



GUIDE TO CALCULATING MACROS



WHAT ARE MACROS

Although the Keto Academy should have taught you everything you need to know about macros, we'll do a small refresher course:

The 3 main macronutrients that are relatable to a keto diet (and any diet, for that matter) are fats, proteins, and carbohydrates. All three of these nutrients have different effects on ketosis from their digestion and have consequent effects on blood glucose and hormones.

FATS

are 90% ketogenic and 10% anti-ketogenic, due to the small amount of glucose that is released in the conversion of triglycerides.

PROTEINS

are typically ranged at 45% ketogenic and 55% anti-ketogenic since insulin levels rise from over half of the ingested protein being converted to glucose.

CARBOHYDRATES

are of course 100% anti-ketogenic, as they raise both blood glucose and insulin.

Protein and carbohydrates will impact our bodies from transitioning into ketosis, but the most important thing to understand is how these nutrients are being utilized for energy. They are utilized through our metabolic pathways after we have eaten food.

You might be asking yourself what metabolic pathways are. It's pretty much the way our bodies handle the breakdown of fats, proteins and carbohydrates. When we eat:

FATS

go straight to the liver to be broken down into fatty acids and glycerol. They are then sent around the body to repair cells and make different chemicals/tissues in the body.

PROTEINS

are processed into amino acids through transamination and sent off to create neurotransmitters, non-essential amino acids, and other protein based compounds in our body. If we have any extra amino acids, they circulate and repair tissue or get stored as glucose.

CARBOHYDRATES

are broken down into glucose which is used as immediate energy. The spike in glucose levels will trigger insulin release, which then helps store the glucose as either glycogen or fat in our cells.

CALCULATING YOUR MACROS

Now, many are you may be asking where you should go to calculate your macros. Visit the website, go to the navigation menu and select Keto Diet > Keto Calculator. From there, you will find a page that asks you for information where you can find what you should be eating on keto.

WEIGHT AND BODY FAT PERCENTAGE

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First thing's first. We have to fill in the total body weight. It is vitally important that you don't lie to yourself – having the correct macros will be able to make you lose weight efficiently. Remember that eating too little calories can have a negative impact on your metabolism, which over time will work negatively against your weight loss.

You have the option here – you can fill in either pounds OR kilograms. You don't have to fill in both, as the calculator will convert one or the other for you. Second, we will need to fill in the body fat percentage. If you don't know your body fat percentage, then you can use the “visually estimate your body fat percentage” guide found on the page.

Here's what it'll look like:

YOUR MEASUREMENTS

Enter your total body weight in pounds or kilograms, and your total bodyfat percentage. If you don't know your bodyfat, [you can visually estimate your body fat percentage](#).

..... Enter Body Weight (lbs) Your Weight (in pounds)
..... Enter Body Weight (kgs) or Your Weight (in kilograms)
..... Enter Body Fat Percentage Your Bodyfat Percentage

BMR and TEF SECTION

You do NOT need to fill out any of the information in this section. This is purely a section to show you what I am using to calculate your final caloric intake. It's based on how many calories you burn, per day, at an absolute minimum. This is how many calories you burn, on average, for breathing, sleeping, and just being sedentary. You can ignore this section if you'd like, but I prefer to include it so that people can have a complete breakdown of how their macros are being calculated.

ENERGY EXPENDITURE

This will give us an idea of how much the minimum amount of calories your body will burn in a day. Here we are calculating the **Basal Metabolic Rate (BMR)** and the **Thermic Effect of Food (TEF)**. The BMR is simply the amount of calories we burn while our bodies are at rest, and the TEF is the amount of calories we burn from eating and digesting food. We are using the KatchMcCardle formula which takes lean body mass into account.

Net Weight (Pounds)	0
Net Weight (Kilograms)	0
BMR (Basal Metabolic Rate)	0
TEF (Thermic Effect of Food)	0
BMR + TEF	0

ACTIVITY LEVEL

In this section, the most common activity level is chosen for you: sedentary. If you're mainly sedentary, then keep this selection and move on to the next section.

Now, if you exercise, you will want to answer this question: Do you own a good quality heart rate monitor?

- If so, then **keep the activity level to sedentary**. We will fill out the exercise section in the next part. A good heart rate monitor will properly tell you how many calories you're burning per session. This is much more accurate than using an "estimate" based on the activity level factor.
- If not, **change the activity level** to what best describes you. If you read the section above, you might be asking why you can't just use the estimates that many apps give you.

Most apps grossly overestimate the amount of calories you burn during exercise, and this can negatively affect the macros in the end. You don't want to be over-consuming calories because you won't have the weight loss you are looking for.

ACTIVITY LEVEL

Based on your activity level, we will get a more realistic look at the average amount of calories your body burns per day.

<input type="radio"/>	Sedentary. Not much daily activity, little to no exercise.
<input type="radio"/>	Lightly active. Daytime walking. 1-3 hours a week of light exercise.
<input type="radio"/>	Moderately active. Active day job. Exercise 3-5 hours a week.
<input type="radio"/>	Very active. Intense exercise 6-7 days a week.
<input type="radio"/>	Extremely active. Training twice a day, very intense workouts.
Total Daily Energy Expenditure (kcal)	0

EXERCISE

Note: You should **ONLY** be filling this section out if you selected “sedentary” in the section above, do exercise, and own a good quality heart rate monitor. If you do not fit into all 3 of these categories, please go back and re-read the instructions.

According to your heart rate monitor, input the amount of calories burned per session. Try to be as accurate as possible. It may be tedious – but we only have to do this once.

EXERCISE

Do you exercise?

No	▼
No	
Yes	

WEIGHT (Deficit/Surplus)

Most people are doing keto for the great weight loss and health benefits. This section is where we find the total amount of calories we'll be eating. Keep in mind that it's very difficult to put muscle on while losing weight. You can do it (due to body adjustments) for about a month, if you're not a frequenter of the gym, but after that it will drastically slow down.

A healthy deficit range is 10-20%.

- **10%**. This should be chosen if you don't have much weight to lose (10-15 pounds to be at goal weight)
- **15%**. This is the medium range. If you're a little bit overweight and have between 15-30 pounds to lose, choose this.
- **20%**. This is for someone looking for faster weightloss. You'll have between 30-100 pounds to lose.
- **25%**. If you have more than 100 pounds to lose, then use a higher deficit. We have the fat stores to cover this deficit, and you'll be able to lose weight a little bit quicker.

I don't suggest going over 25%, as studies show that larger deficits can create a metabolic slowing. If your metabolism slows down, so will your weight loss.

If you're looking to gain mass, I suggest using a 10% - 15% surplus. Gaining mass usually means gaining fat and muscle at the same time, so try to keep that in mind. Once you have gained some muscle, you can go on a "cut" and reduce your calories to quickly lose the excess fat that you gained.

WEIGHT

Do you want to lose weight, maintain your weight, or gain mass? Choose your goals appropriately and only ever use a **10-15%** calorie surplus or **15-30%** deficit. Any higher of a deficit can have negative effects on your dieting, base on this study.

Deficit or Surplus Percentage	20
	%
<input checked="" type="radio"/>	Lose Weight
<input type="radio"/>	Maintain Weight
<input type="radio"/>	Gain Mass
Total Calories to Consume	0

PROTEIN & CARBS

Protein is something that's a bit iffy on keto. Eat too little and you lose muscle, eat too much and you aren't in ketosis. This is where you'll want to use a protein value that best describes you:

- **Sedentary:** 0.6-0.8g of protein per pound of lean body mass.
- **Lightly Active:** 0.8 – 1.0g of protein per pound of lean body mass.
- **Highly Active:** 1.0 – 1.2g of protein per pound of lean body mass.

Keep in mind that this is relating to weight lifting. If you're doing endurance exercises like running or yoga, you will only need a small amount of protein. I suggest 0.8g of protein per pound of lean body mass.

For carbs, you have a choice. We can keep this to average of 30 or go strict and take yourself down to 20. This is all personal choice, and most of the meal plan will stay in the range of both of these values.

CARBOHYDRATES & PROTEIN

It is highly recommended in a ketogenic diet that you keep your carb intake below **30g** per day. You want to stay within healthy protein ranges, in order to retain muscle mass or gain muscle mass depending on your goals. We suggest between **0.8g - 1.2g** per pound of lean body mass based on these studies if you want to **build muscle**. We suggest around 0.6g per pound of lean body mass if you want to **maintain muscle (DON'T BE WORRIED IF THIS IS RED)**. If you want to learn more about how the body uses these, check out macronutrients on a keto diet.

Daily Protein Ratio (g/lbm)	0.6
Daily Carb Intake (g)	20

WRITE DOWN YOUR MACROS

We're finished! **Write down these numbers** and keep them in mind. Normally you will have quite a high intake of fat, a moderate amount of protein, and very few carbs. If you use MyFitnessPal or another online food tracker, make sure you input these numbers into your goal values. If you can't get the app or program to get the exact numbers, come as close as you can.

Now, keep in mind that you may see a number you weren't expecting. Many people don't realize that they can eat so much food and be able to lose weight. The human body burns a LOT of calories just living and surviving.

Note: If you're starting off this diet as someone who was doing a starvation diet (*under 1,000 calories a day*) then please ease your way into it. Slowly increase your calories to the recommended amount over a 2 week period. This way, your metabolism will get used to the amount of calories you're eating and adjust itself accordingly. Doing this, you can expect slight weight gain at first – stick with it and be strong!

RESULT

Here are your nutritional macros. You should eat according to these, and try to spread your meals out during the day. Don't worry about getting exact numbers to the tee. You can afford a 5% fluctuation in either direction, but as long as you are close to your ranges it will balance itself out.

0	kcal. Daily Calorie Intake
0	g Net Carbs (0%, 0 kcal)
0	g Protein (0%, 0 kcal)
0	g Fat (0%, 0 kcal)