



# MACRONUTRIENTS WHAT ARE THEY?



*Education is key. Therefore, we're going to do all we can to prepare you for the results of your genetic profile. It all starts with the basic components, your macronutrients.*

## WHAT ARE MACRONUTRIENTS?

Macronutrients (carbohydrates, proteins & fat) are the three basic food groups required by the human body in large amounts. Macronutrients supply us with energy, in addition to essential vitamins and minerals, and are the building blocks of all meals and snacks.

Standard ratios of each are listed, however, not everyone falls into the “standard” range. The only way to know for sure and achieve optimal nutrition is to have a DNA Test. If you would like one, we can help.

When consumed together, macronutrients work together as a powerful team to positively impact a variety of bodily functions, including: the absorption of nutrients, insulin production, fat storage, satiety, and other factors important to achieving optimal health.

When you adhere to your macronutrient ratios, you will provide your body with the nutrition it needs to maintain and repair major organs, boost energy and mood, moderate cholesterol levels, build lean muscle, balance blood sugar levels, feel fuller longer, control food cravings & much more.

## PROTEIN (15-20% OF CALORIES)

Protein is a critically important component to every cell of the human body. In fact, your DNA is what instructs the cells in your body to create the proteins that are essential to your existence.

The human body uses protein to build and repair tissue. Hair and nails are mostly made of protein. We also use protein to make bones, enzymes, hormones, and other body chemicals.



It is an important building block of skin, muscles, cartilage, and blood. Unlike carbohydrates and fat, the body does not store protein, and therefore has no reservoir to draw on when it needs a new supply.

But how much is required? The answers to that question is truly unique to every individual and will be revealed in your genetic profile. This is one example where one size does not fit all.

## CARBOHYDRATES (45-65% OF CALORIES)

Carbohydrates are the body's most readily available energy source and an essential part of a healthy diet. On a chemical level, carbohydrates contain carbon, hydrogen, and oxygen. Once consumed, they break down, are converted to glucose, and transported via the bloodstream to be used by every cell in the body.

There are two main categories of carbohydrates:

1. Complex Carbohydrates (Fiber & Starches)
2. Simple Carbohydrates (Sugars)

In general, it is always best to consume healthier complex vs simple carbohydrates. They provide the body with essential nutrients like vitamins, minerals, and fiber. Since complex carbohydrates take longer for the body to digest, they promote satiety and a feeling of fullness.

In addition to immediate and stored energy, other key benefits of consuming a diet rich in complex carbohydrates include: normalizing blood sugar levels, preserving lean muscle mass, promoting digestive health, increasing heart health, preventing diabetes, and positively impacting brain function, mood, and sleep patterns.

Good sources of complex carbohydrates include fruits with skin, vegetables, berries, brown rice, 100% whole grain breads and pasta (if you can tolerate gluten), peas, beans, nuts, legumes, quinoa, oats, unsweetened dairy products, and more.

## FATS (20-35% OF CALORIES)

Like carbohydrates and protein, the consumption of healthy fats is critically important to a healthy life. A number of biological functions depend on fat. It is utilized by every cell in the human body. Contrary to popular beliefs, consuming the right kinds of healthy fats - in their ideal proportions - will NOT make you "fat" or cause you to gain excess weight. The key is understanding what types & quantities of these essential macronutrients are best for you.

Advancements in genetic sciences have revealed that different genotypes respond better to different types of healthy fats. This information will help you choose the right fats for YOU and can actually help keep you from gaining or maintaining stubborn weight. It's true!

When considered in combination with genetic testing, you can begin to make changes to the food & fat choices best suited to your personal biology. If you are actively working to change your existing body composition, we encourage you to take this section of the report very seriously!