

# Update for

## *Nutrition During Pregnancy and Lactation: An Implementation Guide*

This update provides current information to supplement the report *Nutrition During Pregnancy and Lactation: An Implementation Guide*.<sup>1</sup> Although a number of scientific advances have been made since the implementation guide was published, the described approach to care remains sound and the information current, with the following changes noted.

### Special Recommendations for Women Before Pregnancy

- Maintain a healthy weight.
- Engage in physical activity regularly.
- If you need to gain or lose weight, do so gradually (no more than 1–2 pounds/week).
- If you are trying to become pregnant and you ordinarily drink alcoholic beverages, stop drinking or cut back on the amount you drink.
- If you smoke, quit or cut back to improve your health.
- To minimize your risk of having an infant with a neural tube defect, eat a highly fortified breakfast cereal that provides 100 percent of the Daily Value (DV) for folate (read the food label to find out) or take a vitamin supplement that provides 400 µg/day of folic acid.<sup>2</sup> Folic acid, the synthetic form of folate, is obtained only from fortified foods or vitamin supplements. It is not yet known whether naturally occurring folate is as effective as folic acid in the prevention of neural tube defects.

### Folate Intake During Pregnancy

The new recommended intake for folate during pregnancy is 600 µg/day of dietary folate equivalents (DFE\*).<sup>2</sup> This recommended intake is higher than the amount of folate usually consumed through food. This means that most pregnant women should try to eat a well-balanced diet including foods naturally rich in folate, such as orange juice, strawberries, cantaloupe, dark green leafy vegetables, asparagus, broccoli, and cooked dried peas and beans. Pregnant women are also likely to need greater amounts of foods fortified with folic acid, such as breakfast cereals or enriched bread, rice, or pasta, or they should take a vitamin supplement. Women who have previously given birth to an infant with a neural tube defect should consult their physician about folic acid intake.

### Calcium

The 1998 recommended intake for calcium is 1,000 mg/day (increased from 800 mg/day) for women ages 19 years and older, regardless of whether they are nonpregnant, pregnant, or lactating. To reach this goal, women need three servings of calcium-rich milk products, such as low-fat milk, cheese, or yogurt, or calcium-fortified orange juice. Adolescent females through age 18 years need four servings of calcium-rich foods daily to reach the recommended intake of 1,300 mg/day of calcium.<sup>3</sup>

### Maternal Weight Gain Expert Work Group

The Maternal Weight Gain Expert Work Group<sup>4</sup> convened by the Maternal and Child Health Bureau (MCHB) on May 6–7, 1996, suggested a weight gain of 1.5 pounds/week for normal-weight women during the second half of a twin pregnancy. The expert work group also suggested that adolescents less than 2 years postmenarche and African-American women with single pregnancies be advised to stay within the body mass index-specific weight

---

\*When determining “dietary folate equivalents,” include folate intake from food and synthetic folic acid in planning and assessing diets.

range recommended by the Institute of Medicine, without either restricting weight gain or encouraging weight gain at the upper end of the range.

## HIV, AIDS, and Other Medical Contraindications to Breastfeeding

Breastfeeding is not recommended for U.S. women who have AIDS or who are HIV positive. Consult *A Review of the Medical Benefits and Contraindications to Breastfeeding in the United States* (see resource listing below) or other current references to find the few additional medical contraindications to breastfeeding in the United States.

## Resource Listing

The following publications provide current information about maternal nutrition research and projects. They can be obtained from the MCHB-supported National Maternal and Child Health Clearinghouse, 2070 Chain Bridge Road, Suite 450, Vienna, VA 22182-2536. Phone: (703) 356-1964; fax: (703) 821-2098; e-mail: nmchc@circsol.com; Web site: <http://www.circsol.com/mch>.

Children's Hospital Medical Center of Akron. 1997. *What You Should Know about Folic Acid: For Parents Who Have Lost a Pregnancy or Had a Child with Spina Bifida, Anencephaly, or Encephalocele*. Akron, OH: Children's Hospital Medical Center of Akron.

Lawrence RA. 1997. *A Review of the Medical Benefits and Contraindications to Breastfeeding in the United States*. Arlington, VA: National Center for Education in Maternal and Child Health.

National Academy of Sciences, Institute of Medicine, Food and Nutrition Board, Committee on Nutritional Status During Pregnancy and Lactation. 1992. *Nutrition Services in Perinatal Care* (2nd ed.). Washington, DC: National Academy Press.

National Academy of Sciences, Institute of Medicine, Food and Nutrition Board, Committee on Nutritional Status During Pregnancy and Lactation, Subcommittee for a Clinical Application Guide. 1992. *Full-sized BMI and Weight Gain Charts: Supplementary Materials for Nutrition During Pregnancy and Lactation—An Implementation Guide*. Washington, DC: National Academy Press.

Suitor CW. 1997. *Maternal Weight Gain: A Report of an Expert Work Group*. Arlington, VA: National Center for Education in Maternal and Child Health.

## Endnotes

1. National Academy of Sciences, Institute of Medicine, Food and Nutrition Board, Committee on Nutritional Status During Pregnancy and Lactation, Subcommittee for a Clinical Application Guide. 1992. *Nutrition During Pregnancy and Lactation: An Implementation Guide*. Washington, DC: National Academy Press.
2. Institute of Medicine, Food and Nutrition Board. 1998. *Dietary Reference Intakes for Thiamin, Riboflavin, Niacin, Vitamin B<sub>6</sub>, Folate, Vitamin B<sub>12</sub>, Pantothenic Acid, Biotin, and Choline*. Washington, DC: National Academy Press.
3. Institute of Medicine, Food and Nutrition Board. 1997. *Dietary Reference Intakes for Calcium, Phosphorus, Magnesium, Vitamin D, and Fluoride*. Washington, DC: National Academy Press.
4. Suitor CW. 1997. *Maternal Weight Gain: A Report of an Expert Work Group*. Arlington, VA: National Center for Education in Maternal and Child Health.

*This update was prepared with the assistance of Carol West Suitor and produced by the National Center for Education in Maternal and Child Health under its cooperative agreement (MCU-119301) with the Maternal and Child Health Bureau, Health Resources and Services Administration, Public Health Service, U.S. Department of Health and Human Services. June 1998.*



Maternal and Child Health Bureau



National Center for Education  
in Maternal and Child Health