

## MACRONUTRIENTS: WHAT ARE THEY?

Macronutrients are nutrients we need in large quantities that provide our bodies energy for many functions.

### ACCEPTABLE MACRONUTRIENT DISTRIBUTION RANGE (AMDR)

**Carbohydrates** 45-65% of total daily calories

**Protein** 10-35% of total daily calories

**Fat** 20-35% of total daily calories

### PROTEIN

Proteins are complex molecules that are made of amino acids. Protein is a major structural component to the human body and supports skin, hair, muscle, and other tissues. Protein facilitates cell growth and repair.

Consuming adequate protein helps with satiety, weight maintenance, muscle growth, and expediting recovery from exercise or injury. Protein rich foods include meat, poultry, fish, dairy, eggs, legumes, nuts & seeds, grains, and soy. Protein offers 4 calories to the 1 gram.

### CARBOHYDRATES

Carbohydrates are sugar molecules and are the preferred source of energy. They can be converted to glucose and used as energy right away, or reserved for later.

Carbohydrates support essential functions for survival such as blood circulation and breathing, but also provide fuel for brain function and physical activity. Carbohydrate foods include whole grains, fruits, vegetables, legumes, dairy, and sugars. Carbohydrates offer 4 calories to the 1 gram.

### FATS

Fats are the most concentrated energy source made up of fatty acids. Types of fats include saturated, unsaturated, and trans fats. Fats provide energy, aid nutrient absorption, promote healthy skin and hair, and contribute to the structure of cell membranes.

Foods high in fat include nuts & seeds, fatty fish, avocados, oils, dairy, fatty cuts of meat, and egg yolks. Fat offers 9 calories to the 1 gram.

### THE 4TH MACRO

Did you know alcohol is technically a macronutrient? Alcohol provides 7 calories to the 1 gram. It is a very concentrated source of calories with virtually no nutritional value. Unlike the other macronutrients, we can survive without alcohol.

### THE BOTTOM LINE

Despite what some dieting trends may lead you to believe, we need all protein, carbohydrates, and fat to survive and function optimally. They each serve their own important functions in the body.

Often times, carbs and fat get a bad wrap because of the ultra-processed foods that are associated with these two nutrients. This is where it is important to note the micronutrient composition to determine how nutritious a food is.

For example, a slice of whole grain toast topped with avocado may offer more carbs and fat than a donut depending on the portion, but the toast offers Potassium and Vitamin C (among other nutrients) where the donut does not. The donut is more calorie dense, where the toast is more nutrient rich.

**AVOCADO  
TOAST**



**Calories** 230  
**Carbs** 27 grams  
**Fat** 12 grams  
**Protein** 6 grams

**GLAZED  
DONUT**



**Calories** 200  
**Carbs** 22 grams  
**Fat** 12 grams  
**Protein** 2 grams