

QA31 – Dietary Fat for Children Less than 2 Years

QUESTION:

I know the standard recommendation is that children under the age of 2 years should receive only whole fat milk to ensure that they receive sufficient dietary fat for proper brain development and nerve myelination. What studies is this information based on? Does the standard American diet supply enough fat or are the fatty acids required found exclusively in dairy foods? If this fat can only be from dairy sources, could additional cheese or other high-fat dairy foods be consumed? (I spoke to a mom today who says her son is lactose-intolerant but tolerates cheeses and other dairy foods well. Likewise, he is asymptomatic with lactose-reduced milks, but these are available in only lower fat forms.)

ANSWER:

Dietary fat recommendations for children under two years of age are most predominantly based on energy needs required to support rapid brain growth from mid-gestation to approximately twenty months of age. Recognizing this, along with the importance of avoiding excessive fat which may predispose a child to early coronary risk factors or ketosis, the American Academy of Pediatrics dietary fat recommendations are consistent with national average consumption levels of normally growing and developing infants and toddlers. The national average fat intake for infants is 50% of total energy, which declines to 30% to 40% of total energy from fat as solids are introduced in the first couple of years of life.

Aside from requirements for essential fatty acids, which make up only 3% of a child's total energy intake, there is no recommendation with regard to a specific fat source. In fact, children may grow satisfactorily when energy needs are met by a diet low in fat and high in carbohydrate, although little research has been done to support such a diet. Concerns about low fat diets in this age groups include inadequate energy intake due to the large quantities of food required to meet needs, as well as osmotic diarrhea related to a higher consumption of disaccharide and monosaccharide sugars.

Given the emphasis of dietary recommendations from the AAP, use of whole milk during a child's transition from breast milk or formula to solid foods can be more accurately described as a reasonable guideline geared to assure an adequate and consistent energy intake for normal growth and development. Children who are allergic, intolerant, or unwilling to drink whole milk can easily meet fat requirements with other foods such as peanut butter, avocados, cheese, yogurt, french fries, various meats and extra use of olive oil, margarine, and cream cheese in food preparation. When replacing milk from a child's food pattern, caution must also be taken to assure an adequate calcium and vitamin D intake by including calcium and vitamin D fortified soy milk, calcium-fortified juice, cereals, and waffles, as well as frequent offerings of broccoli, cheese, and yogurt.

References:

- 1) American Academy of Pediatrics Committee on Nutrition. Statement on cholesterol. Pediatrics. 1992;90:469-473.

- 2) Nationwide Food Consumption Survey. Continuing Survey of Food Intakes by Individuals. Washington, DC: United States Department of agriculture, Human Nutrition Information service; 1989. Report NO 86-4.
- 3) Widdowson EM. Nutrition and Cell and Organ Growth. Shils ME, Young V. Modern Nutrition in health and Disease. 7th Edition, Lea & Febiger, Philadelphia, PA, 1988:620.
- 4) Fomon SJ. Fat. Nutrition of Normal Infants. Mosby-Year Book, Inc. St. Louis, Missouri. 1993:161-162.