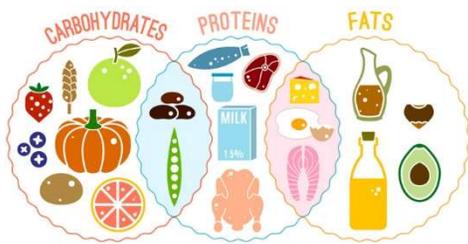


An Overview of Macronutrients



What are macronutrients?

Macronutrients are the three largest nutrients used and stored for energy in the body. Most people know them as carbohydrates, protein, and fat.

Carbohydrates are the preferred source of energy in the body, serving as the main driver of the central nervous system. They also provide the first form of fuel during high intensity workouts, helping to spare protein usage and maintain lean muscle tissue. The recommended daily allowances for carbohydrates for carbohydrates are as follows:

Sedentary Individuals: 40-50% of daily caloric intake

Moderately Active Individuals: 60% of daily caloric intake

Athletes/Highly Active Individuals: 70% of daily caloric intake

Carbohydrates can be broken down into two categories: simple and complex.

Simple carbohydrates quick-burning foods that break down quickly into sugars. These are beneficial for short bursts of energy, such as before a workout or during if the workout is endurance-based. Sources of simple carbohydrates include fruits, dairy, and refined grain products. Complex carbohydrates, on the other hand, are processed more slowly, as they have a higher fiber content, which means they can help to provide a feeling of satiety for a longer period of time. They are also higher in vitamins and minerals and the lower glycemic impact allows for blood sugar levels to maintain their stability throughout the day. Sources of complex carbohydrates include whole grains and starchy vegetables.

SIMPLE CARBS



ENERGY SPIKE

COMPLEX CARBS



CONTINUOUS ENERGY

The second group of macronutrients are proteins. Proteins play a number of roles in the body, including tissue structure, cell membrane structure, pathways in

metabolic/transport/hormone systems, enzyme make up, metabolic function, and acid/base balance to maintain pH neutrality in the body. The recommended daily allowances are as follows:

Sedentary Individuals: 0.36 grams of protein per pound of body weight

Recreationally Active: 0.45-0.68 grams of protein per pound of body weight

Competitive Athlete: 0.54-0.82 grams of protein per pound of body weight

Teenage Athlete: 0.82-0.91 grams of protein per pound of body weight

Body Builder: 0.64-0.91 grams of protein per pound of body weight

When restricting Calories: 0.364-0.91 grams of protein per pound of body weight

Proteins have a wide array of sources, including animal-based products, such as meat, dairy, and eggs, as well as vegan and vegetarian options. These might include legumes, lentils, soy products, nuts and seeds, whole grains and some vegetable sources. It is important to note that plant-based proteins are not considered to be “complete” as they lack the full profile of essential amino acids needed by the body. It is important for those following a plant-based diet to consume a wide variety of these foods in order to obtain the complete set of amino acids needed for optimal function.

The last macronutrient to be discussed is fat. Fats are a major source of energy reserves in the body in addition to protecting major organs, providing insulation, and transporting fat soluble minerals throughout the body. The recommended daily allowance for fats is as follows:

20-35% of your total daily caloric intake

Less than 10% of total daily calories should come from Saturated Fat

Food sources of healthy fats include nuts and seeds and plant-based oils, such as olive oil. Saturated fats should be limited and include oils, such as coconut oil, palm kernel oil, meats and dairy.

How to track macros?

Tracking macronutrients is a lot like the concept of calorie counting. Each macronutrient has a set calorie count. Protein and carbohydrates both contribute 4 calories per gram, while fats provide 9 calories per gram. While individual needs and goals vary, adults, in general, should aim for 45-65% of their diet to come from carbohydrates, 10-35% from protein, and 20-35% from fats. The percentages given in the recommended daily allowances should give a better idea of where individual percentages lie. From here, the calculations are as follows.

First, a total calorie goal needs to be set. According to the Academy of Nutrition and Dietetics, the most accurate way to determine metabolic rates is by using the Mifflin-St Jeor Formula. There are two steps to the formula. Completion of the equation gives a resting metabolic rate. Once this value is obtained, multiplying by the activity factor will give an accurate depiction of daily metabolic needs. If looking to lose weight, a daily calorie deficit of 500 calories is appropriate.

| TABLE: Mifflin-St. Jeor Formula to Estimate Resting Metabolic Rate (RMR) |
|--|
| <i>Men: RMR = (9.99 x weight) + (6.25 x height) - (4.92 x age) + 5</i> |
| <i>Women: RMR = (9.99 x weight) + (6.25 x height) - (4.92 x age) - 161</i> |
| <i>Equations use weight in kg and height in cm.</i> |
| <small>Source: Academy of Nutrition and Dietetics Nutrition Care Manual.</small> |

| Activity Multipliers | |
|-----------------------------|--|
| 1.2 | Sedentary; little or no exercise |
| 1.375 | Lightly Active; light exercise 1-3 days per week |
| 1.55 | Moderately Active; moderate exercise 3-5 days per week |
| 1.725 | Very Active; hard exercise 6-7 days per week |
| 1.9 | Extremely Active; hard daily exercise |

Using this total for daily caloric intake, macronutrient percentages can be determined. This is done by calculating out the following:

Carbs: Calories per day (1,600) x percentage of calories from carbs (.50) / Number of calories per gram in carbohydrates (4) = 200 grams of carbs per day

Protein: Calories per day (1,600) x percentage of calories from protein (.20) / Number of calories per gram in protein (4) = 80 grams of protein per day

Fat: Calories per day (1,600) x percentage of calories from fat (.30) / Number of calories per gram in fat (9) = 53 grams of fat per day

For calculation purposes, a caloric goal of 1,600 was used.

What are the benefits of tracking your macros?

Counting macros is an effective way to approach weight loss or allot caloric spending appropriately. Unlike calorie-counting, macronutrient counting is a much more balanced approach and ensures that individuals are getting the appropriate nutrition for their individual needs, goals, and activity levels. By ensuring the right allotment of protein, fat, and carbohydrates, individuals are also more likely to strike a better balance with assorted micronutrients, as well, providing better nutrition as a whole. In addition, counting macros allows for a sense of responsibility over one's own health.

Meeting a multitude of nutritional needs, rather than one calorie goal, takes more planning and creativity, which leads to a greater feeling of success in the long run.

Are there any downsides to counting macros?

Counting macronutrients can be tedious. As depicted earlier, there is a lot of calculation involved and trial and error is common for beginners. Additionally, as individuals meet their goals, their needs may need to be recalculated to meet new ones.

Here's the good news. We have already done all of the work for you! Our meals are already measured out and balanced with your goals and activity levels in mind. We offer two different plans (Lifestyle and Active) with a variety of meal options to choose from! And with new meals rotated in regularly, you'll never get bored! Check out the menu (psst...there is a vegan one, too!) and place your preorder by Wednesday each week for Saturday pick up or delivery.

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