## **CARBOHYDRATES**

TOMLINSON LIFESTYLE MEDICINE CONSULTING



Carbohydrates are the sugars, starches and fibers found in fruits, grains, vegetables and milk products. Carbohydrates are important to a healthy life.

About 55-60% of our daily carbohydrate intake should come from complex carbohydrates (starches) and natural sugars rather than processed or refined sugars (simple sugars).

Natural sugars are found in fruits and many vegetables, honey, milk products, maple sugar, and sugar cane. Carbohydrates are one of the 3 macronutrients. The other macronutrients are protein and fat. The body gets energy, or calories from all 3 macronutrients.

Macronutrients are essential for proper body functioning. The body requires large amounts of them.

We get macronutrients through our diet because the body cannot produce them on its own.

### **Functions of Carbohydrates**

Carbohydrates provide fuel for the central nervous system and energy for working muscles. They also prevent protein from being used as an energy source and enable fat metabolism.

Carbohydrates are important for brain function. They also have an influence on mood, memory as well as a quick energy source.



# Complex and Simple Carbohydrates

Complex carbohydrates - are made up of sugar molecules that break down slowly to help you sustain that full feeling.

Sources of complex carbohydrates include peas, beans, whole grains, and vegetables like sweet potatoes.

Simple carbohydrates - are made with processed and refined sugar and they do not have vitamins, minerals or fibre.

Simple carbohydrates are often called "empty calories" because they are loaded with calories from sugars and fats and they provide no nutrients and are not essential food. They can also lead to weight gain and other health conditions.

Foods high in simple carbohydrate also break down too quickly in the body, leaving you feeling hungry.

Simple carbs can lead to spikes in blood sugar levels and sugar highs, while complex carbs provide more sustained energy.



### **Indigestible Fibres**

Indigestible dietary fibres - dietary fibres are classified as complex carbohydrates and they also play a vital role in our health.

Fibres can provide the fuel that helps to speed the elimination of feces.

Carbohydrate containing foods that are good for your body and provide abundant sources of other good nutrients includes:

- -Fruits
- Vegetables and starchy vegetables
- High-fibre whole grains (such as whole wheat bread, oatmeal, brown rice, whole wheat pasta, whole-grain cereals)
- Legumes
- Low-fat and nonfat milk





#### **Sugars**

Sugar - is the generic name for sweettasting, soluble carbohydrates, many of which are used in food. The various types of sugar are derived from different sources.

Simple sugars are called monosaccharides and include glucose (also known as dextrose), fructose, and galactose.

Table sugar or granulated sugar refers to sucrose, a disaccharide of glucose and fructose. In the body, sucrose is hydrolysed into fructose and glucose.

Although the sugar industry has actively fought to change public opinion about the health effects of sugar,

We now know today that sugar impacts just about every organ system in the body. For health reasons, limit your sugar intake.