



Brain Food: Nutrients in Breastmilk to Support Baby's Development

An infant's first year of life is marked by rapid growth. In fact, infants' brains double in size between birth and their first birthday. Much of that growth occurs in areas that control motor skills, which allows infants to begin to move and make sense of the world around them.

When possible, medical and public health experts recommend breastmilk as the main source of nutrition during the first year of life. A mother's diet influences the nutritional content of breastmilk. So, consuming a variety of healthy foods is important to support infant brain development. Three important nutrients for mom and baby are DHA, zinc, and vitamin B12. DHA is a fatty acid needed for development of parts of the brain responsible for planning, problem solving, and focused attention. Zinc is a mineral needed to build the structure of the brain. Vitamin B12 is needed to support connections between brain cells and the rapid pace of growth.

Breastfeeding mothers should get 200 milligrams of DHA, 12 milligrams of zinc, and 2.8 micrograms of vitamin B12 each day. Many foods are good sources of these three nutrients. Oily or fatty fish, such as tuna, trout, and salmon, are great sources of DHA. Beans, nuts, and dairy are high in zinc. Vitamin B12 can be found in dairy, eggs, beef, and fish. Fortified cereals also have vitamin B12. There are many ways these foods can be added into the diet. Use canned tuna to make tuna salad for lunch. Include nuts and cheese for a snack. For dinner, add lean ground beef to spaghetti or tacos.

A mother continues to need more nutrients during breastfeeding. To meet these needs, a breastfeeding parent should continue taking a prenatal supplement. Eating nutritious foods will support the health of both mom and baby during the breastfeeding period. For breastfeeding mothers who are vegetarian or vegan, it may be harder to get some of these nutrients, particularly DHA and vitamin B12, as these are primarily limited to animal products. If you are vegetarian or vegan, talk with your health-care provider about other options to ensure you are meeting the nutrient needs.

Breastfeeding is a unique journey for each mother and baby. Regardless of a mother's choice or ability to breastfeed, it is important to be mindful of nutrient intake to support the health of both mom and baby during this period.

Reference

Mayo Clinic. (April 27, 2022). Breastfeeding nutrition: Tips for moms. <https://www.mayoclinic.org/healthy-lifestyle/infant-and-toddler-health/in-depth/breastfeeding-nutrition/art-20046912>

Gavin, M.L. (October 2020). Pregnant or Breastfeeding? Nutrients You Need. Nemours KidsHealth. <https://kidshealth.org/en/parents/moms-nutrients.html>

Source: Erin Hopkins, Dietetic intern; Courtney Luecking, Extension specialist for Nutrition and Health

Copyright © 2024 for materials developed by University of Kentucky Cooperative Extension. This publication may be reproduced in portions or its entirety for educational or nonprofit purposes only. Permitted users shall give credit to the author(s) and include this copyright notice.

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, physical or mental disability or reprisal or retaliation for prior civil rights activity. Reasonable accommodation of disability may be available with prior notice. Program information may be made available in languages other than English. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.