



womenshealth.gov

1-800-994-9662

TDD: 1-888-220-5446

# Folate (Folic Acid)

## EASY TO READ

**Q: What are folate and folic acid?**

**A:** Folate (FOH-layt) is a vitamin found naturally in many foods. Folate helps your body make new cells.

Folic (FOH-lik) acid is the man-made form of folate. It can be taken in vitamin pills. It is also added to many grain products. These include cereals, breads, and flours.

**Q: Why do women need folate?**

**A:** Folate helps keep your blood healthy. Not getting enough can cause a type of anemia (uh-NEE-mee-uh). Having anemia means you have fewer healthy red blood cells than normal. This makes it hard for your blood to carry enough oxygen throughout your body.

Signs that you may have anemia:

- Feeling very tired
- Headache
- Sore mouth and tongue
- Pale skin

Folate can also help prevent some birth defects (problems with the baby). Getting enough folate before and during pregnancy can help prevent certain defects of the baby's spine and brain:

- **Spina bifida** (SPEYE-nuh BIF-ih-duh) is a problem with the spine. The nerves that control leg movements and other functions do not work. Children with spina bifida often have lifelong disabilities. They may also need many surgeries.
- **Anencephaly** (an-en-SEF-uh-lee)

is when most or all of the brain does not develop. Babies with this problem die before or shortly after birth.

Experts think that folate might also help prevent:

- some cancers
- Alzheimer's (AWLTS-heye-merz) disease
- hearing loss as you age

More research is needed to know this for certain.

**Q: How much folate should women get each day?**

**A:** All women capable of pregnancy need 400 to 800 micrograms (400 to 800 mcg or 0.4 to 0.8 mg) folate each day, even if they are not planning to get pregnant. Folate is needed before and during the first weeks of pregnancy to help prevent birth defects. Because half of all pregnancies in the United States are not planned, women who can become pregnant should get 400 to 800 mcg of folate each day. That way, if they do become pregnant their babies will be less likely to have birth defects.

Some women need more folate each day:

- Pregnant women need 400 to 800 mcg of folic acid in the *very* early stages of pregnancy *often before they know that they are pregnant*. A pregnant woman should continue taking folic acid throughout pregnancy. Women should discuss their folic acid needs with their doctors. Some doctors prescribe prenatal vitamins that contain higher amounts of folic acid.
- Breastfeeding women need 500 mcg. Some doctors suggest that breastfeeding women simply continue taking their prenatal vitamins to be sure they are getting plenty of folic acid while they are breastfeeding and should they become pregnant again.

Talk with your doctor about how much

## FREQUENTLY ASKED QUESTIONS



womenshealth.gov

1-800-994-9662

TDD: 1-888-220-5446

folic acid to take if:

- You had a baby with spina bifida or anencephaly and want to get pregnant again. Your doctor may give you a prescription for 4,000 mcg folic acid. That is 10 times the normal dose. Taking this high dose of folic acid can reduce your chances of having another baby with these birth defects.
- You have a family member with spina bifida. Your doctor may give you a prescription for 4,000 mcg folic acid.
- You have spina bifida and want to get pregnant.
- You are taking medicines that affect how your body uses folate. These include some of the medicines for:
  - Epilepsy
  - Type 2 diabetes
  - Rheumatoid arthritis
  - Psoriasis
  - Inflammatory bowel disease
- You have kidney disease and are on dialysis.
- You have liver disease.
- You have celiac disease.
- You abuse alcohol.

Find **folic acid**. Choose a vitamin that says “400 mcg” or “100%” next to folic acid.

they do. And they may contain harmful chemicals. When choosing a brand of vitamins, look for a mark that says USP or NSF. These “seals of approval” mean that the pills are safe and have the amounts of vitamins stated on the label.



### Vitamin Label

Check the Supplement Facts label to be sure you are getting 400 mcg folic acid.

Supplement Facts		
Serving Size: 1 tablet		
Amount Per Serving	% Daily Value	
Vitamin A	5000IU	100
Vitamin C	60mg	100
Vitamin D	400 IU	100
Vitamin E	30 IU	100
Thiamin	1.5mg	100
Riboflavin	1.7mg	100
Niacin	20mg	100
Vitamin B6	2mg	100
<b>Folic Acid</b>	<b>400mcg</b>	<b>100</b>
Vitamin B12	6mcg	100
Biotin	30mcg	10
Pantothenic Acid	10mg	100
Calcium	162mg	16
Iron	18mg	100
Iodine	150mcg	100
Magnesium	100mg	25
Zinc	15mg	100
Selenium	20mcg	100
Copper	2mg	100
Manganese	3.5mg	175
Chromium	65mcg	54
Molybdenum	150mcg	200
Chloride	72mg	2
Potassium	80mg	2

### Q: How can women get enough folate or folic acid each day?

**A:** The easiest way is to take a vitamin pill. Most U.S. multivitamins have 400 micrograms (mcg) folic acid. Check the label on the bottle to be sure. Or you can take a pill that only contains folic acid.

Not all vitamin bottles have the amounts of vitamins that their labels say



womenshealth.gov

1-800-994-9662

TDD: 1-888-220-5446

You can also eat foods that are high in folate, such as:

- Beans and lentils
- Peas (black-eyed peas, chickpeas, green peas)
- Juices (orange, tomato, grapefruit, pineapple)
- Fruits (oranges, cantaloupe, honeydew melon, avocado, papaya, raspberries)
- Soy milk
- Vegetables (green leafy vegetables such as spinach, lettuce, turnip greens, mustard greens, collard greens, and Chinese cabbage; broc-

coli; Brussels sprouts; asparagus; artichokes; okra; corn; cauliflower; potato; beets; green onions; sweet red peppers)

- Nuts
- Sunflower seeds
- Peanuts and peanut butter
- Liver
- Giblets

You can also eat foods that have had folic acid added to them, such as:

- Breakfast cereals (Some have 100% of the Daily Value of folic acid in each serving)
- Breads
- Flours
- Pastas
- Cornmeals
- White rice

**Food Label**

Check the label on the package to see if the food has folic acid. The label will tell you how much folic acid is in each serving. Sometimes, the label will say folate instead of folic acid.

**Q: Can women get too much folate or folic acid?**

You can't get too much folate from foods that naturally have folate. But it is possible for some people to get too much folic acid. Taking more than 1,000 mcg of folic acid a day may cause nerve damage in people who do not have enough vitamin B<sub>12</sub> in their bodies. People at risk for not having enough vitamin B<sub>12</sub> include:

- People who don't eat meat, eggs, or dairy products (vegans)
- People ages 50 years and older ■

<b>Nutrition Facts</b>			
Serving Size 1 cup (228g)			
Servings Per Container 2			
Amount Per Serving			
<b>Calories</b>	250	<b>Calories from Fat</b>	110
% Daily Value*			
<b>Total Fat</b>	12g		18%
Saturated Fat	3g		15%
<b>Cholesterol</b>	30mg		10%
<b>Sodium</b>	470mg		20%
<b>Total Carbohydrate</b>	31g		10%
Dietary Fiber	0g		0%
Sugar	5g		
<b>Protein</b>	5g		
Vitamin A			4%
Vitamin C			2%
Calcium			20%
Iron			4%
<b>Folate</b>			30%

\* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:

		Calories:	2,000	2,500
Total Fat	Less than		65g	80g
Sat Fat	Less than		20g	25g
Cholesterol	Less than		30mg	300mg
Sodium	Less than		2,400mg	2,400mg
Total Carbohydrates			300g	375g
Dietary Fiber			25g	30g

Find folate. Read across to see how much folic acid is in your food.



womenshealth.gov

1-800-994-9662

TDD: 1-888-220-5446

### *For More Information...*

For more information on folic acid, please call womenshealth.gov at 800-994-9662 or contact the following organizations:

#### **Office of Dietary Supplements, NIH, HHS**

Phone number: (301) 435-2920

Internet Address: <http://ods.od.nih.gov/factsheets/folate.asp>

#### **National Center for Birth Defects and Developmental Disabilities, CDC, HHS**

Phone number: (800) 232-4636

Internet Address: <http://www.cdc.gov/folicacid>

#### **National Institute of Neurological Disorders and Stroke, NIH, HHS**

Phone number: (800) 352-9424

Internet Address: <http://www.ninds.nih.gov/disorders/anencephaly/anencephaly.htm>

#### **March of Dimes Birth Defects Foundation**

Phone number: (888) 663-4637

Internet Address: <http://www.modimes.org>

#### **Spina Bifida Association of America**

Phone number: (800) 621-3141

Internet Address: <http://www.sbaa.org/site/PageServer?pagename=index>

#### **American Pregnancy Association**

Phone number: (972) 815-2337

Internet Address: <http://www.americanpregnancy.org/pregnancyhealth/folicacid.html>

All material contained in this FAQ is free of copyright restrictions, and may be copied, reproduced, or duplicated without permission of the Office on Women's Health in the Department of Health and Human Services. Citation of the source is appreciated.

Content last updated December 9, 2009.