Preparing to Make Changes

A properly formulated ketogenic diet is a very powerful tool, and you want to make sure that you understand what will happen before you start. **This is especially true if you take any kind of medication for managing blood sugar (diabetes) or high blood pressure.** These medications will have to be adjusted immediately, so check with your doctor beforehand. In addition, read these pages on the Ketogenic-Diet-Resource website:

- Who should NOT follow a ketogenic diet: [list of medical contraindications](https://ketogenic-diet-resource.com/who-should-not-follow-a-ketogenic-diet/).
- The dangers of low carb diets. (If the diet is done correctly, there aren’t any.)
- Know the [side effects](https://ketogenic-diet-resource.com/side-effects-of-a-ketogenic-diet/) of a ketogenic diet so you can treat them.
- The amazing list of [benefits provided by ketogenic diets](https://ketogenic-diet-resource.com/benefits-provided-by-ketogenic-diets/).

Three Steps to a Custom Ketogenic Diet

1. **Determine your ideal body weight.** This can be any weight at which you feel best, or it can be based on a calculator result like the one shown here.
   
   [https://www.rush.edu/health-wellness/quick-guides/what-is-a-healthy-weight](https://www.rush.edu/health-wellness/quick-guides/what-is-a-healthy-weight)

2. **Establish the daily calorie requirement to maintain your ideal body weight.** Use the handy calorie calculator links below along with your ideal weight and activity level to determine the daily calorie amount you should consume to maintain a normal weight or body mass index (BMI).
   
   [http://www.bcm.edu/cnrc/caloriesneed.cfm](http://www.bcm.edu/cnrc/caloriesneed.cfm)

3. **Figure out how much protein, carb and fat to eat based on ideal weight and calories.** Using the guides below and your ideal body weight and daily caloric intake, figure out your total daily intake of fat, protein and carbohydrate in gram and calorie measures. You can then use a program like MyFitnessPal or FatSecret to track your numbers.
Protein, Carb and Fat Grams

**Protein Requirements:** Generally, protein intake should be between 1 gram and 1.5 grams per kilogram of lean body mass or ideal body weight. Lean body mass is your total weight minus fat weight, which equals the weight of just your muscles and bones. If you don’t know yours, use ideal body weight instead.

Calculation: A person weighs 150 pounds and has a lean body mass of 100 pounds. To calculate average optimal protein intake, we set the lower end of the range at 1.0 g/kg/LBM and the higher end at 1.5 g/kg/LBM. Taking into account that dividing pounds by 2.2 equals the number of kilograms, the math looks like this:

- 100 pounds LBM/2.2 = 45 kilograms LBM
- Multiply 45 x 1 = 45 grams of protein
- Multiply 45 x 1.5 = 67.5 grams of protein

As you can see, the average optimal protein intake range for this person would be 45–68 grams per day. Protein has 4 calories per gram, so this works out to 180–272 calories. See the daily protein-requirements page for more detailed information: [http://www.ketogenic-diet-resource.com/daily-protein-requirement.html](http://www.ketogenic-diet-resource.com/daily-protein-requirement.html)

**Carbohydrate Amounts:** The general goal is to stay under 60 grams of carbohydrate per day, but this is an individual goal. If you exercise a lot and have lots of muscle mass, you could probably eat more and stay in ketosis. If you are severely insulin resistant, diabetic or have other metabolic issues, you may need limit carbohydrate further to stay in ketosis. If weight loss is your goal and it’s not happening, lower your carbohydrate intake to below 30 grams. If you still have issues losing weight, keep protein grams toward the 1 gram/kg range, but don’t go below that. If that doesn’t work, reduce your fat intake until weight loss begins.

**Note on carb cycling:** Some people think that spiking carb intake every week is a good thing. I think it will temporarily put you in a gray zone of fueling, which may result in a net loss of muscle mass to make glucose for the brain when ketones are unavailable. Unless you exercise hard for more than three hours a day, you don’t need to “carb load.” See Jeff Volek’s work at Ohio State on endurance exercise while in ketosis.

**Fat Amounts:** Calories from fats and oils will make up the balance of your calories after subtracting protein and carb calories. In the next section, I’ve included some examples of how to figure out the number of fat grams.
Putting the Steps Together

**Example 1:** Our example person is overweight and would like to get down to an ideal weight of 150 pounds. Daily limits of 1800 calories, 30 grams of carb, and 1 gram/kg of ideal body weight for protein were selected. Remember, to get weight in kilograms, divide pounds by 2.2. Protein and carb have 4 calories per gram, and fat has 9 calories per gram. Here’s the math:

- **Protein:** \( \frac{150}{2.2} = 68 \) kilograms = 68 \( \times \) 1 gram = 68 grams or 272 calories
- **Carb:** 30 grams = 120 calories
  (protein and carb calories combined = 392 calories)
- **Fat** grams from balance of calories: 1800 total calories – 392 protein and carb calories = 1408 fat calories. To get grams of fat, divide fat calories by 9: \( \frac{1408}{9} = 156 \) grams of fat per day.

**Example 2:** This example person is at an ideal weight of 185 pounds. Daily limits of 2500 calories per day, 60 grams of carb, and about 1.5 grams of protein per kilogram of ideal body weight were selected. Selecting the higher end of the protein range is necessary because this person exercises for an hour every day. Here’s the math:

- **Protein:** \( \frac{185}{2.2} = 84 \) kilograms. 84 \( \times \) 1.5 grams = 126 grams of protein or 504 calories
- **Carb** grams: 60 grams = 240 calories
  (protein and carb calories combined = 744 calories)
- **Fat** grams from balance of calories: 2500 total calories – 744 protein and carb calories = 1756 fat calories. To get grams of fat, divide fat calories by 9: \( \frac{1756}{9} = 195 \) grams of fat per day.

I realize that there are ketogenic calculators on the web that can do the math for you. However, I think their results are suspect in that they don’t take into account individual variances, such as body knowledge, exercise habits and health conditions. I think it’s better for you to know how these numbers are reached so that you can tweak them to your individual needs.
General Guidelines and Rules

Here are some general guidelines and rules for following a ketogenic diet. You’ll get better results if you eat only what’s listed below and abide by the guidelines and rules. Everything else is flexible.

**Rule 1:** It’s best to eat only foods that are listed in this document.

If you decide to include other foods, check the label for carbohydrate count and double-check the per-serving size. The food should have 2 grams or less per serving for meat and dairy products, or 5 grams or less per serving for vegetables.

**Rule 2:** When you are hungry, eat your choice of the following foods. Once hunger subsides, stop eating.

- Meat of any kind: beef, lamb, veal, goat, wild game. Grass-fed meat is preferred, as it has a better fatty acid profile.
- Pork of any kind: pork loin, Boston butt, pork chops, ham. Watch for added sugars.
- Poultry of any kind: chicken, turkey, quail, Cornish hen, duck, goose, pheasant.
- Fish or seafood of any kind, preferably wild caught: anchovies, bass, calamari, catfish, cod, flounder, halibut, herring, mackerel, mahi mahi, salmon, sardines, scallops, scrod, sole, snapper, trout, and tuna.
- Canned tuna and salmon are acceptable, but check the labels for added sugars or fillers. (Exception: avoid breaded and fried seafood.)
- Shellfish: clams, crab, lobster, scallops, shrimp, squid, mussels, and oysters. (Exception: imitation crab meat. It contains sugar, gluten and other additives.)
- Whole eggs: these can be prepared in various ways, such as deviled, fried, hard-boiled, omelets, poached, scrambled, and soft-boiled.
- Bacon and sausage: check labels for carb counts (should be less than 2 grams per serving).
- Soy products such as tempeh, tofu and edamame are good sources of protein, but they are higher in carbohydrate, so track them carefully.
- Avoid whey protein and foods that include it until you reach your weight-loss goals. Whey protein spikes insulin.

Protein sources may be cooked in a microwave oven, grilled, baked, boiled, stir-fried, sautéed, roasted or fried with natural fats listed above (but do not add flour, breading, or cornmeal).
Rule 3: Eat one or two cups of salad greens every day and one cup of fibrous vegetables each day. (This rule is important for vitamin K intake).

Salad greens
Consume 1 to 2 cups a day. If it is a green leafy vegetable, you can eat it, and 1 cup is about a fist-sized portion.

- Cabbage (all varieties)
- Chives
- Greens (all varieties, including beet, collards, mustard, and turnip)
- Lettuce (all varieties)
- Parsley
- Spinach
- Kale
- Chard

Fibrous vegetables
Consume 1 cup a day. Can be either a single choice or a combination totaling 1 cup of the following:

- Alfalfa and bean sprouts
- Asparagus
- Bamboo shoots
- Bell pepper
- Bok choy
- Broccoli
- Brussels sprouts
- Cauliflower
- Carrot*
- Celery
- Cucumber
- Green beans (string beans)
- Jicama
- Mushrooms
- Okra
- Radishes
- Rhubarb
- Rutabaga (swede)
- Snow peas*
- Sprouts (bean and alfalfa)
- Sugar snap peas*
- Summer squash
- Tomatoes*
- Turnip
- Wax beans
- Water chestnuts
- Zucchini

*These foods are higher in sugar, so eat in their raw state and limit to half-cup amounts.
Rule 4: Use fats as recommended below.

The list below gives recommendations on fats to consume. You will note that vegetable oils are minimized and saturated animal fats are emphasized. This is to reduce your intake of polyunsaturated fatty acids. These fats are chemically unstable and highly inflammatory to the body.

**Fats to use for cooking and heating**
- Beef tallow, preferably from grass-fed cattle
- Butter (for low-temp frying). Try to find organic sources
- Chicken fat, organic
- Duck fat, organic
- Ghee (butter with milk solids removed)
- Lard, organic (make sure it is not hydrogenated)
- Olive oil, organic and cold-pressed
- Organic coconut oil, coconut butter and coconut-cream concentrate
- Organic red palm oil in small amounts (high in vitamin A)

**Fats to use for cold dressings**
- Avocado oil
- Macadamia oil
- Mayonnaise, contains soybean oil, so don’t go crazy. If you can make your own using olive, avocado or macadamia oil, that’s best. (Also, most brands have sugar in them, so read labels. Duke’s brand is sugar free.)
- Seed and most nut oils: almond oil, sesame oil, flaxseed oil, etc. These are high in inflammatory omega-6 fats, so limit amounts, and don’t heat them.
- Avoid vegetable oils as much as possible (corn, canola, grapeseed, safflower, sunflower, rice bran, etc.) These are very high in inflammatory omega-6 fats, and the production methods introduce toxins into the final products.

Rule 5: Eat the following foods in limited quantities.

**Cheese: up to 4 ounces per day**
- Carb count should be less than 1 gram per serving.
- Hard, aged cheeses such as Swiss and cheddar.
- Soft, such as brie, Camembert, blue, mozzarella, and goat cheeses.
- Whipped and block cream cheese with no added whey.
- Avoid processed cheeses such as Velveeta and high-carb types such as Gjetost.
**Dairy cream: up to 4 tablespoons a day**
- Check labels, avoid products that have whey added.
- Heavy cream, whipping cream, or sour cream.
- Avoid using half-and-half or milk, too many carbs.

**Fatty vegetables**
- Olives (black or green): up to 7 a day.
- Avocado, limit to one half avocado per day.

**Mayonnaise: up to 4 tablespoons a day**
- Less than 1 carb per serving. Duke’s and Hellmann’s are low-carb options.
- Check the labels of other brands.

**Other condiments**
- Lemon/lime juice: up to 4 teaspoons a day.
- Ketchup: buy low-sugar options, and limit to 1 tablespoon per day.
- Soy sauces: up to 4 tablespoons a day. Check the labels for carb content.
- Salad dressings: make your own from oil and vinegar (not balsamic) or mix sour cream and spices and thin with cream or water.
- Pickles: check the labels for carbohydrates and serving size.
  - Dill or sugar-free types: up to 2 servings a day.
  - Bubbies brand offers sugar-free pickles.
- Spices and stevia or other artificial sweeteners in small quantities.

**Snacks/baking**
- Pork rinds in small amounts (no more than 2 servings per day).
- Nuts and nut flours in small amounts (no more than 1 ounce per day).
- Avoid snacks made from whey protein; it spikes insulin and increases hunger.

**Beverages allowed**
- Almond milk, unsweetened (2 cups/day)
- Clear broth or bouillon
- Decaf coffee
- Decaf tea (unsweetened)
- Herbal tea (unsweetened)
- Water
- Flavored seltzer water (unsweetened)
Some quick snack ideas

- A slice of ham, turkey or salami, spread with cream cheese or mayonnaise, with a slice of cheese, and rolled up by itself or in a lettuce leaf
- Cooked bacon, tomato chunks and mayonnaise or cream cheese in a lettuce leaf
- Cooked steak, pork or chicken, cut into small pieces and mixed with mayonnaise, sour cream, cream cheese or avocado
- Deviled eggs, or hard boiled eggs sliced and spread with mayonnaise or sour cream
- Smoked salmon slices, spread with cream cheese mixed with dill and lemon juice
- Smoked salmon, mixed with scrambled eggs and topped with cream cheese
- Crab meat, mixed with cream cheese and lemon juice on cucumber slices
- Shrimp with minced onion, mayonnaise and dried dill on cucumber slices
- Beef jerky, cured without sugar (Organic Prairie brand is a good choice)
- Antipasto made from peppers, olives, prosciutto or salami and cheese cubes
- Tuna mixed with mayonnaise and cream cheese and piled on cucumber rounds
- Olives stuffed with feta cheese
- Roasted or raw nuts
- Dill pickles with cheddar cheese
- Pork rinds dipped in a mixture of full-fat sour cream and low-carbohydrate salsa
- Pork rinds dipped in ranch dressing or pesto sauce
- Jicama, radishes or turnip sticks with full-fat sour cream dip or ranch dressing
- Baked chicken wings (no breading) and blue cheese dip
- Celery stuffed with a cream cheese/blue cheese mixture
- Celery stuffed with cream cheese mixed with curry or any other spice you like
- Celery stuffed with almond butter
- Macadamia nuts fried in butter and sprinkled with cinnamon
- Pecans with thin slices of blue cheese
- Chunks of avocado and tomatoes mixed with mayonnaise
- String cheese and pepperoni slices
- Cucumber and tomato chunks with feta cheese and balsamic vinegar
- Sliced radishes spread with cream cheese and sprinkled with chives or spices
- Shrimp mixed with a low-carb Thai green-chili sauce and sprinkled with cilantro
- Crispy cooked bacon mixed with blue cheese with sour cream, with spices to taste (makes a good dip for raw broccoli and cauliflower or leftover cooked chicken)
- Mix a quarter cup of almond butter and a little heavy cream and sweetener
- Mix 2 ounces of cream cheese with 2 tablespoons heavy cream and sweetener
- Greek yogurt mixed with cardamom, ginger, cinnamon and sweetener
More on Specific Health Concerns

For those with specific health issues, my books offer detailed information on the following health conditions:

- [Fight Cancer with a Ketogenic Diet](http://www.ketogenic-diet-resource.com/cancer-diet.html)
- [Conquer Type 2 Diabetes with a Ketogenic Diet](http://www.ketogenic-diet-resource.com/diabetes-diet.html)
- [The Ketogenic Diet for Type 1 Diabetes](http://www.ketogenic-diet-resource.com/treatment-for-diabetes.html)