



# Factors that Promote a Healthy Weight: Protein

Protein is a macronutrient that provides 4 calories per gram. Protein is essential for building and repairing body tissues, promoting normal growth and development, and aiding in essential hormone and enzyme function.

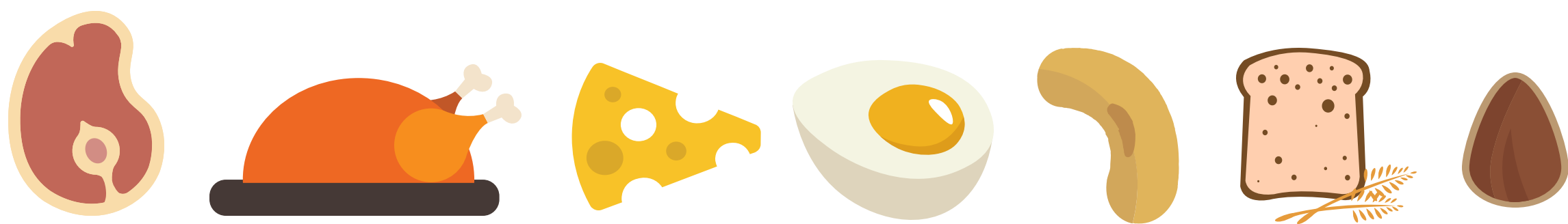
Protein is made up of smaller components called amino acids. There are 9 amino acids that cannot be produced by the body, making it essential for them to be consumed via diet. When a protein source is "complete" it means that it contains all of the 9 essential amino acids that the body needs. When a protein is incomplete, it means that it is missing 1 or more of the essential amino acids in its structure.

## Protein can be found in both animal and plant-based food products:

### Animal-Based Protein Sources:

- Meat
- Poultry
- Fish
- Dairy Products
- Eggs

Animal-based sources of protein are **complete** proteins because they provide all 9 essential amino acids.



### Plant -Based Protein Sources:

- Whole grains
- Soy
- Beans and legumes
- Tempeh
- Nuts
- Seeds

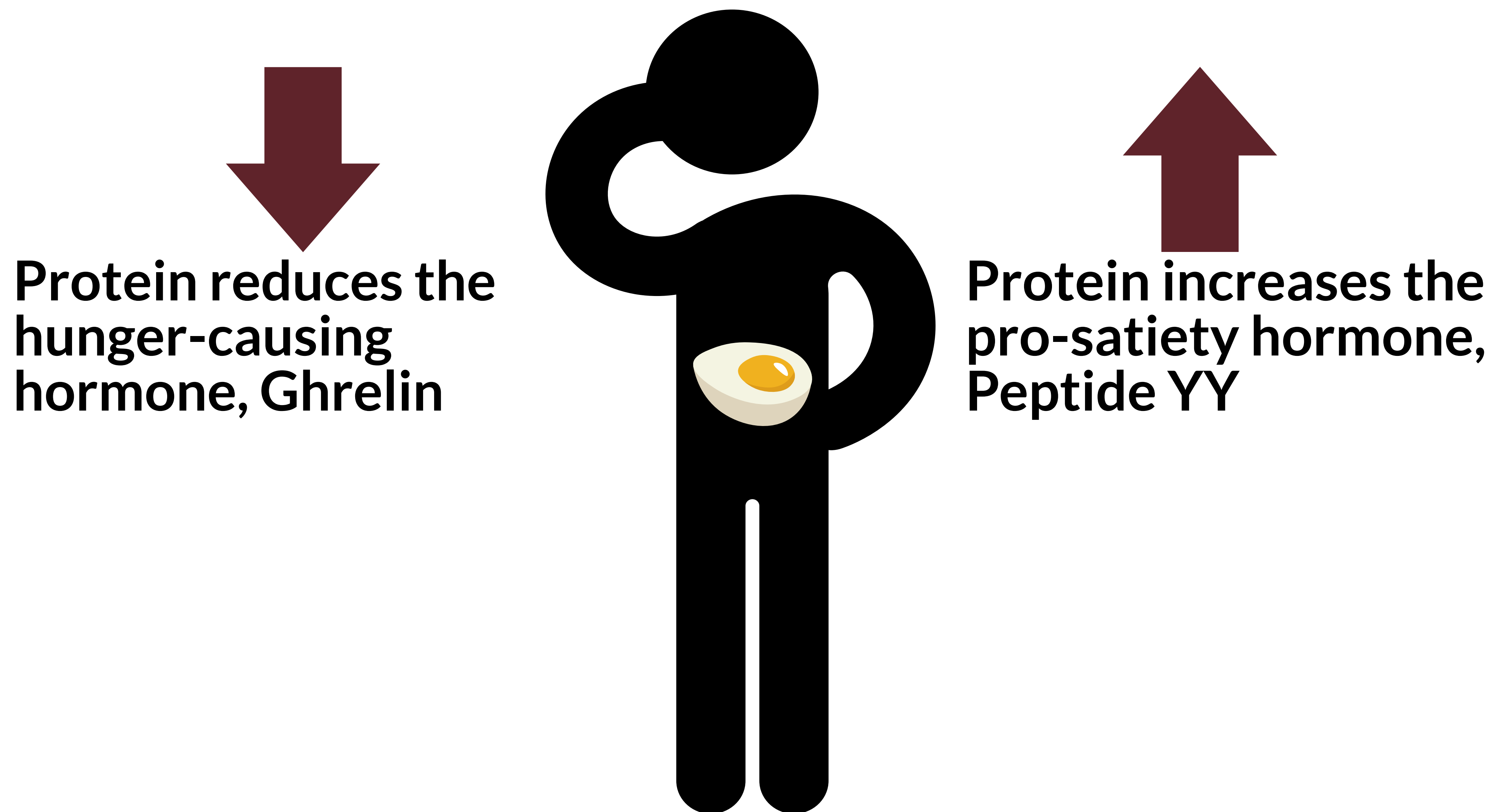
Most plant-based sources of protein do not contain all 9 essential amino acids, therefore are considered **incomplete** proteins. Some exceptions are soybeans, quinoa, and some nuts.

Just because a protein is incomplete does not mean that it is not beneficial. In fact, plant-based proteins tend to be higher in fiber, and lower in unhealthy fats than many animal-based proteins. When two foods provide all of the 9 essential amino acids when combined, they are known as complimentary proteins.

Examples of Complimentary Proteins		
Grains	+	Legumes
Nuts/Seeds	+	Legumes
Vegetables	+	Grains, nuts, and seeds
Corn	+	Legumes

## The Role of Protein in Maintaining a Healthy Weight

Not only is protein essential for growth, development, and body function, but it is also a key factor in maintaining a healthy weight. Adding a lean source of protein to meals and snacks helps promote feelings of satisfaction and satiety after eating, and helps to keep blood sugar levels steady for longer.



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For weight management, it is helpful to look at what other nutrients are coming with the protein that is being consumed. For example, soy beans are a protein source that are also high in fiber and low in saturated fat, while a hot dog is a protein source that is high in saturated fat and sodium. Likewise, a piece of grilled chicken and a piece of fried chicken may have the same amount of protein, however, the grilled preparation is much lower in saturated fat, making it the healthier option.





# Factors that Promote a Healthy Weight: Healthy Fats

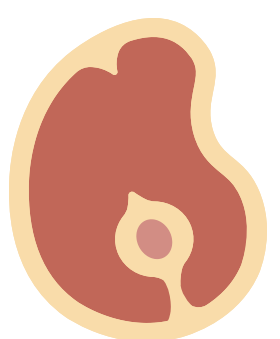
Fat is a macronutrient that provides 9 calories per gram. Fat is essential for cell function, energy synthesis, organ protection, and absorption of essential nutrients.

Like protein, including healthy sources of fat to meals and snacks helps to promote feelings of satisfaction after eating.

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## Fat can be split up into three groups:

**Saturated, trans, and unsaturated fats.** These different types of fat differ in their chemical structure, thus have different effects on health.



Saturated fat is fat that is needed in very small amounts before it becomes associated with adverse health effects. Excess saturated fat intake is associated with increased risk for heart disease, elevated unhealthy cholesterol levels (LDL), lowering healthy cholesterol levels (HDL) and unwanted weight gain.



Trans fats are man-made and are a result of the chemical reconfiguring or 'hydrogenating' of an unsaturated fat to make it solid at room temperature. Trans fats do not have any health benefits and are associated with heart disease, diabetes, and unwanted weight gain. It is best to avoid trans fats completely.



Unsaturated fat is healthy fat. Unsaturated fat is usually liquid at room temperature and most often comes from plant sources. Unsaturated fat is associated with lowering LDL cholesterol levels and raising HDL cholesterol levels, protecting heart health, and maintenance of a healthy weight.

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- **Saturated Fat Sources:** Beef, pork, bacon, processed meats like hot dogs and salami, butter, lard, and ghee
  - **Trans Fat Sources:** Margarine, shortening, refrigerated biscuit and roll dough, deep fried foods (French fries, fried chicken, mozzarella sticks, onion rings), packaged cookies and snack cakes



*Food with less than 0.5 grams of trans fat per serving can be labeled as 0g of trans fat. One way to make sure the food does not have trans fat is to check that the words “**partially-hydrogenated oil**” or “**hydrogenated oil**” are not in the ingredients list.*

- **Unsaturated Fat Sources:** Fatty fish, nuts, seeds, avocados, plant-based oils (olive, avocado, canola, corn)

## Beneficial Types of Fat

- **Monounsaturated Fat:**

Monounsaturated fats help decrease levels of LDL when consumed in place of saturated fat. *Sources: olive oil and canola oil, hazelnuts, macadamia nuts, almonds, pecans, avocados.*

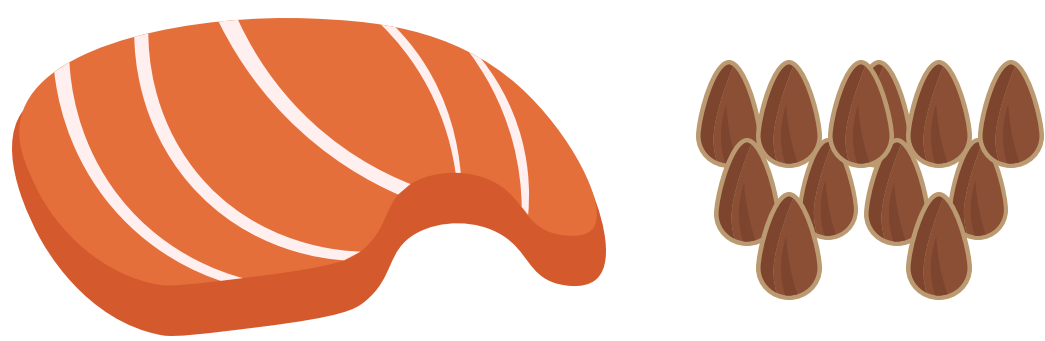
- **Polyunsaturated**

There are *two main types* of poly-unsaturated fat, omega 3 and omega 6. Omega 3 and omega 6 fats cannot be produced by the body so they are essential to be consumed via diet.

**Omega 3s:**

Omega 3s can reduce inflammation, lower triglyceride levels and raise HDL.

*Sources: Oily fish such as salmon, herring, mackerel, and sardines; fish oil and flaxseed oil; flaxseeds, walnuts, and chia seeds*



**Omega 6s:**

Omega 6s are essential for skin and hair growth, and play a role in lowering LDL levels and preventing heart disease.

*Sources: Safflower oil, sunflower oil, corn oil, soybean oil, sunflower seeds, walnuts, pumpkin seeds*

- **Medium chain triglycerides (MCTs)**

MCTs are a type of saturated fat, however, they are smaller in structure and thus do not need to be broken down before being absorbed. As a result, MCTs are absorbed much more easily into the body. MCTs are not shown to be associated with risk for heart disease like other saturated fats.

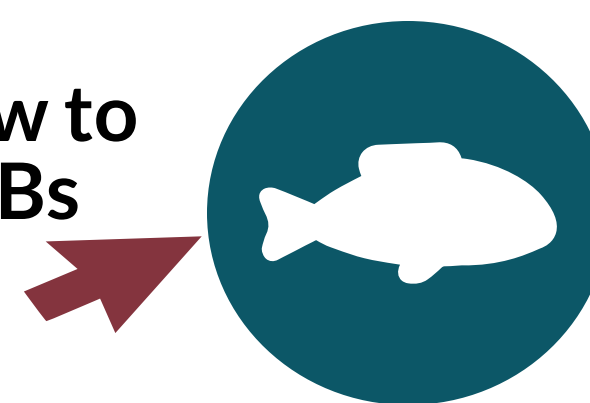
*Sources: MCT supplements, coconut oil, palm kernel oil*

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## Increasing Intake of Healthy Fats

- **Consume fatty fish** twice a week. Choose: Sardines, Mackerel-Atlantic, Herring-Atlantic, Salmon-Chinook, Anchovy, Lake Trout, Bluefish, Salmon-Atlantic

Click for more information on how to pick fish low in mercury and PCBs

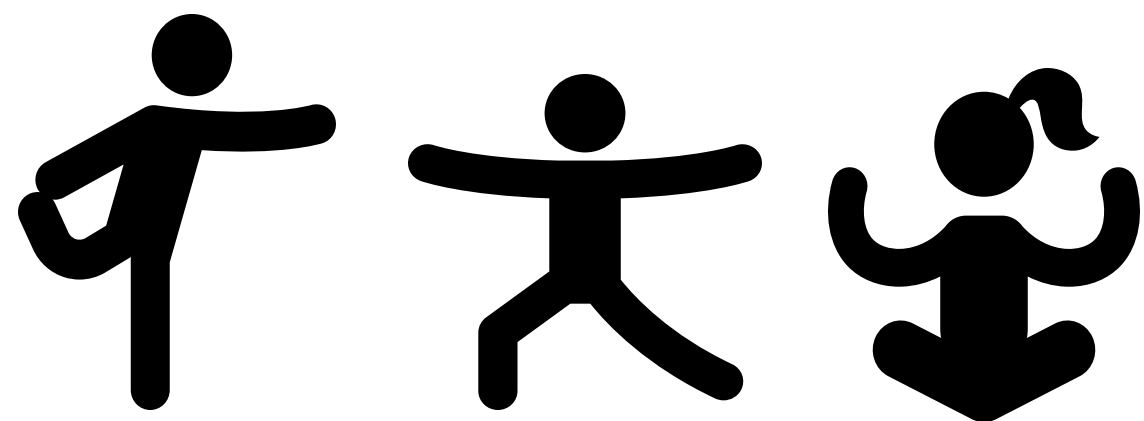


- **Incorporate nuts and seeds:** add a small handful of nuts to fruit at snack time, sprinkle a tablespoon flax meal or chia seeds over oatmeal, yogurt, or cereal
- **Experiment with a variety of nut butters:** almond, cashew, macadamia
- **Try avocados** in guacamole, as a spread, on a sandwich, or in a salad
- **Use olive, avocado, or flax seed oil** for cooking, dressings, and sauces



# Factors that Promote a Healthy Weight: Physical Activity

When physical activity is deemed safe by a physician or physical therapist, try to incorporate movement throughout the day. Increasing physical activity not only helps in the maintenance of a healthy weight, but also can help fight fatigue and boost mood!



Stretch/ practice yoga poses



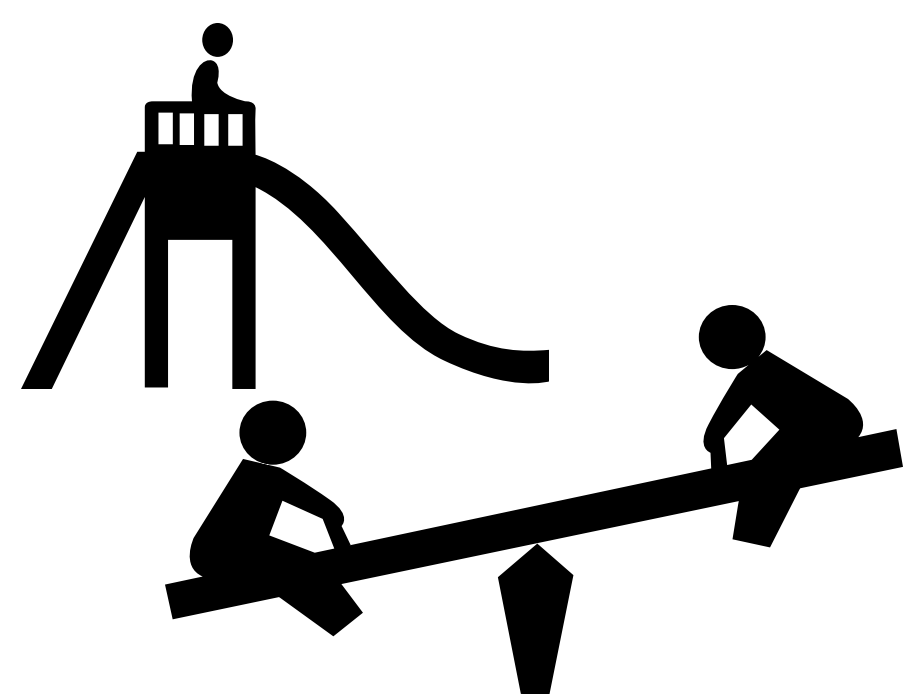
Make up a dance



Try a new sport



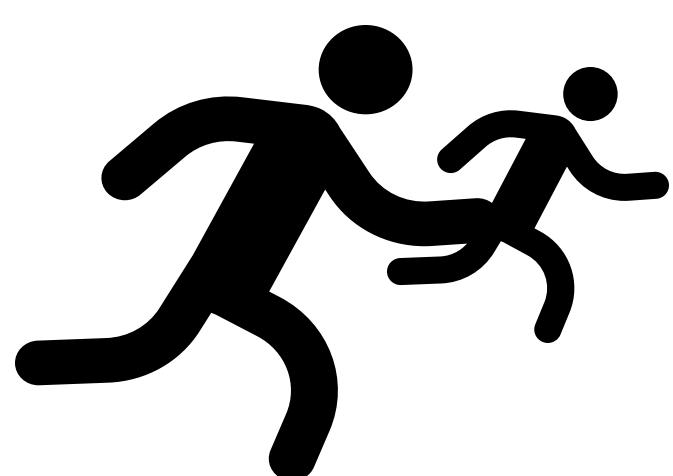
Jump Rope



Go to a local playground



Play Hide and Seek



Have a Race



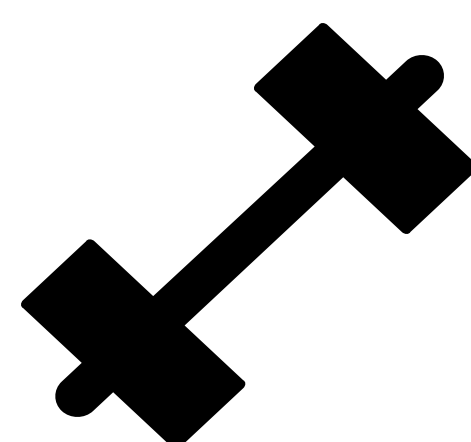
Ride a bike



Play with non-electronic toys



Take the stairs



Join a gym/ work with a personal trainer



Set movement timers