



The 3 Macronutrients

1. Carbohydrates

Purpose: Primary energy source for the brain, muscles, and organs.

Types of Carbohydrates:

Simple Carbohydrates: Quick energy; found in fruit, dairy, and refined sugars.

Complex Carbohydrates: Longer-lasting energy; found in whole grains, legumes, vegetables.

Fiber is also a type: but your body handles it very differently than other types of carbs, there are two categories of fiber: soluble & insoluble

Soluble Fiber: Forms a gel, helps lower cholesterol & stabilizes blood sugar (oats, beans, berries). Insoluble Fiber: Adds bulk, supports digestion & bowel regularity (whole grains, vegetables).

Role in Nutrition: Provides glucose for energy, supports digestion, fuels metabolism, optimizes gut health from whole plant foods.

2. Proteins

Purpose: Builds and repairs tissues, muscles, enzymes, and hormones.

Types of Protein:

Complete Proteins: Contain all 9 essential amino acids (soy, quinoa, buckwheat).

Incomplete Proteins: Missing some amino acids but balanced through variety (beans, nuts, seeds, whole grains).

Complementary Proteins: Plant-based foods that form complete amino acid profiles together (beans + rice, hummus + whole grain bread).

Role in Nutrition: Supports immune function, muscle recovery, hormones, enzymes, and cellular structure.

3. Fats

Purpose: Long-lasting energy, hormone production, nutrient absorption, and brain health.

Types of Fat:

Unsaturated Fats: Heart-healthy; found in nuts, seeds, avocados, olives.

Monounsaturated Fats: Reduce inflammation; found in avocado, almonds, peanuts.

Polyunsaturated Fats: Essential omega-3 and omega-6 fats (flaxseed, chia, walnuts).

Saturated Fats: Typically raise cholesterol; mostly in animal products and tropical oils.

Trans Fats: Artificial fats that increase inflammation—avoid completely.

Role in Nutrition: Supports cell structure, brain health, hormone balance, and absorption of vitamins A, D, E, and K.

Daily Macronutrient Recommendations

Carbohydrates: 45–65% of total daily calories

Best sources: fruits, vegetables, whole grains, legumes.

Fiber: Women: 25g per day | Men: 38g per day

Higher is better when from whole plant foods.

Protein: 10–35% of total daily calories

General guide: 0.8–1.0 g per kg of body weight (higher for athletes or recovery).

Fats: 20–35% of total daily calories

Focus on unsaturated fats from nuts, seeds, avocados, and olives.

Balanced nutrition comes from whole plant foods such as fruits, vegetables, whole grains, legumes, nuts, and seeds—providing high-quality sources of all three macronutrients.