ASPIRE
INTEGRATIVE WELLNESS

Macronutrients

- Carbohydrates
  The main function of carbohydrates is to supply your body with readily available fuel for energy. Carbohydrates in the body are found in two forms: glucose and glycogen.
  - Starches and sugars are broken down, via digestion processes, and form glucose. Your blood transports and provides glucose to all cells in the body. Any excess glucose will be stored as glycogen in your liver and muscles.

  Carbohydrates are categorized as *simple* or *complex:*

  - *Simple carbohydrates* are easy to digest and absorb. Simple carbohydrates are categorized as single sugars (monosaccharides), which include glucose, fructose and galactose, or double sugars (disaccharides), which include sucrose (table sugar), lactose (milk sugar) and maltose.
  - *Complex carbohydrates* are also known as polysaccharides, which are starches formed by longer saccharide chains. Whole grain complex carbohydrates are a great source of fiber

- Protein
  Protein is vital to all parts of the body's function. Protein is essential to many processes in the body. It provides structure to the tissue. That includes cell membranes, organs, muscle, hair, skin, nails, bones, tendons, ligaments and blood plasma. Proteins are involved in metabolic, hormonal and enzyme systems and help maintain acid-base balance in our bodies. In a dire situation, protein helps supply energy to the body when carbohydrates and fats are not available.

  Proteins are classified as *incomplete* or *complete*.
  - *Incomplete* proteins are foods that do not supply all the needed essential amino acids. Typically plant sources such as grains, fruits, vegetables, and nuts are considered incomplete sources of protein. Pairing two incomplete proteins can form a complete protein.
  - *Complete* proteins are foods that supply all the essential amino acids the body needs. These include foods like beef, lamb, poultry, fish, pork, shellfish, eggs, milk, and milk products.

  Amino acids are the building blocks of proteins. The body requires 20 amino acids for protein synthesis. Since our bodies only make 13 amino acids it is important to make sure we are eating foods that contain the other nine amino acids we need.

- Fats

  Fats play a vital role in our bodies. The body needs fat for insulation, conditioning muscles and organs, healthy skin and hair, temperature regulation, and the transport of fat: soluble vitamins A,D, E, and K. Fats provide the essential fatty acids the body cannot make. Fatty acids help in the control of blood pressure, blood clotting, inflammation, and other functions. Like carbohydrates, fats are an important energy source for our bodies. Fats can be *saturated* or *unsaturated*.
  - *Saturated* fats are solids at room temperate and cause high levels of unwanted LDLs. Foods high in saturated fats are typically animal products like butter, cheese, whole milk, ice cream, and fatty meats as well as vegetables oils like coconut oil and palm oil.
  - *Unsaturated* fats are liquids at room temperature and help lower cholesterol levels by increasing healthy HDLs. Unsaturated fats are usually foods from plants and most vegetable oils.