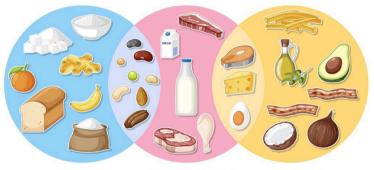
# Understanding Macronutrients & Micronutrients



Carbs

**Proteins** Fats

# What are macronutrients?

### Macronutrients: The Energy Providers

Macronutrients are the nutrients that our bodies require in larger amounts. They provide us with energy needed for daily activities and maintain our bodies structures and systems. There are three types of macronutrients: **Carbohydrates, proteins, and fats** 

### **Carbohydrates:**

The bodies primary energy source. During digestions, carbs are broken down into glucose (sugar), which is used by the body for energy. Sources of carbohydrates include fruits, vegetables, and grains.

Examples:



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#### **Proteins:**

Essential for building and repairing tissues, muscles, and organs. Proteins also support immune function and enzyme production. Sources: Animal (e.g. meat, eggs, dairy) and plant-based protein (e.g. beans, lentils, tofu).

Examples:



#### Fats:

Necessary for energy storage, hormone production, and the absorption of certain vitamins. Some example of fats are olive oil, fatty fish, avocados, nuts and seeds.

Examples:





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Source: Beshgetoor et.al., (2012). Wardlaw's perspectives in nutrition. McGraw-Hill Education.

# Understanding Macronutrients & Micronutrients

## What are micronutrients?

## **Micronutrients: The Regulators**

Micronutrients are vitamins and minerals that the body needs in smaller amounts. There are 13 essential vitamins and 14 essential minerals, which are necessary for proper functioning as our bodies cannot produce them and must obtain them from external sources.

**Role:** Each micronutrient has a unique function such as supporting metabolism, immune function, bone health, growth and development, cognitive function, hormone balance, or protecting cells through their antioxidant properties.

## Vitamins:

Organic compounds that regulate various body functions. Some examples of vitamins include Vitamin C (vision and skin health), Vitamin A (wound healing) and Vitamin D (bone health and calcium absorption)

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### Minerals:

Inorganic elements that help regulate metabolism and support cellular function. Some examples of minerals include iron (oxygen transport), calcium (bone health), and magnesium (muscle and nerve function).

Examples:

Fe Ca Mg



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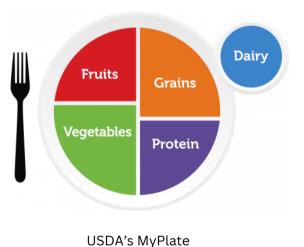
## Why Does This Matter?

It is essential to have a variety of different foods to provide the body with adequate amounts of both macronutrients and micronutrients for optimal functioning.

## How do I get enough?

A helpful tool for balancing your diet is USDA's MyPlate. It's a practical guide to help the general public build balanced meals with the recommended proportions of food groups. MyPlate serves as a visual guide to show the proportions of different food groups that make up a nutritious plate, emphasizing variety and portioning.

Try to include all five food groups in your meals or add any missing components as snacks throughout the day. The goal is to help you meet your nutrition needs with a simple, visual guide.



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Future editions will take a deeper look at each macronutrient, highlighting food sources, and ways to include them into meals from the culinary centers.



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