

Nutrition CARBOHYDRATES	PHOENIX FIRE DEPARTMENT HEALTH & FITNESS M. P. 1-A03.02 06/2004-R Page 1 of 1
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TYPES

Simple

All carbohydrates are basically sugar. Carbohydrates such as candies are referred to as simple carbohydrates. This has to do with the molecular structure, which allows them to be broken down quickly and absorbed by the body. Another distinguishing characteristic of simple carbohydrates is that they tend to be packaged with food that provides no other nutritional value except for calories.

Complex

Complex carbohydrates are associated with more nutritional foods such as cereals, vegetables and fruits. They are preferred because of this association, plus because of their molecular structure the sugar provided is released much slower into the blood stream. This is important to prevent excessive levels of insulin that can lead to low blood sugar levels. This undesirable phenomenon is known as hypoglycemic overshoot.

Fiber

Carbohydrates are also seen as fiber. Fiber is that part of food that is not digested by the body and serves as a cleansing agent for the intestinal tract.

FUNCTION

The importance of carbohydrates in the diet is primarily for energy. The carbohydrates also serve a protein-sparing function. That is to say if carbohydrates are present in the diet in adequate amounts protein will be spared as an energy source and used for its primary function of building muscle.

The importance of fiber in the diet is in its relationship with reduced risk of developing obesity, diabetes, CHD, cavities and periodontal disease, constipation, varicose veins, hemorrhoids, colon spasm, appendicitis and large bowel cancer.

RDA

The current recommendation is that fifty percent of daily calories should come from complex carbohydrates and no more than ten percent from simple carbohydrates provided that the consumer is not carbohydrate sensitive.