Health-Full Eating & Nutrition

Macros vs Micros

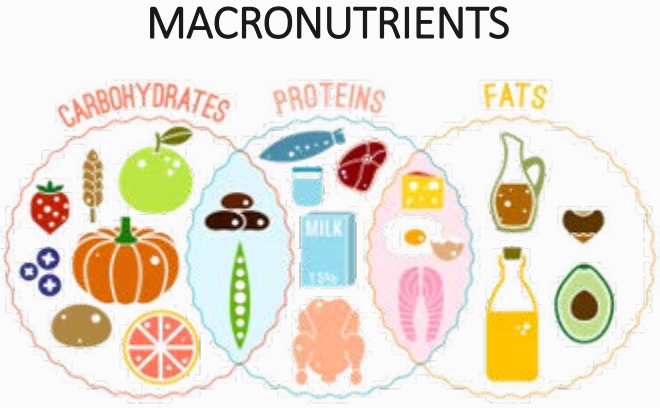
Macronutrients

Macronutrients are the nutrients that your body needs in significant amounts. The three main macronutrients are carbohydrates, proteins and fats. Macros are responsible for not only energizing the body, but many other critical functions like digestion, hormone production, and cell formation. The body uses each macronutrient differently.

Carbohydrates

During the digestion process carbohydrates are broken down into glucose, the main energy source for the body. Along with providing the body with energy, certain carbs help build amino acids that aid in the making of proteins. Not all carbs are the same. Some carbs have a simple molecular structure and others are more complex.

-Simple carbohydrates are made with one or two sugar molecules making it easy to break down into glucose during digestion. This makes simple carbs good for short term spikes in energy. Food like table sugar, syrup, honey, and fruit are sources of simple carbohydrates.



-Complex carbohydrates are made with longer chains of sugar molecules which take more time to break down into glucose. Non-refined complex carbs contain fiber which is not broken-down during digestion and is good for the intestinal tract. Foods like rice, pasta, potatoes and corn are sources of complex carbohydrates.

(continued on next page)

Protein

To repair and rebuild new tissue the body needs protein. Protein also protects your body's muscles from wasting away in a process called atrophy. Animal products like chicken, fish, beef and eggs are rich sources of protein. Plant based protein sources include lentils, nuts and seeds.

Fat

Fat is responsible for hormone production, energy storage, the absorption of fat-soluble vitamins and helps fortify cell membranes, most notably for our neurons in our brains. Fat comes in three types: trans, saturated, and unsaturated.

-Trans fat should be limited or avoided. It is processed fat by hydrogenating or adding hydrogen to unsaturated fat. It's found in food like shortening, baked goods, doughs and fried foods.

-Saturated fat at the molecular level has no double bonds because it is saturated in hydrogen. Saturated fat comes from animal products like pork, beef, lamb and cream. If eaten too much saturated fat can increase cholesterol and risk for heart disease. It is recommended that just 5-6% of your daily caloric intake come from saturated fat.

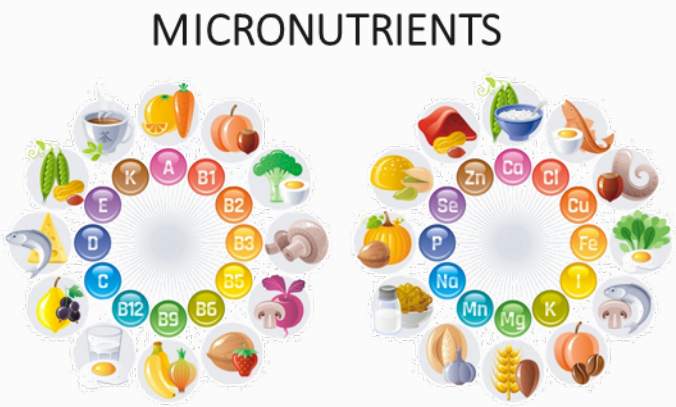
-Unsaturated fats have at least one double bond in the molecular make up causing bends and making it harder to structure together. For that reason, unsaturated fats are usually found in liquid form when at room temperature. These are considered the healthy fats because the can decrease your risk for heart disease. Unsaturated fats are found in olives, seeds, canola oil, and fatty fish.

Micronutrients

Vitamins and minerals are the two types of micronutrients. We need these micronutrients in small amounts for proper body and organ function. There are water soluble vitamins (dissolved by water) and fat-soluble vitamins (dissolved by fat cells). Some water-soluble vitamins include Vitamin C and Vitamin B variants. Fat soluble vitamins include vitamin K, vitamin D, and vitamin A.

Our body doesn't make vitamins and minerals naturally, so we need to eat foods or take supplements that contain high amounts.

Micronutrients are so important to our bodies. They help us heal faster, turn food into energy, boost our immune responses and repair damaged cells.



Macronutrients and micronutrients are both very important to a healthy functioning body. Make sure to get a good variety of foods on your plate with every meal to get a good vitamins and minerals. You should always look to get your nutrients from food first, but in some cases your physician may recommend nutrition supplementation.

References:

https://www.rwjbh.org/blog/2019/march/a-breakdown-of-macros-and-micros/
https://www.nal.usda.gov/fnic/macronutrients
https://www.health.harvard.edu/staying-healthy/micronutrients-have-major-impact-on-health