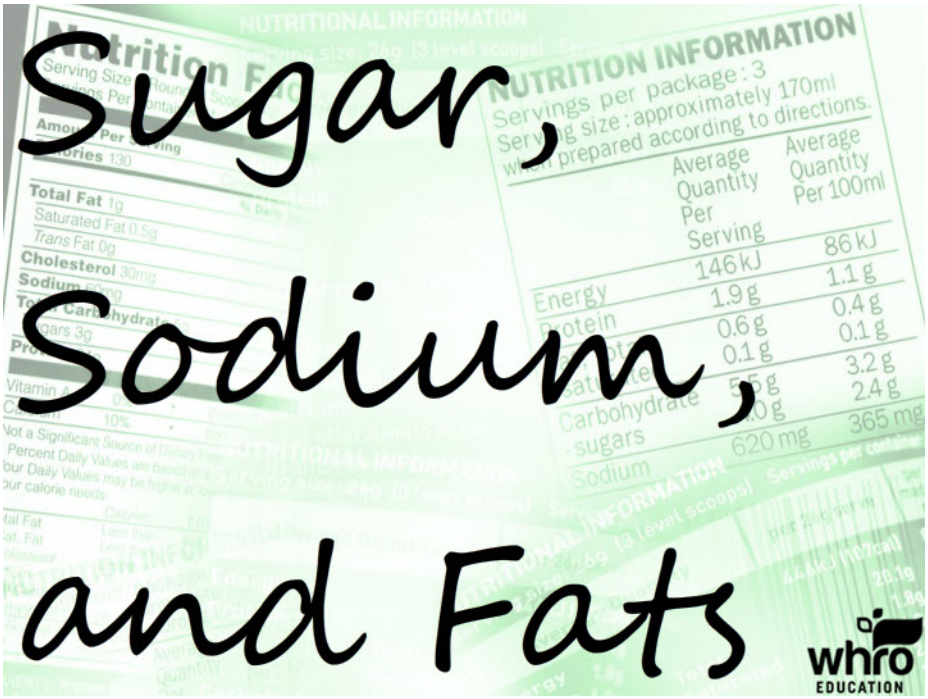
Module 8: Lifelong Health and Wellness
Topic 3 Content: Sugar, Sodium, and Fats Notes

Introduction



Sugar, Sodium, and Fats

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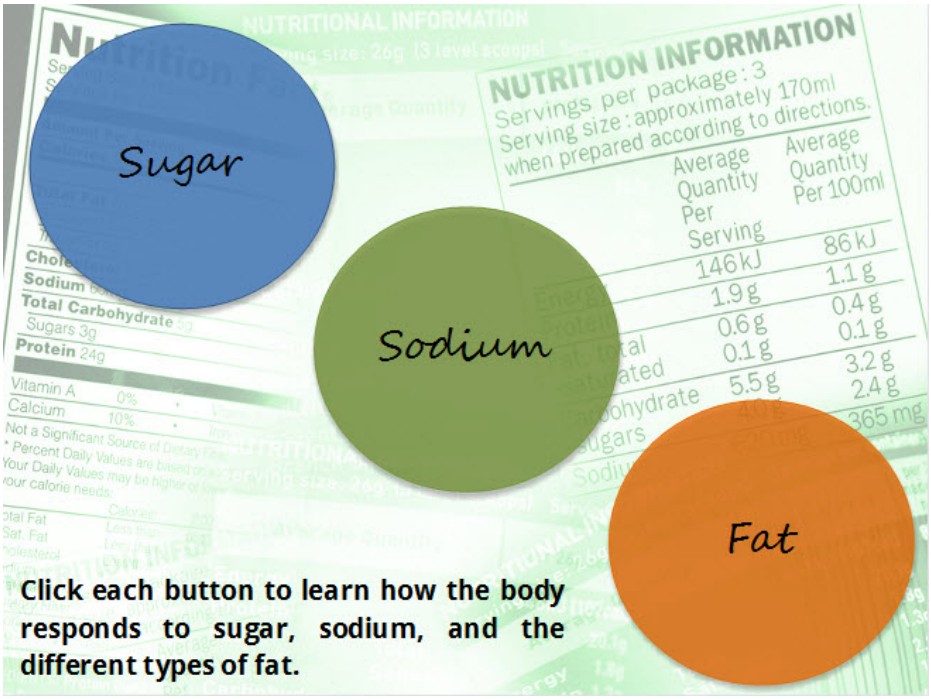
Instructions



The body responds to sugar, sodium, and fat in different ways. Limiting your intake of sugar and sodium, while consuming the proper amounts and types of fat will help you maintain optimal health.

Click each button to learn how the body responds to sugar, sodium, and the different types of fat.

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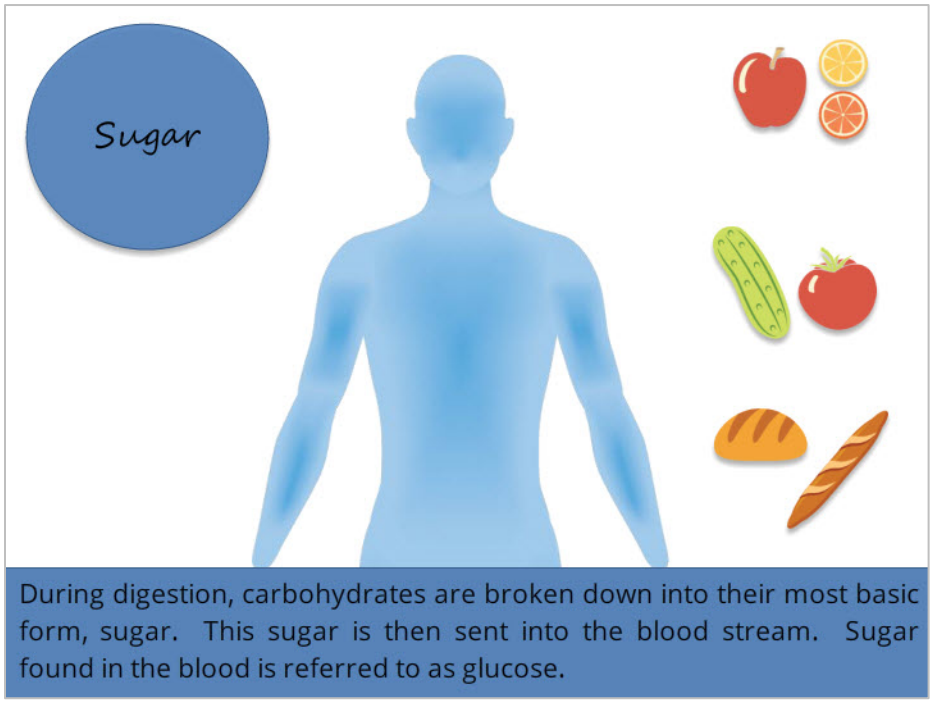
Sugar



Foods such as fruits, vegetables, and grains contain carbohydrates. During digestion, carbohydrates are broken down into their most basic form, sugar. This sugar is then sent into the blood stream. Sugar found in the blood is referred to as glucose.

Your glucose level will typically be at its highest immediately after a meal, because your body has just digested food and released sugar into your blood stream. When the glucose level is elevated, the body will release insulin, a hormone that prompts its cells to receive the glucose needed to supply the body with energy. If the body's cells do not respond to the insulin, perhaps as a result of diabetes or another health condition, the cells will not receive the glucose needed to supply energy.

Any excess sugar not absorbed by the cells is stored in the body. This sugar is referred to as glycogen. Glycogen can be converted into glucose to satisfy energy needs.

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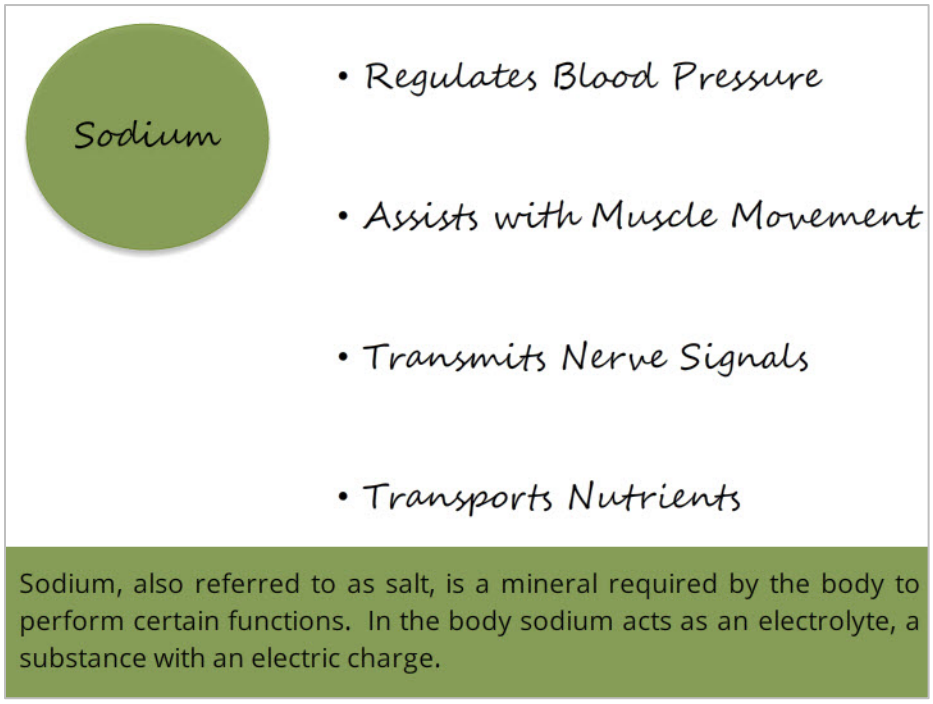
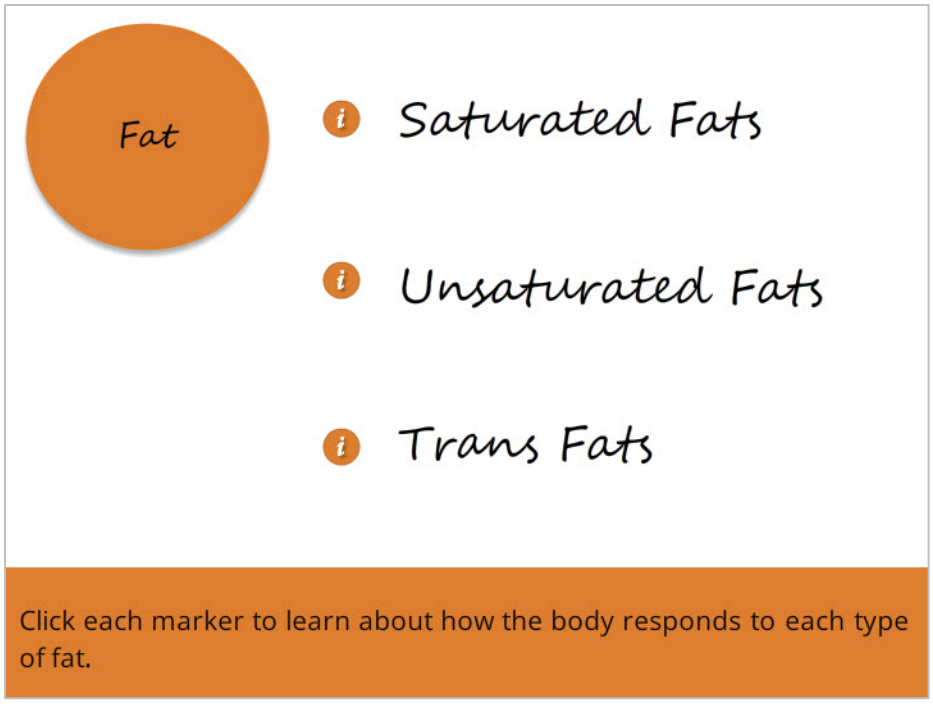
Sodium



Sodium, also referred to as salt, is a mineral required by the body to perform certain functions. In the body sodium acts as an electrolyte, a substance with an electric charge. Its charge allows it to regulate blood pressure and assist with other important bodily functions, such as muscle movement, the transmission of nerve signals, and the transportation of nutrients to and from cells. When you consume foods that contain sodium, you are assisting your body with its ability to perform these functions. Consuming an excessive amount of sodium, however, can have negative effects on the body.

As of 2013, the recommendation of the Food and Drug Administration is that the average adult consume approximately one teaspoon of sodium each day. Many individuals, however, consume much more than that amount daily. Over time, consuming an excessive amount of sodium can result in increased blood pressure and an enlarged heart, which is a form of heart disease. An enlarged heart is less effective at pumping blood to the body's organs than a healthy heart. This impact on blood flow can cause damage to the kidneys and congestive heart failure, a condition in which the body becomes overloaded with sodium and fluid.

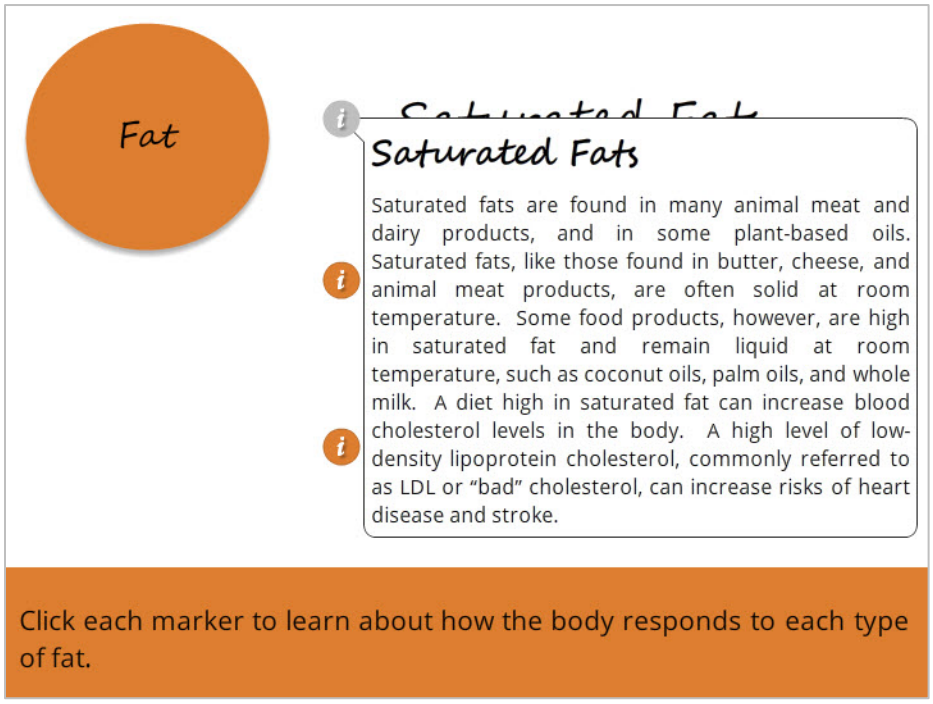
Fat



In order for the body to perform necessary functions, you should consume a diet that includes the right types and proper amounts of fats. Three types of fats are saturated fats, unsaturated fats, and trans fats. Each of these fats affect the body differently.

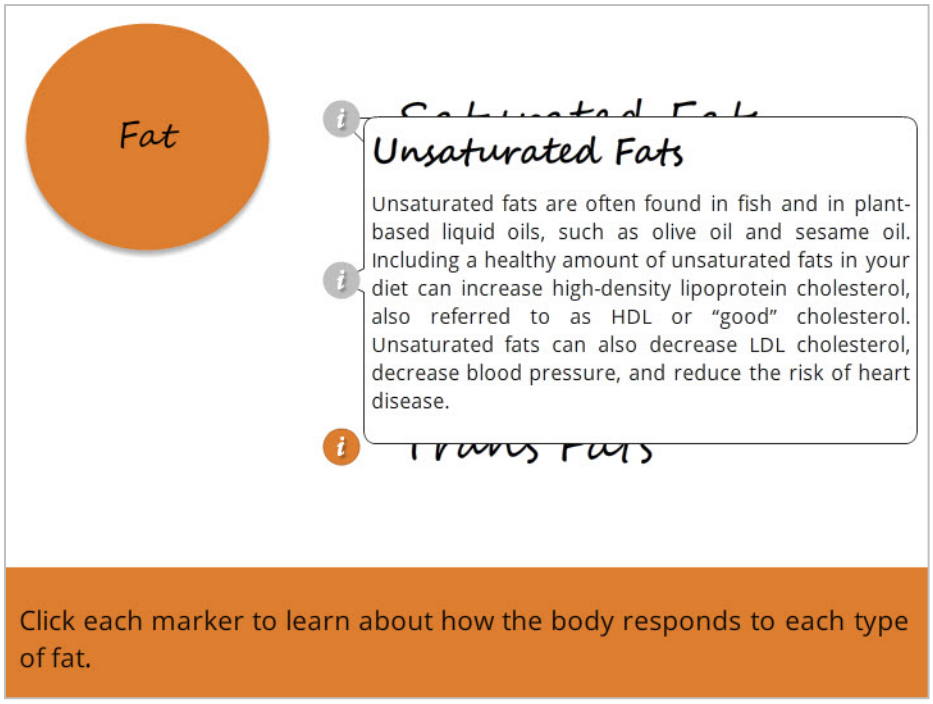
Click each marker to learn about how the body responds to each type of fat.

Saturated Fats



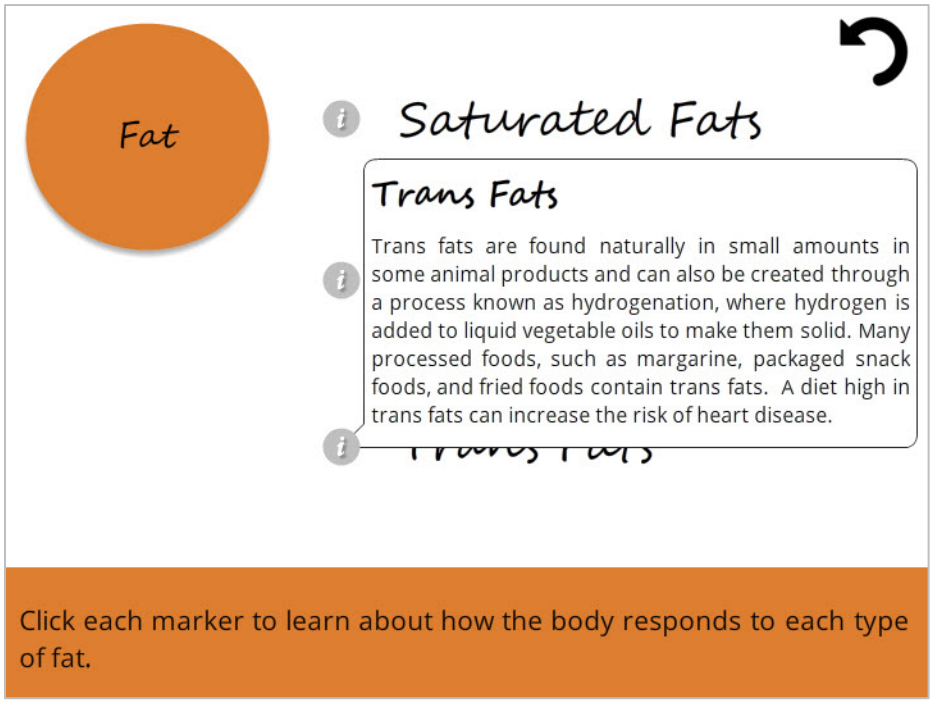
Saturated fats are found in many animal meat and dairy products, and in some plant-based oils. Saturated fats, like those found in butter, cheese, and animal meat products, are often solid at room temperature. Some food products, however, are high in saturated fat and remain liquid at room temperature, such as coconut oils, palm oils, and whole milk. A diet high in saturated fat can increase blood cholesterol levels in the body. A high level of low-density lipoprotein cholesterol, commonly referred to as LDL or "bad" cholesterol, can increase risks of heart disease and stroke.

Unsaturated Fats



Unsaturated fats are often found in fish and in plant-based liquid oils, such as olive oil and sesame oil. Including a healthy amount of unsaturated fats in your diet can increase high-density lipoprotein cholesterol, also referred to as HDL or "good" cholesterol. Unsaturated fats can also decrease LDL cholesterol, decrease blood pressure, and reduce the risk of heart disease.

Trans Fats



Trans fats are found naturally in small amounts in some animal products and can also be created through a process known as hydrogenation, where hydrogen is added to liquid vegetable oils to make them solid. Many processed foods, such as margarine, packaged snack foods, and fried foods contain trans fats. A diet high in trans fats can increase the risk of heart disease.