



Nutrition for Family Living

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January, 2003 Topics

- Nutrition and lifestyle for a healthy pregnancy
- Breastfeeding rates continue to increase
- Grocery store access: a link to good health and food security

Nutrition and lifestyle for a healthy pregnancy

The American Dietetic Association (ADA) recently updated their position paper on nutrition for a healthy pregnancy. Their recommendations are consistent with information in "My Child, My Choices." New resources for this audience are planned for 2003.

A healthy pregnancy is considered one without physical or psychological pathology in the mother or fetus and results in the delivery of a healthy baby. Women need to achieve good nutritional status before, during, and after pregnancy for the health of the mother and to reduce the risk of birth defects and chronic disease in their children later in life.

Before pregnancy, women should consider the following:

- **Folic acid.** To reduce the risk of birth defects, women of childbearing age should make sure they consume 400 micrograms of folic acid each day. This can come from a folic acid supplement, folic acid-fortified foods (cereals, breads, or pasta), or naturally occurring folate in food (dry beans, orange juice, spinach). Because folate and vitamin B12 work together, strict vegetarians should consider a vitamin B12 supplement as well.
- **Iron.** If a woman has iron deficiency anemia before becoming pregnant, it will be very difficult to replace her stores during pregnancy. Lean meat, fish, poultry, dried fruits and iron-fortified cereals are good sources of iron.
- **Vitamin A.** High doses (more than 10,000 IU or 3,000 RAE/day) can cause birth defects. Women of childbearing age must be very careful with vitamin A supplements. Most prenatal vitamins now supply 50% of the RDA for vitamin A.
- **Maternal weight.** A healthy weight before pregnancy improves chances of conception and may make breastfeeding easier. Obese women have more complications during pregnancy and are at risk of a more difficult delivery.
- **Physical activity.** Physical activity has many benefits, including weight management, physical fitness and psychological wellbeing. Experts recommend 60 minutes per day of moderate physical activity for adults and children.

During pregnancy, women should follow these recommendations:

- Gain an appropriate amount of weight.
- Eat a variety of foods, as recommended by the Food Guide Pyramid.
- Ensure adequate and timely vitamin and mineral intake.
- Avoid alcohol, tobacco, and other harmful substances.
- Handle food safely.



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Gain an appropriate amount of weight. Recommended weight gain depends on the woman's weight before becoming pregnant. Women who are thin and don't gain enough weight during pregnancy are at risk of having a low birth weight baby. Women who are overweight before becoming pregnant and gain too much weight during pregnancy have a greater risk of very large babies, difficult deliveries, and have more trouble losing weight after the baby is born. How many additional calories are needed during pregnancy to provide for the baby's growth and the mother's health? The number may be different for everyone. *If a woman's appetite is good and she is gaining weight appropriately, her calorie intake is probably appropriate.* Healthy women with uncomplicated pregnancies may continue moderate exercise but should discuss particular activities with their doctor.

Eat a variety of foods. Women should eat a variety of foods, as suggested by the Food Guide Pyramid, to meet energy and nutrient needs and gain recommended amounts of weight. According to the Food Guide Pyramid, pregnant women should get 9 servings of grains, 4 servings of vegetables, 3 servings of fruit, 2-3 servings from the milk group, and 2 servings (6 oz) from the meat group. Nutrient density and caloric density are important concepts when discussing food with pregnant women. Educators should become familiar with their clients' cultural food practices and provide culturally relevant advice.

Vitamin and mineral intake. Folic acid, iron, and calcium are especially important during pregnancy. If women are not able to consume enough in food, a supplement may be necessary. Multivitamin and mineral supplements may be necessary for women who smoke or abuse alcohol or drugs, who consume poor quality diets, or who are vegans. For vegans, a supplement with vitamin B12 is especially important. Women carrying twins or other multiples should also take a multivitamin/mineral supplement.

Alcohol, drugs and tobacco. Alcohol consumption during pregnancy can increase the risk of birth defects, mental retardation, and low birth weight. Smoking during pregnancy can lead to low birth weight and preterm birth. Illegal drugs have a variety of effects which can include low birth weight, preterm birth, developmental delays and fetal addiction. Women should avoid alcohol, drugs and tobacco before and during pregnancy and lactation.

Handle food safely. Pregnant women should not consume raw unpasteurized juices, raw sprouts, or unpasteurized milk products. They should also avoid raw or undercooked meat, poultry, eggs, fish or shellfish. It is important to reheat leftovers thoroughly and avoid soft cheeses. To avoid toxoplasmosis, handwashing after cleaning cat boxes is even more important during pregnancy.

The American Dietetic Association also emphasizes that women should be educated about the benefits of breastfeeding, and that breastfeeding should be encouraged as the best way to feed babies.

Position of the American Dietetic Association: Nutrition and lifestyle for a healthy pregnancy outcome. *J Am Diet Assn.* 2002;102(10): 1479-1490.

For full text, go to <http://www.eatright.com/adar1002b.html>.



Breastfeeding rates continue to increase

Approximately 1.4 million questionnaires were mailed in 2001 to new mothers throughout the United States to collect information on breastfeeding and formula feeding rates. The news is good. In 2001, more women than ever reported breastfeeding in the hospital (69.5%), and breastfeeding at 6 months of age (32.5%).

Between 1996 and 2001, breastfeeding rates increased in all socioeconomic groups. The rates increased most in the groups that are traditionally less likely to breastfeed: women who were younger than age 20, African-American, had no more than a high school education, gave birth to their first child, were employed, and participated in WIC. Breastfeeding in the hospital and at 6 months of age was most common in the Mountain and Pacific states and among women who were white or Hispanic, older, college-educated, and not enrolled in WIC.

If breastfeeding rates continue to increase as they have since 1996, the United States could reach or exceed the Healthy People 2010 goal for breastfeeding in the hospital (75%). The goal for breastfeeding at 6 months (50%) will probably not be met in all population subgroups.

Implications for educators: Breastfeeding promotion efforts appear to be having a positive, significant impact on breastfeeding rates even in high risk populations. This study suggests that educators should continue to provide culturally sensitive messages, especially for adolescents and ethnic minorities, the groups that showed the smallest increases in breastfeeding rates. Because most women make breastfeeding decisions early, it is helpful to foster positive attitudes about breastfeeding in women who may become pregnant and to provide education throughout the pregnancy as well as after the baby is born.

Ryan AS et al. Breastfeeding continues to increase into the new millennium. *Pediatrics*. 2002;110:1103-1109.



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Grocery store access: a link to good health and food security

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An epidemiological study reported in the *American Journal of Preventive Medicine* confirms that as a group, people who live near supermarkets have healthier diets.

Researchers looked at the number of supermarkets in a given area, the demographics of the people who lived there, and the quality of their diets. When there was at least one supermarket nearby, residents ate more fruits and vegetables and were more likely to watch their dietary fat intake. Specifically, this study showed that African-Americans' fruit and vegetable intake increased by 32% for each additional supermarket in the neighborhood. A similar but less pronounced increase (11%) was seen in mainly white neighborhoods. This was true even after controlling for education and income.

The *number* of supermarkets in the neighborhoods studied was related to the race and income of the residents. Census tracts where residents were predominantly white had five times as many supermarkets as there were in areas where residents were predominantly black. Large supermarket chains have migrated to the suburbs, where residents have higher incomes. A report issued by the Urban and Environmental Policy Institute at Occidental College (www.uepi.oxy.edu) found that the higher the concentration of poverty in a community, the smaller the number of supermarkets.

Other community-based studies confirm that access to food is a key factor in food security. A food systems project in Hartford, CT (www.hartfordfood.org) showed that three main factors contribute to food insecurity: limited income at the household-level, limited social networks, and limited access to food resources at the community level.

A food security survey in Green Bay, Wisconsin (http://www.co.brown.wi.us/uw_extension/foodsecurity.html), found that 30% of respondents that experienced food insecurity with hunger said one reason they did not have enough food was because there was no grocery store in the area. Thirty-two percent said that having a grocery store downtown would help them get food.

Implications for educators: These studies confirm that some people may not be eating a healthy diet because their *access* to healthy food is limited – not their *desire* to eat healthy food. Borrowing a term from the U.K., there are “food deserts” in many U.S. cities, areas where there is limited access to healthy food.

Extension's focus on smart shopping, budgeting, and stretching food dollars is especially important when learners have fewer choices of where to shop. It is important for us to have an awareness of the challenges our learners face in gaining access to food.

WNEP Coordinators and FL Agents/Educators that serve on community-based hunger coalitions might be in a position to consider food access issues when addressing community food security. The food security survey in Green Bay, for example, helped provide evidence of the need for a downtown grocery store, something that has now been achieved.

Morland K et al. Neighborhood characteristics associated with the location of food stores and food service places. *Am J Prev Med.* 2002;22(1):23-9.