



Remember the Pyramid of Things Worth Worrying About from Week 1? Now it's time to talk about the second level:

Carbohydrates, Proteins and Fats.

Also known as "Macronutrients".

Macro means "large" and these nutrients are needed in large amounts if you want to fuel a marathon.

Unfortunately, there is a lot of misinformation about these nutrients, so let's set the record straight:

What exactly are carbohydrates, proteins, and fats?

They are not food groups, they are different types of molecules found in food.

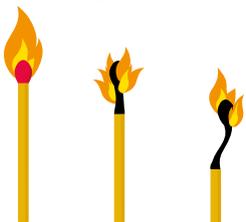
And when your body uses those different molecules to do different things.

Carbohydrates

Carbohydrates are molecules that your body can break down easily for energy. Carbohydrate molecules exist on a spectrum from simple sugars to complex starches.



A simple sugar has a simple molecular structure that can be broken down really quickly to release energy. Think of this like burning a match for light: it catches flame easily but the light won't burn for very long.



A starch has a more complex molecular structure that takes longer to break down. It releases energy like a candle - slowly and steadily until it's used up.



Fats

Fats are also broken down by the body for energy. If complex starches are like a candle, then fat is like coal: burning slowly and steadily giving off lots of heat.



Fat molecules also come in different types. They are made up of fatty acids which can vary in length, and they also vary in whether they are "saturated" with carbon molecules or not.

Saturated fats tend to come from animals and are solid at room temperature e.g. butter



Unsaturated fats tend to come from plants and are liquid at room temperature e.g., olive oil



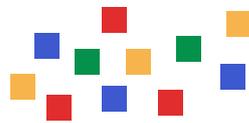
It's not fair to say any one type of fat is "good" or "bad" because food is more complicated than that. But it's recommended that most of your fat intake comes from unsaturated fats.

Proteins

Proteins are different to carbohydrates and fats in that their primary role is not to give energy. Instead, they are the building blocks of your body.



Proteins are made of long chains of molecules called "amino acids"



Your body breaks down those chains into individual amino acids



And then reforms those amino acids into new proteins that it needs

Your body can get protein from plant or animal sources and both are absolutely fine.

If you take in more protein than you need, it will be broken down for energy, so "enough protein" is better than "high protein".