

MACRONUTRIENTS



MACRONUTRIENTS ARE THE MAIN NUTRIENTS IN THE FOOD WE EAT. There are three; carbohydrates, proteins, and fats. Most foods contain a different combination of the three macronutrients. Each are important to eat and all are essential for our bodies.



CARBOHYDRATES

WHAT IS A CARBOHYDRATE?

A carbohydrate is a naturally occurring molecule made up of carbon, hydrogen, and oxygen. These foods are converted into glucose (a form of sugar) in our bodies. All carbohydrates are technically sugars, but we aren't just talking about sweet foods. Words like starch or sugar refer to carbohydrates.

WHAT DO CARBOHYDRATES DO FOR US?

Carbohydrates are our bodies preferred source of energy. Our bodies reserve a bit of energy (glycogen) from carbohydrates as well. Carbohydrates are also needed for: your brain, muscle contraction, and cell structure.

WHICH FOODS HAVE CARBOHYDRATES?

Fruits, vegetables, potatoes, rice, corn, and grains based foods like bread, pasta, pastries, and cereal.

CARBOHYDRATES

WHAT TYPES OF CARBOHYDRATES ARE THERE?

- Simple carbohydrates are smaller molecules and are absorbed quickly into our bodies. These include foods like table sugar, honey, fruit juice.
- Complex carbohydrates take a little longer to be absorbed. Foods that have complex carbohydrates often have other nutrients too like B vitamins, folate, vitamin E, and magnesium. Grains, legumes (beans), and vegetables all are considered complex carbohydrates. These foods often have dietary fiber too!



If you have diabetes, it's important to choose complex carbs, they are absorbed much more slowly than simple carbs. This helps your body manage your blood sugar.



CHOOSE MORE

Complex carbohydrates with fiber: whole grains, squash, sweet potatoes, chickpeas, and brown rice.
Foods with naturally existing simple sugars; bananas, apples, carrots, beets, and plain yogurt.

CHOOSE LESS

Simple carbohydrates with added sugars: sweet desserts, sweetened yogurt, sugar sweetened beverages, beer, chips, French fries, and chips. These foods are low in nutrient density, meaning they lack ample vitamins, minerals, and fiber.

MACRONUTRIENTS (CONT.)



PROTEINS

WHAT IS A PROTEIN?

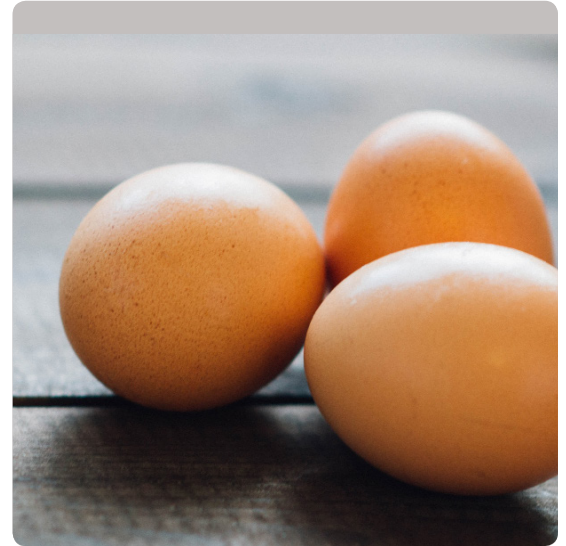
Proteins are commonly referred to as building blocks, or amino acids. Some of which our body can make, some we must obtain through diet.

WHAT DO PROTEINS DO FOR US?

Protein is needed to rebuild cells. This includes cells in your muscles, bones, skin, hair, and other body tissue. Protein carries oxygen through our bloodstream.

WHICH FOODS HAVE PROTEINS?

Legumes, nuts, seeds, whole grains, poultry, red meat, dairy, and some vegetables (broccoli, asparagus, artichokes, to name a few).



HOW MUCH PROTEIN SHOULD I EAT?

This depends on your body, generally about 4 servings of protein rich foods per day is sufficient for most people. If you're you exercise for more than 3 hours a week, add an extra serving. If you are healing from surgery, add an extra serving. If you are under 25 years old, add another serving!

CHOOSE MORE

Legumes (beans and peas. Nuts, seeds, whole grains, fish, and meats that have not been cured or processed like beef, pork, or lamb.

CHOOSE LESS

Processed meats like hot dogs, sausage, deli meats, and bacon.

MACRONUTRIENTS (CONT.)



PROTEINS

THERE ARE many ranchers and producers in Central Oregon

Go to to [HDFFA.org/find-local-food](http://hdffa.org/find-local-food) to source meats & dairy products

| | servings | grams of protein/serving | servings |
|------------------------|----------|--------------------------|--------------|
| DAIRY | | | |
| Cheese | 1 oz | 6 grams | 1 serving |
| Yogurt | 6 oz | 11 grams | 1.5 servings |
| Milk | 8 oz | 8 grams | 1 serving |
| MEAT & EGGS | | | |
| Chicken or Turkey | 3 oz | 25 grams | 3 servings |
| Beef | 3 oz | 24 grams | 3 servings |
| Pork | 3 oz | 22 grams | 2.5 servings |
| Salmon or Tuna | 3 oz | 14 grams | 2 servings |
| Eggs | 1 egg | 6 grams | 1 serving |

PLANT BASED PROTEINS

THESE FOODS tend to be more affordable and shelf stable.

| | | | |
|-----------------------------------|----------|----------|--------------|
| NUTS & SEEDS | | | |
| Peanuts | 1 oz | 7 grams | 1 serving |
| Almonds, Pistachios | 1 oz | 6 grams | 1 serving |
| Sunflower Seeds | 1 oz | 6 grams | 1 serving |
| VEGETABLES | | | |
| Spinach | 1 cup | 5 grams | 1 serving |
| Mushrooms | 1 cup | 5 grams | 1 serving |
| Asparagus | 1 cup | 3 grams | .5 servings |
| LEGUMES (BEANS & PEAS) | | | |
| Tofu | 1/2 cup | 10 grams | 1.5 servings |
| Lentils | 1/2 cup | 9 grams | 1.5 servings |
| Beans (black, kidney, pinto) | 1/2 cup | 6 grams | 1 serving |
| Chickpeas | 1/2 cup | 6 grams | 1 serving |
| GRAINS | | | |
| Whole wheat bread | 2 slices | 7 grams | 1 serving |
| Whole wheat pasta | 1/2 cup | 3 grams | .5 serving |
| Quinoa | 1/2 cup | 4 grams | .5 serving |
| Oats (steelcut or rolled) | 1/2 cup | 6 grams | 1 serving |

FATS

WHAT IS A FAT?

Fats are molecules made up a glycerol group and fatty acids. Sometimes called "lipids". Like proteins, there are some fats the body can make. Others we must consume in our diet, these are called essential fatty acids.

WHAT DO FATS DO FOR US?

Fat is our bodies preferred way to store energy. Fat is used to create cell walls. Many vitamins and minerals need fat molecules to be absorbed through the digestive system. Fats are necessary for growth, development, and recovery.

WHICH FOODS HAVE FATS?

Oils, butter, cheese, milk, meat, poultry, nuts, and seeds.

WHAT TYPES OF FATS ARE THERE?

Unsaturated fats: These fats are typically from plant sources, they can be found in foods like olive oil, cashews, avocados, and salmon. They have positive health benefits associated with consuming them. Essential fatty acids (omega-3 and omega-6) fall into this category. Saturated fats: These fats are typically from animal sources. They can be found in butter, bacon, beef products, processed meats, coconut oil, and more. These fats are solid at room temperature.

WHAT THE DEAL WITH CHOLESTEROL?

Consuming high levels of dietary cholesterol can be associated with poor heart health. Cholesterol is used for vitamin D metabolism, hormone regulation, and parts of digestion. Our bodies can make cholesterol without consuming it from diet.

CHOOSE MORE

Unsaturated fats, fats from plants, fats that are close to their natural state (almonds, avocado, salmon).

CHOOSE LESS

Saturated fat. Eating some saturated fat is okay, try to limit heavy meat consumption and processed fats like fats found in foods like donuts, cakes, cookies, chips, and snack food.

VITAMINS & MINERALS

MOST VITAMINS AND MINERALS can be sourced from diet. Though since most diets are not perfect, a multivitamin can help fill the gaps.

CHOOSING VITAMIN & MINERAL RICH FOODS

- Naturally colorful
- Eat fresh!
- Consume skin or peel of food if edible
 - apples, beets, carrots, cucumber, pears, potatoes
- Close to natural state
 - fresh strawberries vs strawberry jam
- Cook lightly
 - some nutrients can be lost in water or degraded when overcooked. Choose roasting, grilling, or sautéing when possible instead of boiling or frying.

