	70g	0.5NC

NUTS & SEEDS

5	chia seeds (≈ 2 Tbsp)	20g	2.3NC 30g seeds	0.2NC
5	hemp hearts (≈ 1 1/2 Tbsp)	15g	0.7NC	0.3NC
5	SunButter (≈ 1 Tbsp + 1 tsp)	20g		0.5NC
5	pumpkin seeds (≈ 1 1/2 Tbsp)	15g	1.2NC	0.7NC
5	Brazil nuts (≈ 1/4 cup or 7 to 8 nuts)	35g		1.5NC
5	almonds (≈ 2 1/2 Tbsp almonds or 1 1/2 Tbsp almond butter or 3 Tbsp almond flour)	25g		2NC
5	walnuts (≈ 1/3 cup)	35g		2.5NC
5	hazelnuts (≈ 1/4 cup)	35g		2.5NC
5	peanuts, roasted (≈ 2 Tbsp peanuts or 1 Tbsp + 1 tsp peanut butter)	20g		2.5NC
5	sunflower seeds (≈ 2 1/2 Tbsp)	25g		3NC
5	pistachios (≈ 3 Tbsp)	25g		4NC
2.5	flax seeds (≈ 1 1/2 Tbsp seeds or 2 Tbsp flaxseed meal)	15g		0.2NC
2.5	macadamia nuts (≈ 1/4 cup)	30g		1.5NC
2.5	pecans (≈ 1/4 cup)	30g		1.5NC
2.5	sesame seeds, brown (≈ 1 1/2 Tbsp seeds or 1 Tbsp tahini)	15g		1.5NC

	GRAMS PROTEIN	g	GRAMS FOOD		NC	GRAMS NET CARBS
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VEGETABLES & MUSHROOMS

2.5	kale (≈ 3 cups)	85g		0.2NC
2.5	spinach (≈ 3 cups)	85g		1NC
2.5	collards (≈ 2 1/3 cups)	85g		1NC
2.5	mushrooms, white (≈ 1 cup or 5 shrooms)	80g		1NC
2.5	broccolini (≈ 6 stalks or 3/4 cup)	70g		1NC
2.5	bok choy (≈ 1 1/2 baby heads or 2 3/4 cups)	165g		2NC
2.5	asparagus (≈ 7 stalks or 1 cup)	115g		2NC
2.5	heart of palm, canned (≈ 4 hearts or 3/4 cup)	100g		2NC
2.5	Tenderstem broccoli (≈ 5 1/2 stalks or 3/4 cup)	65g		2NC
2.5	avocado (≈ 1 medium)	130g		2.5NC
2.5	mushrooms, brown (≈ 1 1/3 cup or 5 shrooms)	100g		3NC
2.5	broccoli (≈ 1/4 crown or 1 cup)	90g		3.5NC
2.5	bean sprouts (≈ 1 1/2 cups)	85g		3.5NC
2.5	cauliflower (≈ 1/4 head or 1 1/4 cup)	130g		4NC
2.5	Brussels sprouts (≈ 4 sprouts or 3/4 cup)	75g		4NC
2.5	snow peas (≈ 26 pods or 1 cup)	90g		4.5NC
2.5	green beans (≈ 25 beans or 1 cup)	135g		5.5NC
1	alfalfa sprouts (≈ 1/2 cup)	25g		0.1NC

OTHER ITEMS

10	protein powder (≈ 1/2 scoop or 2 Tbsp)	≈ 15g		0NC +
10	pea milk (≈ 1 1/4 cups)	300ml		0NC +
10	pea-based TVP, dry (≈ 1/3 cup)	15g		0NC +
10	plant-based meats with no more than 2g net carbs per 10g protein			0-2NC
10	vital wheat gluten (≈ 1 1/2 Tbsp)	15g		2NC
5	chickpea hummus (≈ 1/3 cup)	70g		7-9NC
4-5	most other beans/pulses (≈ 1/3 cup)	55g		8-9NC
5	chickpea flour (≈ 3 Tbsp)	20g		9.5NC
5	chickpea pasta/rice, dry (scant 1/2 serv)	20g		±10NC
2.5	nutritional yeast flakes (≈ 1 Tbsp)	5g		0.5NC +
1	nori (≈ 2 sheets)	4g		0NC
1	spirulina (≈ 1 tsp)	1.5g		0.3NC
1	cocoa powder (≈ 1 Tbsp)	5g		1NC

HOW TO GET ##g protein

 GRAMS PROTEIN	g	GRAMS FOOD	NC GRAMS NET CARBS
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GROUP 1 (60-110 calories per item)

10	lupini beans, Brami (1/2 multi-serve package)	75g	0NC
10	protein powder (≈ 1/2 scoop or 2 Tbsp)	≈ 15g	0NC +
10	pea milk (≈ 1 1/4 cups)	300ml	0NC +
10	pea-based TVP, dry (≈ 1/3 cup)	15g	0NC +
10	extra-firm tofu (≈ 1 1/4 servings [85g])	100g	0.5NC
10	lupini beans, Unico (≈ 1/3 cup)	55g	0.5NC
10	lupins, ground/flaked, dry (3 Tbsp)	25g	0.5NC
10	soybeans, cooked from dry (≈ 1/3 cup)	55g	1NC
10	plant-based meats with no more than 2g net carbs per 10g protein		0-2NC
10	soymilk, unsweetened (≈ 1 1/4 cup)	275ml	2NC
10	tempeh (≈ 2/3 serving [85g])	50g	2NC
10	edamame, dry roasted, Seapoint Farms (≈ 1 small [0.79oz] packet)	20g	2NC
10	edamame, shelled, frozen (≈ 2/3 cup)	90g	2.5NC
10	lupin pasta/rice, dry, Kaizen (1/2 serving)	28g	3NC
10	soy-based TVP, dry (≈ 1/4 cup)	20g	3.5NC
10	lupini beans, Cento (≈ 1/2 cup)	80g	4NC
10	soy/edamame pasta, dry (1/2 serv [56g])	28g	2.5-5NC

GROUP 2 (85-230 calories per item)

5	chia seeds (≈ 2 Tbsp)	20g	2.3NC 30g seeds	0.2NC
5	hemp hearts (≈ 1 1/2 Tbsp)	15g	0.7NC	0.3NC
5	SunButter (≈ 1 Tbsp + 1 tsp)	20g		0.5NC
5	lupin hummus, Brami (≈ 1/3 cup)	70g		0.5NC
5	Brazil nuts (≈ 1/4 cup or 7 to 8 nuts)	35g		1.5NC
5	pumpkin seeds (≈ 1 1/2 Tbsp)	15g	1.2NC	0.7NC
5	almonds (≈ 2 1/2 Tbsp almonds or 1 1/2 Tbsp almond butter or 3 Tbsp almond flour)	25g		2NC
5	walnuts (≈ 1/3 cup)	35g		2.5NC
5	hazelnuts (≈ 1/4 cup)	35g		2.5NC
5	peanuts, roasted (≈ 2 Tbsp peanuts or 1 Tbsp + 1 tsp peanut butter)	20g		2.5NC
5	sunflower seeds (≈ 2 1/2 Tbsp)	25g		3NC
5	pistachios (≈ 3 Tbsp)	25g		4NC
5	chickpea hummus (≈ 1/3 cup)	70g		7-9NC

protein (g)	70	80	90	100	110	120	130
Group 1	×4	×5	×6	×7	×8	×9	×10
Group 2	×3						
Group 3	×1						
Group 4	×2						

protein (g)	70	80	90	100	110	120	130
Group 1	×3	×4	×5	×6			
Group 2	×4				×5	×6	×7
Group 3	×1				×2	×2	×2
Group 4	×4				×5	×7	×9

GROUP 3 (80-220 calories per item)

2.5	flax seeds (≈ 1 1/2 Tbsp or 2 Tbsp flaxseed meal)	15g	0.2NC
2.5	macadamia nuts (≈ 1/4 cup)	30g	1.5NC
2.5	pecans (≈ 1/4 cup)	30g	1.5NC
2.5	sesame seeds, brown (≈ 1 1/2 Tbsp seeds or 1 Tbsp tahini)	15g	1.5NC
2.5	avocado (≈ 1 medium)	130g	2.5NC

GROUP 4 (20-40 calories per item)

2.5	kale (≈ 3 cups)	85g	0.2NC
2.5	nutritional yeast flakes (≈ 1 Tbsp)	5g	0.5NC +
2.5	spinach (≈ 3 cups)	85g	1NC
2.5	collards (≈ 2 1/3 cups)	85g	1NC
2.5	mushrooms, white (≈ 1 cup or 5 shrooms)	80g	1NC
2.5	broccolini (≈ 6 stalks or 3/4 cup)	70g	1NC
2.5	bok choy (≈ 1 1/2 baby heads or 2 3/4 cups)	165g	2NC
2.5	asparagus (≈ 7 stalks or 1 cup)	115g	2NC
2.5	heart of palm, canned (≈ 4 hearts or 3/4 cup)	100g	2NC
2.5	Tenderstem broccoli (≈ 5 1/2 stalks or 3/4 cup)	65g	2NC
2.5	mushrooms, brown (≈ 1 1/3 cup or 5 shrooms)	100g	3NC
2.5	broccoli (≈ 1/4 crown or 1 cup)	90g	3.5NC
2.5	bean sprouts (≈ 1 1/2 cups)	85g	3.5NC
2.5	cauliflower (≈ 1/4 head or 1 1/4 cup)	130g	4NC
2.5	Brussels sprouts (≈ 4 sprouts or 3/4 cup)	75g	4NC
2.5	snow peas (≈ 26 pods or 1 cup)	90g	4.5NC
2.5	green beans (≈ 25 beans or 1 cup)	135g	5.5NC

GROUP 5 (65-100 calories per item)

4-5	most other beans/pulses (≈ 1/3 cup)	55g	8-9NC
5	chickpea pasta/rice, dry (scant 1/2 serv)	20g	±10NC