



Extension FactSheet

Family and Consumer Sciences, 1787 Neil Avenue, Columbus, Ohio 43210

Nutritional Needs of Pregnancy

Updated by: **Jaime Foster**, Extension Associate, Human Nutrition, February 2006

Pregnancy is the most nutritionally demanding time of a woman's life. Your body needs enough nutrients every day to support the growth of your baby and the maintenance of your own body. All the nourishment this developing baby needs comes from you, either through the foods you eat or the supplements you take.

Pregnant women need more essential nutrients than other women. From the beginning of the second trimester until delivery, your body needs an additional 300 calories each day to support the growth of your baby. It is important to eat the right foods every day since tissues and organs develop during certain weeks of your pregnancy. Your own health depends on your diet, too. While your body is supplying the nutrients your baby needs, your body still needs the same nutrients as before you were pregnant.

MyPyramid helps you choose healthy foods to meet your needs. Increase your intake of nutrient-dense foods. Nutrient-dense foods are packed with more nutrients for the calories than other foods that are mostly calories with few other nutrients. Nutrients are also called vitamins and minerals. By following MyPyramid recommendations based on age, sex, and activity level while adding the additional 300 calories per day at the start of the second trimester, you can get the nourishment you need.

Protein is needed for the buildup of your muscles, uterus, breasts, blood supply, and baby's tissues. Low protein intake is related to smaller-than-average weight babies who may have health problems. Pregnant women need around 60 grams of protein per day.

Folate is a vitamin that is required to build protein tissues. Low folate levels are linked to birth defects, such as spina bifida. These defects form early in pregnancy, often before women know they are pregnant. It is important to eat enough foods high in folate like broccoli, dark green vegetables, and oranges both before and during

pregnancy. The dietary reference intake for folate is 400 milligrams per day.

Calcium is needed by your baby for strong bones. If calcium is not supplied by the mother's diet, calcium is taken from the mother's bones for the baby. The dietary reference intake for calcium is 1,000 milligrams per day or 1,300 milligrams per day for women under 18 years of age.

Low **Zinc** levels during pregnancy can cause long labor and small babies who may have health problems. The dietary reference intake for zinc is 11 milligrams per day or 12 milligrams per day for women under 18 years of age.

Iron deficiency is common in pregnant women. Both mother and baby need iron for their developing blood supplies. A developing baby also stores iron for use after birth. This increases the mother's iron needs. It is practically impossible to get enough iron from food. Doctors usually recommend supplements. The dietary reference intake for iron is 27 milligrams per day for all pregnant women.

A good diet takes planning. Pregnant women should make sure to include:

- Enough calories for adequate weight gain.
- A variety of foods from each food group, with limited use of the oils and solid fats group.
- Regular meals and snacks.
- 30 grams of dietary fiber every day.
- 8 or more cups of water each day.
- Salt to taste.
- No alcoholic beverages, including beer.
- Prenatal vitamin once a day, if prescribed by your doctor.

No one can guarantee a baby will be born healthy and strong. However, these are steps mothers-to-be can take to make the best baby possible. Nothing offers greater benefits to mother and baby than good nutrition.

Guide to Good Eating During Pregnancy

Tips to Remember:

- Eat a variety of foods.
- Choose foods with a lot of fiber—fruits, vegetables, dry beans, whole grain breads and cereals, and other whole grain products.
- Exercise in moderation on a regular basis (ask your doctor).
- Drink plenty of fluids (64 ounces per day or eight, 8-ounce glasses)
- Eat 3 to 5 meals and snacks per day.
- Pregnancy increases the need for calories and most nutrients. Starting with the second trimester, you need to increase your normal calorie level by 300 calories to provide the extra energy your body needs. Remember, this is not a lot of food. 300 calories is equal to a small snack, such as a half of a peanut butter and jelly sandwich and a glass of 1% milk.
- The amount of suggested weight gain depends upon your weight before pregnancy (ask your doctor).
- Visit the new food guide pyramid online at <http://www.mypyramid.gov> for more information.

Weight Before Pregnancy	Suggested Weight Gain
Normal Weight (BMI 20–24)	25–35 pounds
Underweight (BMI < 20)	28–40 pounds
Overweight (BMI 25–29)	15–25 pounds
Very Overweight (BMI > 30)	~15 pounds

Recommended Servings*

Dairy Group—3 cups per day; be sure to choose lower fat selections

Count as 1 cup: 1 cup (8 ounces) 1% or skim milk; 1 cup low-fat yogurt; 2 cups low-fat or fat-free cottage cheese; 1½ cups low-fat or fat-free ice cream; 1½ ounces of low fat hard cheese (cheddar, mozzarella, Swiss, or parmesan); 1/3 cup shredded cheese; 2 ounces processed cheese (American); 1 cup pudding (made with milk).

*Based on a 2000 calorie diet. Your needs may vary depending on age, sex, and activity level.

Meat and Meat Alternatives—5.5 ounce equivalents (or the amount of a food that has a similar nutrition value as 5.5 ounces of meat)

Count as 1 ounce equivalent: 1 ounce lean meat, fish, or poultry; 1 egg; 1 slice lunch meat; 1 tablespoon peanut butter; 1/4 cup cooked kidney, pinto, or garbanzo beans.

Fruit Group—2 cups

Count as 1 cup: 1 cup (8 ounces) 100% juice; 1 large banana or orange; 1 small apple; 1 cup canned fruit. Include one Vitamin C source such as an orange or orange juice every day.

Vegetable Group—2.5 cups

Count as 1 cup: 1 cup cooked vegetables; 2 cups raw leafy vegetables; 1 cup (8 ounces) 100% juice. Include one serving of a dark green leafy vegetable every day.

Grain Group—6 ounce equivalents (or the amount of a food that has a similar nutrition value to 6 ounces of a grain)

Count as 1 ounce equivalent: 1 slice 100% whole grain bread; 1 cup whole grain, ready-to-eat cereal; ½ cup cooked cereal, rice, or pasta, ½ “mini” bagel, 1 small tortilla, 6 inches in diameter; 1 pancake, 4½ inches in diameter.

Oils and Solid Fats—use sparingly

Common portions: 1 tablespoon corn, safflower, or cottonseed oil; 1 tablespoon margarine; 1 tablespoon mayonnaise; 1 ounce nuts; and 4 large olives.

Most cakes, pies, cookies, soft drinks, sugar, honey, candy, jams, jellies, gravies, butter, and sour cream have either an oil or solid fat and may be loaded with simple sugars. Eat them in moderation; save them to eat only if you need extra calories after eating the basic needed foods.

MyPyramid	
A Guide to Daily Food Choices when Pregnant	
Oils and Solid Fats	Use sparingly
Milk, Yogurt, and Cheese Group	3 cups
Vegetable Group	2.5 cups
Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts Group	5.5 ounce equivalents
Fruit Group	2 cups
Bread, Cereal, Rice, and Pasta Group	6 ounce equivalents

References

- Panel on Micronutrients, Subcommittees on Upper Reference Intakes of Nutrients and of Interpretation and the Uses of Dietary Reference Intakes, and the Standing Committee on the Scientific Evaluation of Dietary Reference Intakes. Dietary Reference Intakes for Calcium, Phosphorus, Magnesium, Vitamin D, and Fluoride. National Academies Press, Washington, DC. 2001. <http://www.nap.edu>
- Panel on Micronutrients, Subcommittees on Upper Reference Intakes of Nutrients and of Interpretation and the Uses of Dietary Reference Intakes, and the Standing Committee on the Scientific Evaluation of Dietary Reference Intakes. Dietary Reference Intakes for Thiamin, Riboflavin, Niacin, Vitamin B6, Folate, Vitamin B12, Pantothenic Acid, Biotin, and Choline. National Academies Press, Washington, DC. 2001. <http://www.nap.edu>
- Panel on Micronutrients, Subcommittees on Upper Reference Intakes of Nutrients and of Interpretation and the Uses of Dietary Reference Intakes, and the Standing Committee on the Scientific Evaluation of Dietary Reference Intakes. Dietary Reference Intakes for Vitamin A, Vitamin K, Arsenic, Boron, Chromium, Copper, Iodine, Iron, Manganese, Molybdenum, Nickel, Silicon, Vanadium, and Zinc. National Academies Press, Washington, DC. 2001. <http://www.nap.edu>
- The National Women's Health Information Center. Pregnancy and a Healthy Diet. January 2005. <http://www.4women.gov>. Accessed 1 June 2005.
- U.S. Department of Agriculture, MyPyramid, 2005. <http://www.mypyramid.gov>. Accessed June 2005.

Visit Ohio State University Extension's web site "Ohioline" at: <http://ohioline.osu.edu>

OSU Extension embraces human diversity and is committed to ensuring that all educational programs conducted by Ohio State University Extension are available to clientele on a nondiscriminatory basis without regard to race, color, age, gender identity or expression, disability, religion, sexual orientation, national origin, or veteran status.

Keith L. Smith, Associate Vice President for Agricultural Administration and Director, OSU Extension