

# Keto?

Carb limited diet. Lots of protein and fibers!

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# Key Components of a Ketogenic Diet

## Sample Daily Breakdown:

- **LBM**: ~190 lbs (86 kg), moderately active.
- **Protein**: 152–190 g/day (~30–40% of calories, ~600–760 kcal).
- **Fat**: 130–180 g/day (~55–65% of calories, ~1,170–1,620 kcal).
- **Vegies**: 20–50 g/day (~5–10% of calories, ~80–200 kcal).
- **Fiber**: 25–35 g from low-carb veggies/seeds.
- **Electrolytes/ Micronutrients** :Sodium: 3,000–5,000 mg (e.g., 1–2 tsp salt, broth).
  - Potassium: 3,000–4,700 mg (e.g., avocado, spinach).
  - Magnesium: 300–400 mg (e.g., nuts, greens, or supplement).
- **Water**: 2–3 L/day.

Want a [Food List by Category](#)?

## The long version:

- **Fat:**
  - **Role**: Primary energy source on keto (60–75% of total calories), replacing carbs to sustain ketosis (burning fat for fuel).
  - **Goal**:
    - Aim for **1.5–2.0 g fat/kg lean body mass** (or ~130–180 g/day for your ~190 lbs/86 kg LBM), adjusted to meet calorie needs.
    - For weight loss, keep total calories at a slight deficit (e.g., 10–15% below maintenance, ~2000–2500 kcal for you, depending on activity).
  - **Sources**: Butter, olive oil, coconut oil, avocado, fatty meats (e.g., ribeye), nuts (macadamia, almonds), cream, cheese.
  - **Tip**: Prioritize healthy fats (monounsaturated, saturated) and limit processed trans fats. Track to ensure fat intake supports ketosis without overeating.
- **Carbohydrates:**
  - **Role**: Minimized to induce ketosis by depleting glycogen and forcing fat metabolism.
  - **Goal**:
    - **20–50 g net carbs/day** (total carbs minus fiber). Stricter keto (e.g., for medical purposes) may aim for <20 g.

- Net carbs = Total carbs – Fiber.
- **Sources:** Low-carb vegetables (spinach, broccoli, cauliflower, zucchini), small amounts of berries, nuts/seeds.
- **Tip:** Focus on non-starchy veggies to stay under carb limit. Avoid grains, sugars, and starchy foods (potatoes, rice).
- **Fiber:**
  - **Role:** Supports digestion, gut health, and satiety; prevents constipation common on low-carb diets.
  - **Goal:**
    - **25–35 g/day** (similar to general recommendations, not specific to keto).
    - Most comes from low-carb vegetables and seeds.
  - **Sources:**
    - Veggies: Spinach (2 g fiber/cup), broccoli (5 g/cup cooked), cauliflower (3 g/cup).
    - Seeds: Chia seeds (10 g fiber/oz), flaxseeds (8 g/oz).
    - Supplements: Psyllium husk (5 g/tbsp) if needed.
  - **Tip:** Gradually increase fiber to avoid bloating. Ensure adequate water (2–3 L/day) to aid digestion.
- **Electrolytes (Key Minerals):**
  - **Role:** Keto increases water loss (due to glycogen depletion), flushing out electrolytes, which can cause fatigue, cramps, or "keto flu."
  - **Key Electrolytes and Goals:**
    - **Sodium:** 3,000–5,000 mg/day.
      - Sources: Salt (1 tsp = ~2,300 mg sodium), bone broth, pickles, olives.
      - Tip: Add salt to meals or drink broth to prevent headaches or lethargy.
    - **Potassium:** 3,000–4,700 mg/day.
      - Sources: Avocado (700 mg/cup), spinach (800 mg/cup cooked), salmon (400 mg/3 oz).
      - Tip: Avoid supplements unless prescribed; food sources are safer.
    - **Magnesium:** 300–400 mg/day.
      - Sources: Almonds (80 mg/oz), spinach (80 mg/cup), pumpkin seeds (150 mg/oz).
      - Tip: Consider a supplement (e.g., magnesium citrate, 200–400 mg) if cramps or fatigue persist.
  - **Tip:** Monitor for symptoms (e.g., muscle cramps, dizziness) and adjust intake. Electrolyte powders (low-carb) can help.
- **Other Micronutrients:**
  - **Role:** Prevent deficiencies, as keto limits food variety (e.g., no fruits, grains).
  - **Key Nutrients to Watch:**
    - **Calcium:** 1,000–1,300 mg/day (bone health, muscle function).
      - Sources: Cheese (200–300 mg/oz), kale (100 mg/cup), sardines (300 mg/3 oz).
    - **Vitamin D:** 600–800 IU/day (or more if deficient; supports immunity, bones).
      - Sources: Fatty fish (salmon, 600 IU/3 oz), egg yolks, sunlight, supplements.
    - **B Vitamins:** Especially B1, B9 (folate) from greens, liver, eggs.

- **Vitamin C:** 75–90 mg/day (lower needs on keto due to less glucose competition).
  - Sources: Bell peppers (190 mg/cup), broccoli (80 mg/cup).
- **Tip:** Eat nutrient-dense foods (e.g., liver, leafy greens) and consider a low-carb multivitamin if variety is limited.
- **Water:**
  - **Role:** Prevents dehydration, supports kidney function, and aids fiber digestion.
  - **Goal:** 2–3 L/day (80–100 oz), more if active or in hot climates.
  - **Tip:** Increase intake during the first few weeks of keto to offset water loss from glycogen depletion.

# Electrolytes / Micronutrients Intake | Ketogenic Diet.

This table provides daily protein intake ranges for a ketogenic diet based on [lean body mass \(LBM\)](#) in 25-lb increments. Use your estimated [LBM](#) (approximated as your "ideal" or "skinny" weight) and activity level to determine your target.

## Electrolytes Intake

Electrolytes prevent keto flu and maintain hydration. Ranges are based on general keto needs, slightly increasing with LBM due to larger body size and water turnover:

- **Sodium**: 3,000–5,000 mg/day.
- **Potassium**: 3,000–4,700 mg/day.
- **Magnesium**: 300–400 mg/day.
- **Note**: Active individuals may need the higher end due to sweat loss. Adjust based on symptoms (e.g., cramps, fatigue).

Lean Body Mass (lbs)	Sodium (mg/day)	Potassium (mg/day)	Magnesium (mg/day)
100	3,000–4,500	3,000–4,200	300–350
125	3,000–4,500	3,000–4,200	300–350
150	3,200–4,700	3,200–4,400	320–370
175	3,200–4,700	3,200–4,400	320–370
200	3,500–5,000	3,500–4,700	340–400
225	3,500–5,000	3,500–4,700	340–400
250	3,500–5,000	3,500–4,700	340–400

## Micronutrients Intake

Micronutrient needs are based on general dietary recommendations (RDA/AI) and are consistent across LBM and activity levels, as keto limits food variety:

- **Calcium**: 1,000–1,300 mg/day.
- **Vitamin D**: 600–800 IU/day (or more if deficient).
- **Vitamin C**: 75–90 mg/day (lower needs on keto due to reduced glucose competition).
- **B Vitamins**: Met through food (e.g., B1, B9 from liver, eggs); no specific daily gram range, but ensure sources are included.

- **Note**: Larger individuals may need slightly higher intakes to prevent deficiencies.  
Supplements may be needed if diet lacks variety.

Lean Body Mass (lbs)	Calcium (mg/day)	Vitamin D (IU/day)	Vitamin C (mg/day)	B Vitamins
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100	1,000-1,200	600-800	75-90	Ensure sources
125	1,000-1,200	600-800	75-90	Ensure sources
150	1,000-1,300	600-800	75-90	Ensure sources
175	1,000-1,300	600-800	75-90	Ensure sources
200	1,100-1,300	600-800	75-90	Ensure sources
225	1,100-1,300	600-800	75-90	Ensure sources
250	1,100-1,300	600-800	75-90	Ensure sources

# Fat Intake by Lean Body Mass | Ketogenic Diet

This table provides daily protein intake ranges for a ketogenic diet based on [lean body mass \(LBM\)](#) in 25-lb increments. Use your estimated [LBM](#) (approximated as your "ideal" or "skinny" weight) and activity level to determine your target.

## **\*\*Light Activity (Sedentary)\*\***

Lean Body Mass (lbs)	Fat Range (g/day)
100	100-130
125	125-163
150	150-195
175	175-228
200	200-260
225	225-293
250	250-325

## **\*\*Moderate Activity (Moderately Active)\*\***

Lean Body Mass (lbs)	Fat Range (g/day)
100	130-170
125	163-213
150	195-255
175	228-298
200	260-340
225	293-383
250	325-425

## **\*\*Active (Athletes/Heavy Lifting)\*\***

Lean Body Mass (lbs)	Fat Range (g/day)
100	170-200
125	213-250
150	255-300
175	298-350
200	340-400
225	383-450
250	425-500





# Methods to Determine Lean Body Mass (LBM):

## 1. **Estimate Based on "Ideal" Weight (Simplest):**

- **How:** Use your estimated "skinny" or "ideal" weight as a proxy for LBM. You already

This is less accurate, as it doesn't account for individual muscle mass or body composition. But, it works.

[Protein intake guide](#)

# Protein/Fat Sources

These foods provide protein (to hit 152–190 g/day) and fat (to reach 130–180 g/day), keeping carbs low to maintain ketosis. Prioritize high-quality, minimally processed options.

## [How much Protein should you have per day?](#)

- **Beef (Fatty Cuts):**
  - **Examples:** Ribeye, ground beef (80/20), brisket.
  - **Nutrition (per 4 oz/113 g):**
    - Ribeye: ~25 g protein, 20 g fat, 0 g carbs, ~280 kcal.
    - Ground beef (80/20): ~23 g protein, 17 g fat, 0 g carbs, ~250 kcal.
  - **Tips:** Grill or pan-sear with butter for extra fat. Use ground beef for keto burgers (no bun) or casseroles.
- **Pork:**
  - **Examples:** Pork belly, bacon, pork chops, sausage (no fillers/sugar).
  - **Nutrition (per 4 oz/113 g):**
    - Pork belly: ~15 g protein, 50 g fat, 0 g carbs, ~500 kcal.
    - Bacon (3 slices, ~1 oz): ~10 g protein, 12 g fat, 0 g carbs, ~150 kcal.
  - **Tips:** Choose uncured bacon to avoid added sugars. Pork belly is great for high-fat meals; pair with low-carb veggies.
- **Poultry:**
  - **Examples:** Chicken thighs (skin-on), wings, duck breast.
  - **Nutrition (per 4 oz/113 g):**
    - Chicken thighs (skin-on): ~24 g protein, 15 g fat, 0 g carbs, ~230 kcal.
    - Wings (3 pieces, ~3 oz): ~18 g protein, 14 g fat, 0 g carbs, ~200 kcal.
  - **Tips:** Avoid lean cuts like chicken breast unless adding fat (e.g., butter sauce). Roast or fry for crispy skin.
- **Fish/Seafood:**
  - **Examples:** Salmon, mackerel, sardines, shrimp.
  - **Nutrition (per 4 oz/113 g):**
    - Salmon: ~25 g protein, 15 g fat, 0 g carbs, ~230 kcal, ~400 mg potassium.
    - Sardines (canned in oil, drained): ~23 g protein, 10 g fat, 0 g carbs, ~190 kcal, ~300 mg calcium.
  - **Tips:** Fatty fish like salmon boost omega-3s and potassium. Canned sardines are convenient and nutrient-dense.
- **Eggs:**
  - **Examples:** Whole eggs (chicken or duck).
  - **Nutrition (per 2 large eggs, ~100 g):**
    - ~12 g protein, 10 g fat, 1 g net carbs, ~140 kcal, ~50 IU vitamin D.
  - **Tips:** Scramble with butter or cheese for extra fat. Hard-boil for snacks.

- **Dairy (High-Fat, Low-Carb):**

- **Examples:** Hard cheeses (cheddar, parmesan), cream cheese, Greek yogurt (full-fat, unsweetened).
- **Nutrition (per 1 oz/28 g cheddar or 2 tbsp cream cheese):**
  - Cheddar: ~7 g protein, 9 g fat, 0.5 g net carbs, ~110 kcal, ~200 mg calcium.
  - Cream cheese: ~2 g protein, 10 g fat, 1 g net carbs, ~100 kcal.
- **Tips:** Use cheese as a snack or topping. Check yogurt labels for no added sugars.

- **Plant-Based (for Variety):**

- **Examples:** Tofu (firm), tempeh (low-carb versions).
- **Nutrition (per 4 oz/113 g tofu):**
  - ~10 g protein, 6 g fat, 2 g net carbs, ~100 kcal, ~200 mg calcium.
- **Tips:** Fry tofu in coconut oil for extra fat. Limited use to keep carbs low.

# Fats

These help you reach 130–180 g fat/day, ensuring energy for ketosis.

## [Fat Intake guide](#)

- **Oils:**
  - **Examples:** Olive oil, coconut oil, avocado oil, MCT oil.
  - **Nutrition (per 1 tbsp, ~14 g):**
    - Olive oil: 0 g protein, 14 g fat, 0 g carbs, ~120 kcal.
    - MCT oil: 0 g protein, 14 g fat, 0 g carbs, ~130 kcal (boosts ketones).
  - **Tips:** Drizzle olive oil on salads or veggies. Use MCT oil in coffee (bulletproof coffee).
- **Butter/Ghee:**
  - **Nutrition (per 1 tbsp, ~14 g):**
    - Butter: 0 g protein, 12 g fat, 0 g carbs, ~100 kcal.
    - Ghee: 0 g protein, 13 g fat, 0 g carbs, ~110 kcal.
  - **Tips:** Cook eggs or veggies in butter. Ghee is lactose-free for sensitive stomachs.
- **Nuts/Seeds (Moderate Use):**
  - **Examples:** Macadamia nuts, almonds, chia seeds, flaxseeds.
  - **Nutrition (per 1 oz/~28 g):**
    - Macadamia: ~2 g protein, 21 g fat, 2 g net carbs, 2 g fiber, ~200 kcal.
    - Chia seeds: ~5 g protein, 9 g fat, 2 g net carbs, 10 g fiber, ~140 kcal.
  - **Tips:** Limit to 1–2 oz/day to avoid carb creep. Use chia for keto puddings.
- **Avocado:**
  - **Nutrition (per ½ avocado, ~70 g):**
    - ~1 g protein, 10 g fat, 2 g net carbs, 5 g fiber, ~110 kcal, ~350 mg potassium.
  - **Tips:** Add to salads or blend into smoothies for creaminess.

# Low-Carb Vegies Intake | Net Carbohydrates Intake

## #### Net Carbohydrates Intake

Net carbs (total carbs minus fiber) are kept low to maintain ketosis. The range is generally fixed across LBM and activity levels, as ketosis depends on carb restriction rather than body size:

- **Standard**: 20-50 g/day (5-10% of calories). Stricter keto (e.g., therapeutic) may aim for <20 g/day.
- **Note**: Activity level doesn't significantly alter carb needs, but active individuals may tolerate closer to 50 g for glycogen replenishment.

## Have a little as possible

Lean Body Mass (lbs)   Net Carbs Range (g/day)	
----- -----	
100	20-50
125	20-50
150	20-50
175	20-50
200	20-50
225	20-50
250	20-50

# Fiber Intake | Net Carbohydrates Intake

## #### Fiber Intake

Fiber supports digestion and gut health. The range is consistent across LBM and activity levels, based on general recommendations:

- **Standard**: 25–35 g/day. Higher fiber may be needed for larger individuals or to counter constipation.
- **Note**: Ensure adequate water intake (80–100 oz/day) to support fiber digestion.

Lean Body Mass (lbs)   Fiber Range (g/day)	
-----	-----
100	25–35
125	25–35
150	25–35
175	25–35
200	25–35
225	25–35
250	25–35

# Vegies and Fiber | Low-Carb Vegetables

**Net Carbohydrates (20-50 g/day, ~5-10% of calories, ~80-200 kcal):**

## [Low Carb Vegie Intake](#)

Have a little as possible...

- **Leafy Greens:**
  - **Spinach:** 2 cups raw (60 g, ~1 g net carbs, 2 g fiber, ~7 kcal). Use in salads or sauté with eggs.
  - **Kale:** 1 cup raw (50 g, ~1 g net carbs, 2 g fiber, ~15 kcal). Blend with avocado.
  - **Arugula:** 1 cup raw (30 g, ~0.5 g net carbs, 1 g fiber, ~5 kcal). Top with salmon.
  - **Swiss Chard:** 1 cup raw (40 g, ~0.5 g net carbs, 1 g fiber, ~7 kcal). Sauté with bacon.
- **Cruciferous Vegetables:**
  - **Broccoli:** 1 cup cooked (90 g, ~4 g net carbs, 5 g fiber, ~40 kcal). Roast with olive oil.
  - **Cauliflower:** 1 cup cooked (100 g, ~3 g net carbs, 3 g fiber, ~25 kcal). Make rice or mash.
  - **Brussels Sprouts:** 1 cup cooked (100 g, ~4 g net carbs, 4 g fiber, ~40 kcal). Roast with bacon.
  - **Cabbage:** 1 cup cooked (100 g, ~3 g net carbs, 2 g fiber, ~20 kcal). Sauté with butter.
- **Other Low-Carb Veggies:**
  - **Zucchini:** 1 cup raw (125 g, ~2 g net carbs, 1 g fiber, ~15 kcal). Spiralize for noodles.
  - **Asparagus:** 1 cup raw (100 g, ~3 g net carbs, 2 g fiber, ~20 kcal). Grill with olive oil.
  - **Bell Peppers:** ½ cup raw (75 g, ~3 g net carbs, 2 g fiber, ~25 kcal). Stuff with ground beef.
  - **Mushrooms:** 1 cup raw (70 g, ~2 g net carbs, 1 g fiber, ~15 kcal). Sauté with butter.
- **Tip:** Consume 3-4 cups of these veggies daily to stay under 50 g net carbs; mix varieties for flavor.

## [Fiber Intake](#)

**Fiber (25-35 g/day):**

- **Spinach:** 2 cups raw (60 g, ~2 g fiber). Daily salad base.
- **Broccoli:** 1 cup cooked (90 g, ~5 g fiber). Side dish 2-3x/week.
- **Cauliflower:** 1 cup cooked (100 g, ~3 g fiber). Regular substitute for rice.
- **Brussels Sprouts:** 1 cup cooked (100 g, ~4 g fiber). Roasted side.
- **Chia Seeds:** 1 oz (28 g, ~10 g fiber, 2 g net carbs). Add to cream or water.
- **Flaxseeds:** 1 oz (28 g, ~8 g fiber, 0 g net carbs). Top kale or cabbage.
- **Tip:** Combine 3-4 cups veggies + 1 tbsp seeds daily; drink 2-3 L water to support digestion.



# Electrolyte/Micronutrient-Rich Foods

These support sodium (3,000–5,000 mg/day), potassium (3,000–4,700 mg/day), magnesium (300–400 mg/day), and other nutrients.

## [Electrolyte/Micronutrient Intake](#)

- **Sodium Sources:**

- **Examples:** Sea salt, bone broth, pickles, olives.
- **Nutrition:**
  - Sea salt (1 tsp): ~2,300 mg sodium, 0 g carbs.
  - Bone broth (1 cup): ~500–1,000 mg sodium, ~1 g carbs, ~40 kcal.
  - Pickles (1 medium, ~35 g): ~300 mg sodium, 1 g net carbs, ~10 kcal.
- **Tips:** Sip bone broth daily. Add ½–1 tsp salt to meals or water.

- **Potassium Sources:**

- **Examples:** Avocado, spinach, salmon, mushrooms.
- **Nutrition (see above for avocado, spinach, salmon):**
  - Mushrooms (1 cup cooked): ~3 g protein, 2 g net carbs, ~400 mg potassium, ~40 kcal.
- **Tips:** Include 1–2 servings of these daily to hit potassium goals.

- **Magnesium Sources:**

- **Examples:** Pumpkin seeds, almonds, spinach, dark chocolate (85%+ cocoa).
- **Nutrition (per 1 oz pumpkin seeds):**
  - ~10 g protein, 10 g fat, 2 g net carbs, 1 g fiber, ~150 mg magnesium, ~150 kcal.
  - Dark chocolate (1 oz, 85% cocoa): ~2 g protein, 12 g fat, 5 g net carbs, 3 g fiber, ~50 mg magnesium, ~170 kcal.
- **Tips:** Snack on 1 oz pumpkin seeds or take a magnesium supplement (e.g., 200 mg citrate) if needed.

- **Other Micronutrients:**

- **Calcium (1,000–1,300 mg/day):**
  - **Kale:** 1 cup raw (50 g, ~100 mg). Use in salads or smoothies.
  - **Broccoli:** 1 cup cooked (90 g, ~60 mg). Daily veggie.
  - **Sardines:** 100 g (~300 mg). Serve with spinach or cabbage.
- **Vitamin D (600–800 IU/day):**
  - **Salmon:** 150 g (~600 IU). Pair with cruciferous veggies.
  - **Egg Yolks:** 4 eggs (~80 IU). Scramble with mushrooms.
  - **Sunlight:** 15–30 min exposure (if possible).
- **B Vitamins:**

- **Liver (Beef):** 100 g (~high B1, B9). Serve with sautéed spinach 1x/week.
- **Eggs:** 4 eggs (~B vitamins). Pair with asparagus.
- **Vitamin C (75–90 mg/day):**
  - **Bell Peppers:** ½ cup raw (75 g, ~95 mg). Stuff with beef or add to salads.
  - **Broccoli:** 1 cup cooked (90 g, ~80 mg). Regular side dish.
- **Tip:** Include greens and peppers daily; consider a low-carb multivitamin if variety is limited
  - Egg yolks provide vitamin D.

# Water

- **Water (2-3 L/day, 80-100 oz):**
  - **Sources:** Plain water, sparkling water (unsweetened), bone broth, herbal tea (no sugar).
  - **Tip:** Drink 8-12 oz every 1-2 hours, especially with high-fiber veggies like broccoli.

# Keto Food List by Category

- **Protein:**

- **Beef:** Ribeye steak (7 oz: ~50 g protein, 40 g fat, 0 g carbs), ground beef 80/20 (7 oz: ~46 g protein, 34 g fat, 0 g carbs), brisket (7 oz: ~48 g protein, 30 g fat, 0 g carbs), sirloin (7 oz: ~54 g protein, 20 g fat, 0 g carbs).
- **Pork:** Pork belly (5.3 oz: ~30 g protein, 50 g fat, 0 g carbs), pork chops (5.3 oz: ~35 g protein, 20 g fat, 0 g carbs), bacon (3.5 oz: ~15 g protein, 40 g fat, 0 g carbs), sausage (no sugar/fillers, 3.5 oz: ~15 g protein, 30 g fat, 0 g carbs).
- **Poultry:** Chicken thighs (skin-on, 7 oz: ~40 g protein, 30 g fat, 0 g carbs), chicken wings (7 oz: ~36 g protein, 28 g fat, 0 g carbs), duck breast (5.3 oz: ~30 g protein, 35 g fat, 0 g carbs), turkey thigh (5.3 oz: ~32 g protein, 15 g fat, 0 g carbs).
- **Fish/Seafood:** Salmon (5.3 oz: ~30 g protein, 20 g fat, 0 g carbs), mackerel (5.3 oz: ~28 g protein, 25 g fat, 0 g carbs), sardines (3.5 oz: ~25 g protein, 11 g fat, 0 g carbs), tuna (canned in oil, 3.5 oz: ~25 g protein, 10 g fat, 0 g carbs), shrimp (3.5 oz: ~20 g protein, 1 g fat, 0 g carbs), scallops (3.5 oz: ~20 g protein, 1 g fat, 2 g carbs).
- **Eggs:** Chicken eggs (4 large: ~24 g protein, 20 g fat, <1 g carbs), duck eggs (2 large: ~18 g protein, 20 g fat, <1 g carbs).
- **Dairy:** Cheddar cheese (3.5 oz: ~25 g protein, 33 g fat, ~1 g carb), parmesan (3.5 oz: ~35 g protein, 25 g fat, ~1 g carb), cottage cheese (full-fat, 3.5 oz: ~11 g protein, 4 g fat, 3 g carbs), Greek yogurt (unsweetened, full-fat, 3.5 oz: ~9 g protein, 5 g fat, 4 g carbs).
- **Plant-Based:** Tofu (firm, 3.5 oz: ~15 g protein, 8 g fat, 2 g carbs), tempeh (3.5 oz: ~20 g protein, 11 g fat, 4 g carbs, limit due to carbs).
- **Other:** Pork rinds (1.8 oz: ~25 g protein, 15 g fat, 0 g carbs), beef jerky (no sugar, 1.8 oz: ~20 g protein, 5 g fat, 0 g carbs), protein powder (low-carb, whey/collagen, 1 oz: ~25 g protein, 2 g fat, 1-2 g carbs).
- **Tip:** Combine with low-carb veggies for balanced meals. Check labels for hidden carbs in processed items.

- **Fat:**

- **Oils:** Olive oil (1 tbsp/0.5 oz: ~14 g fat, 0 g carbs), coconut oil (1 tbsp/0.5 oz: ~14 g fat, 0 g carbs), avocado oil (1 tbsp/0.5 oz: ~14 g fat, 0 g carbs), MCT oil (1 tbsp/0.5 oz: ~14 g fat, 0 g carbs).
- **Dairy Fats:** Butter (1 tbsp/0.5 oz: ~12 g fat, 0 g carbs), ghee (1 tbsp/0.5 oz: ~14 g fat, 0 g carbs), heavy cream (2 tbsp/1.1 oz: ~10 g fat, <1 g carb), cream cheese (2 tbsp/1.1 oz: ~10 g fat, 1 g carb).
- **Nuts/Seeds:** Macadamia nuts (1 oz: ~20 g fat, 2 g net carbs), almonds (1 oz: ~14 g fat, 3 g net carbs), pecans (1 oz: ~20 g fat, 1 g net carbs), walnuts (1 oz: ~18 g fat, 2 g net carbs).
- **Other:** Avocado (1 medium/5.3 oz: ~22 g fat, 2 g net carbs), coconut (shredded, unsweetened, 1 oz: ~18 g fat, 2 g net carbs), olives (10 large/1.8 oz: ~5 g fat, 1 g net carbs), bacon fat (1 tbsp/0.5 oz: ~14 g fat, 0 g carbs).

- **Tip:** Use oils or dairy fats in cooking or dressings. Limit nuts to small portions due to carbs.

- **Veggies:**

- **Leafy Greens:**

- **Spinach:** 2 cups raw (2.1 oz: ~1 g protein, 0 g fat, 1 g net carbs, 2 g fiber, ~7 kcal).
- **Kale:** 1 cup raw (1.8 oz: ~2 g protein, 0.5 g fat, 1 g net carbs, 2 g fiber, ~15 kcal).
- **Arugula:** 1 cup raw (1.1 oz: ~0.5 g protein, 0 g fat, 0.5 g net carbs, 1 g fiber, ~5 kcal).
- **Swiss Chard:** 1 cup raw (1.4 oz: ~0.5 g protein, 0 g fat, 0.5 g net carbs, 1 g fiber, ~7 kcal).
- **Lettuce (Romaine):** 2 cups raw (2.1 oz: ~1 g protein, 0 g fat, 1 g net carbs, 1 g fiber, ~10 kcal).
- **Collard Greens:** 1 cup raw (1.8 oz: ~1 g protein, 0 g fat, 1 g net carbs, 2 g fiber, ~12 kcal).

- **Cruciferous Vegetables:**

- **Broccoli:** 1 cup cooked (3.2 oz: ~3 g protein, 0.5 g fat, 4 g net carbs, 5 g fiber, ~40 kcal).
- **Cauliflower:** 1 cup cooked (3.5 oz: ~2 g protein, 0 g fat, 3 g net carbs, 3 g fiber, ~25 kcal).
- **Brussels Sprouts:** 1 cup cooked (3.5 oz: ~3 g protein, 0 g fat, 4 g net carbs, 4 g fiber, ~40 kcal).
- **Cabbage:** 1 cup cooked (3.5 oz: ~1 g protein, 0 g fat, 3 g net carbs, 2 g fiber, ~20 kcal).
- **Bok Choy:** 1 cup cooked (3.5 oz: ~1 g protein, 0 g fat, 1 g net carbs, 1 g fiber, ~15 kcal).
- **Kohlrabi:** 1 cup raw (4.8 oz: ~2 g protein, 0 g fat, 4 g net carbs, 5 g fiber, ~30 kcal).

- **Other Low-Carb Veggies:**

- **Zucchini:** 1 cup raw (4.4 oz: ~1 g protein, 0 g fat, 2 g net carbs, 1 g fiber, ~15 kcal).
- **Asparagus:** 1 cup raw (3.5 oz: ~2 g protein, 0 g fat, 3 g net carbs, 2 g fiber, ~20 kcal).
- **Bell Peppers (Green/Red):** ½ cup raw (2.6 oz: ~1 g protein, 0 g fat, 3 g net carbs, 2 g fiber, ~25 kcal).
- **Mushrooms (White/Shiitake):** 1 cup raw (2.5 oz: ~2 g protein, 0 g fat, 2 g net carbs, 1 g fiber, ~15 kcal).
- **Eggplant:** 1 cup cooked (3.5 oz: ~1 g protein, 0 g fat, 4 g net carbs, 3 g fiber, ~25 kcal).
- **Green Beans:** 1 cup cooked (3.5 oz: ~2 g protein, 0 g fat, 4 g net carbs, 3 g fiber, ~30 kcal).
- **Cucumber:** 1 cup raw (3.5 oz: ~0.5 g protein, 0 g fat, 2 g net carbs, 1 g fiber, ~15 kcal).

- **Radishes:** 1 cup raw (4.1 oz: ~1 g protein, 0 g fat, 2 g net carbs, 2 g fiber, ~15 kcal).
- **Tip:** Mix leafy greens, cruciferous, and other veggies for variety. Use in salads, stir-fries, or as low-carb substitutes (e.g., cauliflower rice).
- **Fiber:**
  - **Chia Seeds:** 1 oz: ~10 g fiber, 2 g net carbs, 9 g fat, ~140 kcal.
  - **Flaxseeds:** 1 oz: ~8 g fiber, 0 g net carbs, 12 g fat, ~150 kcal.
  - **Psyllium Husk:** 1 tbsp (0.4 oz: ~5 g fiber, 0 g net carbs, 0 g fat, ~20 kcal).
  - **Hemp Seeds:** 1 oz: ~4 g fiber, 1 g net carbs, 15 g fat, ~160 kcal.
  - **Spinach:** 2 cups raw (2.1 oz: ~2 g fiber, 1 g net carbs, ~7 kcal).
  - **Kale:** 1 cup raw (1.8 oz: ~2 g fiber, 1 g net carbs, ~15 kcal).
  - **Broccoli:** 1 cup cooked (3.2 oz: ~5 g fiber, 4 g net carbs, ~40 kcal).
  - **Cauliflower:** 1 cup cooked (3.5 oz: ~3 g fiber, 3 g net carbs, ~25 kcal).
  - **Brussels Sprouts:** 1 cup cooked (3.5 oz: ~4 g fiber, 4 g net carbs, ~40 kcal).
  - **Cabbage:** 1 cup cooked (3.5 oz: ~2 g fiber, 3 g net carbs, ~20 kcal).
  - **Kohlrabi:** 1 cup raw (4.8 oz: ~5 g fiber, 4 g net carbs, ~30 kcal).
  - **Avocado:** 1 medium (5.3 oz: ~10 g fiber, 2 g net carbs, 22 g fat, ~240 kcal).
  - **Tip:** Include seeds and veggies in meals or snacks. Pair with ample water to support digestion.
- **Electrolytes/Micronutrients:**
  - **Sodium:**
    - **Salt:** 1 tsp (~2,300 mg sodium, 0 g carbs). Add to meals or water.
    - **Bone Broth:** 1 cup (~500 mg sodium, 0 g carbs). Sip or use in soups.
    - **Pickles:** 1 medium (~500 mg sodium, 0 g carbs). Snack or side.
    - **Olives:** 10 large (1.8 oz: ~200 mg sodium, 1 g net carbs). Add to salads.
    - **Soy Sauce (low-sodium):** 1 tbsp (~900 mg sodium, 1 g carbs). Use sparingly in cooking.
  - **Potassium:**
    - **Spinach:** 1 cup cooked (3.2 oz: ~800 mg, 1 g net carbs). Sauté with butter.
    - **Avocado:** 1 medium (5.3 oz: ~700 mg, 2 g net carbs). Side or smoothie.
    - **Mushrooms:** 1 cup cooked (3.5 oz: ~400 mg, 2 g net carbs). Add to omelets.
    - **Salmon:** 5.3 oz (~400 mg, 0 g carbs). Regular protein.
    - **Pork:** 5.3 oz (~400 mg, 0 g carbs). Protein source.
    - **Broccoli:** 1 cup cooked (3.2 oz: ~300 mg, 4 g net carbs). Daily veggie.
  - **Magnesium:**
    - **Spinach:** 1 cup cooked (3.2 oz: ~80 mg, 1 g net carbs). Side dish.
    - **Pumpkin Seeds:** 1 oz: ~150 mg, 2 g net carbs. Snack or topping.
    - **Almonds:** 1 oz: ~80 mg, 3 g net carbs. Small portions.
    - **Hemp Seeds:** 1 oz: ~50 mg, 1 g net carbs. Add to salads.
    - **Cocoa Powder (unsweetened):** 1 tbsp (0.2 oz: ~25 mg, 1 g net carb). Use in keto desserts.
    - **Supplement (Magnesium Citrate):** 200–400 mg if needed (consult doctor).
  - **Calcium:**
    - **Kale:** 1 cup raw (1.8 oz: ~100 mg, 1 g net carbs). Salad or smoothie.
    - **Sardines:** 3.5 oz (~300 mg, 0 g carbs). Canned, with bones.

- **Cheddar Cheese:** 3.5 oz (~300 mg, 1 g carb). Snack or topping.
- **Broccoli:** 1 cup cooked (3.2 oz: ~60 mg, 4 g net carbs). Regular veggie.
- **Almonds:** 1 oz (~80 mg, 3 g net carbs). Limit portions.
- **Vitamin D:**
  - **Salmon:** 5.3 oz (~600 IU, 0 g carbs). Regular protein.
  - **Sardines:** 3.5 oz (~200 IU, 0 g carbs). Canned option.
  - **Egg Yolks:** 4 eggs (~80 IU, <1 g carb). Daily breakfast.
  - **Mushrooms (exposed to sunlight):** 1 cup (3.5 oz: ~100 IU, 2 g net carbs). Sauté with butter.
- **B Vitamins (B1, B9, etc.):**
  - **Liver (Beef):** 3.5 oz (~high B1, B9, 0 g carbs). Weekly protein.
  - **Eggs:** 4 eggs (~B vitamins, <1 g carb). Regular protein.
  - **Spinach:** 1 cup cooked (3.2 oz: ~high B9, 1 g net carbs). Daily veggie.
  - **Pork:** 5.3 oz (~high B1, 0 g carbs). Protein source.
- **Vitamin C:**
  - **Bell Peppers (Red):** ½ cup raw (2.6 oz: ~95 mg, 3 g net carbs). Stuff or add to salads.
  - **Broccoli:** 1 cup cooked (3.2 oz: ~80 mg, 4 g net carbs). Daily side.
  - **Kale:** 1 cup raw (1.8 oz: ~40 mg, 1 g net carbs). Salad or smoothie.
  - **Brussels Sprouts:** 1 cup cooked (3.5 oz: ~75 mg, 4 g net carbs). Roasted side.
- **Tip:** Diversify with greens, fish, and organ meats. Consider a low-carb multivitamin if variety is limited.

## Notes:

- **Tracking:** Use Cronometer or MyFitnessPal to log macros and nutrients.
- **Ketosis:** Monitor with ketone strips (0.5–3.0 mmol/L) to confirm carb/protein balance.
- **Warnings:** Ensure adequate electrolytes to avoid keto flu; consult a doctor for health conditions or deficiencies. Drink sufficient water to support fiber and electrolyte balance.

# Protein Intake by Lean Body Mass | Ketogenic Diet

## **\*\*Protein Intake\*\***

- **\*\*Light\*\***: 0.6–0.8 g/lb LBM
- **\*\*Moderate\*\***: 0.8–1.0 g/lb LBM
- **\*\*Active\*\***: 1.0–1.2 g/lb LBM

## **\*\*Light Activity (Sedentary)\*\***

| Lean Body Mass (lbs) | Protein Range (g/day) |

----- -----
100   60-80
125   75-100
150   90-120
175   105-140
200   120-160
225   135-180
250   150-200

## **\*\*Moderate Activity (Moderately Active)\*\***

| Lean Body Mass (lbs) | Protein Range (g/day) |

----- -----
100   80-100
125   100-125
150   120-150
175   140-175
200   160-200
225   180-225
250   200-250

## **\*\*Active (Athletes/Heavy Lifting)\*\***

| Lean Body Mass (lbs) | Protein Range (g/day) |

----- -----
100   100-120
125   125-150
150   150-180
175   175-210
200   200-240
225   225-270
250   250-300



