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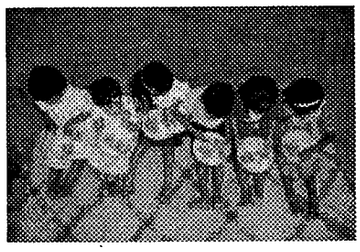
No link between sugar and lifestyle diseases, experts conclude



Good news for kids: experts see no harm in sugar

An expert consultation on carbohydrates in human nutrition has concluded that there is no link between the consumption of refined and other sugars and lifestyle diseases and conditions such as adult-onset diabetes, heart disease and obesity. The experts also found that there is no proof that sugar causes hyperactivity in children.

The Joint Food and Agriculture Organization (FAO)/World Health Organization (WHO) Expert Consultation on Carbohydrates in Human Nutrition, held from 14 to 18 April in Rome, brought together nutritionists, physicians and biochemists from thirteen countries. They examined decades of research findings on carbohydrates, the world's single most important source of food energy. Carbohydrates include cereals and sugar crops, followed by root crops, fruits, vegetables, pulses and milk products. These foods are an important vehicle for protein, micronutrients and other food components that have important benefits for health.

Much controversy surrounds the extent to which sugars and starch promote obesity. The consultation found no direct evidence to implicate either of these groups of carbohydrates among the factors leading to obesity, based on data derived from studies in affluent societies. In fact, excess food energy consumption in any form will promote body fat accumulation if intake is not matched by energy expenditure.

Neither have sucrose and other sugars been directly implicated in the factors leading to adult-onset diabetes. The consultation recommendations concerning carbohydrate intake and diabetes related primarily to the avoidance of all energy-dense foods in order to reduce obesity.

The experts concluded that there was also no evidence for a causal role of sucrose in the factors leading to coronary heart disease. The cornerstone of dietary advice aimed at reducing coronary heart disease risk is to increase the intake of carbohydrate-rich foods, especially cereals, vegetables and fruits, at the expense of fat. Dietary carbohydrates are also thought to protect against colon cancer by promoting normal intestinal cell function.

It has been suggested that sugar consumption leads to hyperactivity in children. However, after discussing an extensive review of the scientific literature on carbohydrates and behaviour produced for the meeting, the experts declared that there was no evidence to support the claim that refined sugar intake has any significant influence on either behaviour or cognitive performance in children.

FAO will publish a report on the consultation containing background material and

recommendations on issues ranging from the role of carbohydrates in maintaining health and preventing disease to more technical aspects such as methodology for dietary carbohydrate analysis.

Children should adopt adult diet by age five, consultation recommends

While children need a high-fat diet such as breast milk or formula up to two years of age, the FAO/WHO Expert Consultation on Carbohydrates in Human Nutrition has recommended that by the age of five they should have decreased fat intake and increased the proportion of carbohydrates in their diet to that recommended for adults. This is considered a precaution for the prevention of obesity, diabetes and cardiovascular disease, and serves to develop good dietary habits early in life.

In many countries, infants receive 45 to 55 percent of energy from fat, through breast milk or formulas, and 35 to 45 percent of energy from carbohydrates. In fact, during the first four to six months of life, exclusive breastfeeding is recommended as this tailors the concentration of lactose to the maturing neonatal and infant gut. Specific reductions in fat intake are not recommended below the age of two years, although infants in many countries consume lower fat diets. The consultation recommended that fat intake be reduced after the age of two.

An optimum diet with at least 55 percent of total energy from a variety of carbohydrate sources should be introduced gradually. The major sources of carbohydrates are cereals and cane and beet sugar, followed by root crops, fruits, vegetables and pulses. Carbohydrates are the single most important source of food energy in the world, comprising some 40 to 80 percent of total dietary energy intake of most individuals, depending on locale, cultural considerations and economic status. However, people with higher energy intake levels from carbohydrates often do not have good nutritional status because their diets lack sufficient amounts of other essential nutrients.

Proteins and fats are necessary to maintain essential functions and are also sources of energy. Proteins should account for at least 10 to 15 percent of total energy intake. Energy from fat accounts for up to 40 percent of total energy intake in many individuals, a level that is considered too high for adults. An FAO/WHO Expert Consultation on Fats and Oils in Human Nutrition (October 1993) recommended fat intakes of up to 30 percent of total energy intake for sedentary individuals, and up to 35 percent for active people. Balanced diets that provide these amounts of carbohydrates, protein and fat, will almost always contain the essential vitamins and minerals that are also needed for good nutrition and health.

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