How to Count Macros

You may have never heard of macros before. Or you may have heard of it before and have some vague idea that people with physique goals often spend a lot of time in the kitchen prepping meals and measuring food on a scale… and subsequently post a lot of pictures on Instagram of them doing so (please, don't do this).

Or, you may be well aware of macros and have been counting and tracking them for some time now, in which case you can hit the tiny red X up in the corner of your window.

For the un-indoctrinated, you may be asking: what are macros and why do they matter?

Great question.

Macros, short for "macronutrients," are the three main energy-giving components of the diet: protein, carbohydrates and fat. On a gram per gram basis, fat provides nine calories per gram while protein and carbohydrates both provide four calories per gram. While this makes fat more "energy dense," meaning it provides more energy than an equivalent amount of any other macro, it does not mean fat is inherently more fattening in the context of a well-constructed diet.

Without diving into the finer details (those can be found in my diet series, Part 1, Part 2, Part 3), the macronutrient totals that you will find in your spreadsheet will account for the total energy you will be taking in each day, dependent on your overall goal. This allows us to simply track macros that add up to calorie totals, making the task of counting calories obsolete. Granted, any form of tracking (even macros) can be meticulous at times, but removing calories from the picture makes the task much simpler.

In your template, you will find macro totals listed per day and suggested guidelines per meal. It may look something like this:

Example Training	Fat	Carb	Fiber	Protein
	110	180	38	150
10 AM	25	10	x	30
3 PM	30	40	x	40
8 PM	55	130	x	80

This is just an example to illustrate a point. The highlighted meal would indicate that it comes after your workout in the Anabolic Window, which merits a larger percentage of your total calories.

So you have these values that will propel you toward your goal; how do we fill them with food?

If you remember the game Tetris, then you already have a basic idea of how to fill your macros. Any food has nutrition information that you will either find on its nutrition label (for prepackaged/processed foods) or by using the USDA Database (for things like produce/unlabeled products).

For example, using foods you can find on my Suggested Shopping List, you will see similar values for the following foods:

1 Serving (28 g) Almonds:	18 g Fat, 5 g Carb (3 g Fiber), 8 g Protein
1 Serving (1/4 lb) Beef:	17 g Fat, 0 g Carb (0 g Fiber), 22 g Protein
1 Serving (28 g) Hard Cheese:	9 g Fat, 0 g Carb (0 g Fiber), 7 g Protein
1 Serving (87 g) Broccoli:	0 g Fat, 4 g Carb (2 g Fiber), 2 g Protein
1 Egg (50 g):	4 g Fat, 0 g Carb (0 g Fiber), 6 g Protein

And so on and so on. In practice, this means finding the foods and amount of servings of those foods that will comprise your daily macronutrient goals.

I want you to notice a few things about that list:

1) Every food has a serving size, so don't make the mistake of assuming that one bag/container/bowl/etc. of something equals one serving. For instance, I took the macros from the broccoli example from the microwavable bag of frozen broccoli I have in my freezer. If I just looked at the nutrition panel and saw the macros, I could falsely think that the *entire bag* is accounted for with the macros listed. However, if you look to the left of the panel, you'll see the amount of servings included in each bag. For my frozen broccoli, that's 3.5 servings. So if I eat the whole bag, which I always do, then I multiply accordingly. The macros I input now become:

   3.5 Servings (305 g/whole bag) Broccoli:0 g Fat, 14 g Carb (7 g Fiber), 7 g Protein

   Don't fall into this trap; always be aware of how many servings are in each container/package/etc. of food vs how many you are actually eating and multiply accordingly. It doesn't make a whole heck of a lot of difference calorie-wise if you're eating something like broccoli, but tell me how far you get if you make that mistake with something like ground beef.

2) This amount of servings can be conveyed in weight (grams, lbs) or volume (cups). This is how we come up with the nutrition values of something that doesn't have a label. If you have something without a label that you want to program into your macros, you can search the specific food in the USDA Database and find the nutrition data based on varying sizes and servings. You can also customize the serving size based on what you currently have.

   For example, if you were to eat a banana and want to program that into your macros, you can search bananas on the USDA Database to come up with these numbers:

Basic Report: 09040, Bananas, raw

Return to Search Results   Full Report (All Nutrients)   Statistics Report   Download (CSV)   Print (PDF)

Nutrient values and weights are for edible portion.

Search nutrient table:

Nutrient	Unit	Value per 100 g	1 cup, mashed 225g	1 cup, sliced 150g	1 extra small (less than 6" long) 81g	1 small (6" to 6 7/8" long) 101g	1 medium (7" to 7 7/8" long) 118g
Proximates							
Water	g	44.91	168.55	112.36	60.68	75.65	88.39
Energy	kcal	89	200	134	72	90	105
Protein	g	1.09	2.45	1.64	0.88	1.10	1.29
Total lipid (fat)	g	0.33	0.74	0.50	0.27	0.33	0.39
Carbohydrate, by difference	g	22.84	51.39	34.26	18.50	23.07	26.95
Fiber, total dietary	g	2.6	5.8	3.9	2.1	2.6	3.1
Sugars, total	g	12.23	27.52	18.34	9.91	12.35	14.43

This is where measuring instruments come in handy. You can weigh your banana on a kitchen scale to find that it's 120 grams. According to the database, that roughly constitutes a "medium" banana, with ~0 Fat, 27 g Carb (3 g Fiber) and 1.5 g Protein. Therefore, these are the numbers you'd input into your macro tracking spreadsheet (which will be provided with your templates).

This example highlights the necessity of things like scales, measuring cups and measuring spoons. These tools will also come in handy for prepackaged foods, because you still have to know how much of those foods you're eating.

As a rule of thumb, it's always more accurate to judge by weight (grams, lbs, etc.) than by volume (cups, ounces, etc.) because the total amount used can vary widely based on how you fill the measuring cup. For example, you can fill a measuring cup with yogurt to the one-cup mark with lots of room for air, or you can smash in as much yogurt as humanly possible, and you could end up logging the same values for either scenario.

In order to be as precise as possible, these tools are a must. During periods of less strict dieting, such as a bodybuilder in their "offseason," you can afford to approximate measurements. When you get very advanced at tracking and have a better gauge on hunger signals, you can also implement an Ad Libitum (as much as you want) diet and still see results. But for anyone who is trying to encourage the maximal amount of progress, you're better off tracking your macros. The way to do that most accurately is with measuring instruments.

3) Notice I list the fiber values alongside each carbohydrate value. This is because when we talk about carbohydrate values, we're generally talking about "net" carbohydrate totals. In the United States, foods are listed with their total carb value, leaving it up to you to do the math to find the net carb total. Total carbs - fiber = net carbs.

Why subtract fiber from the total amount of carbs? Fiber isn't easily (if at all) digested by the body or used for energy, so it doesn't contribute to your total energy intake the way other carbs do.

So if we go back to the banana example, you will see that it actually has 27 - 3 = 24 g Carbs, which you will input on your macro tracker instead of the full 27 grams. Eating high fiber foods effectively allows you to eat a higher volume of food and adds to the satiating effect of any diet. If you read my diet series, you also know the implication of fiber and whole foods on TEF, which is a major consideration for anyone trying to diet optimally.

You want to keep track of fiber intake. In the example above, note how the daily target is listed (38 g), but the per meal goals aren't written in. This indicates that you simply need to hit or exceed that mark across the day, but it's not incredibly crucial as to when that fiber comes.

38 g/day is an effective minimum target for men; 25 g/day is a minimum for females.

Now that we have the principles down, let's put this into practice. Say it's a training day for the person in the example above. Here's how they can go about constructing each meal to reach their macro target. Keep in mind that the per-meal targets are just guidelines and don't have to

be hit to the T. What matters more is the macro totals over the course of the day, and even those don't have to be exact (but the closer, the better).

Meal 1 Targets:	25 g Fat, 10 g Net Carbs (X g Fiber), 30 g Protein
3.5 Serv. Broccoli:	0 g Fat, 7 g Net Carbs (7 g Fiber), 7 g Protein
1 Serv. (28 g) Almonds:	18g Fat, 2 g Net Carbs (3 g Fiber), 8 g Protein
1 Serv. (1/4 lb) Turkey:	8 g Fat, 0 g Net Carbs (0 g Fiber), 21 g Protein
Totals:	26 g Fat, 9 g Net Carbs (10 g Fiber), 36 g Protein

Meal 2 Targets:	30 g Fat, 40 g Net Carbs (X g Fiber), 40 g Protein
4 Serv. (340 g) Brussel Sprouts:	0 g Fat, 20 g Net Carbs (12 g Fiber), 12 g Protein
1 Serv. (1/4 lb) Ground Beef:	17 g Fat, 0 g Net Carbs (0 g Fiber), 22 g Protein
1 Serv. (28 g) Cashews:	12 g Fat, 8 g Net Carbs (1 g Fiber), 5 g Protein
1 Medium (180 g) Apple:	0 g Fat, 21 g Net Carbs (4 g Fiber), 1 g Protein
Totals:	29 g Fat, 49 g Net Carbs (17 g Fiber), 40 g Protein

Meal 3 Targets:	55 g Fat, 130 g Net Carbs (X g Fiber), 80 g Protein
6 Eggs, Hard Boiled (300 g):	24 g Fat, 0 g Net Carbs (0 g Fiber), 36 g Protein
Spinach (200 g):	1 g Fat, 3 g Net Carbs (4 g Fiber), 6 g Protein
1 Serv. (110 g) Cottage Cheese:	5 g Fat, 0 g Net Carbs (0 g Fiber), 14 g Protein
Avocado (100 g):	15 g Fat, 2 g Net Carbs (7 g Fiber), 2 g Protein
2 Large (260 g) Sweet Potatoes:	0 g Fat, 44 g Net Carbs (8 g Fiber), 4 g Protein
1 X-Large (150 g) Banana:	0 g Fat, 30 g Net Carbs (4 g Fiber), 2 g Protein
1 Cup (8 oz) Whole Milk:	8 g Fat, 12 g Net Carbs (0 g Fiber), 8 g Protein
1 Serv. (45 g) White Rice:	0 g Fat, 36 g Net Carbs (0 g Fiber), 3 g Protein
1 Fish Oil Pill:	1 g Fat, 0 g Net Carbs (0 g Fiber), 0 g Protein
Totals:	54 g Fat, 127 g Net Carbs (23 g Fiber), 75 g Protein

Daily Targets:	110 g Fat, 180 g Net Carbs (38 g Fiber), 150 g Protein
Daily Totals:	109 g Fat, 185 g Net Carbs (50 g Fiber), 151 g Protein

Presto! A successful training day meal plan in the books. All told, only 15 calories above the desired daily total. Not to mention, that's *a lot of food*. This example macro total works out to 2310 kcal, which is a feasible calorie level to diet on for many people. Do you think a diet with *this much* food will leave you hungry and prone to making bad choices? Didn't think so.

Note how I went a little over the protein total in the first meal and a little over the carb total in the second meal. I simply accommodated for that by removing a few grams of protein and carbs from the post workout meal.

You don't have to eat the exact same meals every day if you don't want to; you can opt to play Tetris every day with what you have in your pantry. But it's not inherently bad if you stick to a specific list of meals for a given time. I'm currently employing a similar practice, where I alter my

menu of meals on a week-to-week basis. Planning ahead and meal prepping (discussed later) clears up a lot of time and mental space to be more productive across the week instead of agonizing over food choices every day. In the end, the choice comes down to preference and willingness to spend more or less time in the kitchen throughout the week.

A final thing to notice in this example is that each meal roughly represents a "mash-up" of single-ingredient foods; there aren't any themed meals or pre-made dishes to be found in this meal plan. You can definitely afford to make those more gourmet style meals, so long as you account for the macros properly and don't mind the time commitment. But personally, and with many others, I have found that a "buffet-style" approach lands squarely in the middle ground between huge commitment and convenience.

Meal Prep

Meal prepping is a practice of preparing most or all of your meals in bulk on a single day to save you the trouble of having to cook before every single meal during the week. I have been meal prepping for quite a while in some form or fashion, and I notice the more consistent I am with it, the easier it is to progress.

There's something about having a meal already pre-made for you that just makes the process simpler. Your mind is already made up for you; you have your allotment of food to enjoy and when you're done, you're done. Knowing you have specific food already made for you strongly discourages overeating or choosing foods that don't fit the plan. Nobody likes to spend extra money when the don't have to.

I recommend picking one day a week where you do all of your shopping and cooking. I also recommend planning ahead and purchasing only the amount of food that will be necessary for the week. That way, when you ration out your food, you will have enough to cover a specific time period and nothing more. If you want to overeat and sneak more food in, it literally means forfeiting another meal down the road. Incentives matter, boys and girls.

A Word on "IIFYM"

Macro counting has exploded in popularity within the fitness community over the past decade or so. So much so that many people believe we can progress optimally by eating literally any kind of food, like cake and pizza, so long as the macro totals add up to our end goal. This approach is called If It Fits Your Macros (IIFYM), a name/acronym you've surely seen floating around social media at one time or another.

While this is great in theory, is easily marketable, and can be pulled off by some of the genetic freaks among us, the quality of a diet goes far beyond simple macronutrients. Considerations need to be taken to ensure a proper fatty-acid profile, sufficient micronutrient and fiber intake, and an optimal composition of amino-acids within protein. And as you may have guessed, Pop-Tarts and Pixie Stix don't exactly fit the bill in any of those categories.

Now, this is not to say that you don't have ANY form for "discretionary calories" from time to time. Provided you are getting the vast majority of your foods from the Suggested Shopping List, you can likely afford to eat some "junk food" a few times a month and still progress, so long as

the calories have been accommodated for and you don't have some kind of physique or bodybuilding show on the near horizon.

But it should be pretty clear by now that the bulk of your diet will be coming from whole, fibrous nutrient dense foods.