



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 move-

ments 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: Most women need 400 micrograms (mcg) of 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 U.S. are not planned, women who can become pregnant should aim to get 400 mcg 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:

- If you are pregnant, you need 600 mcg.
- If you are breastfeeding, you need 500 mcg.

Talk with your doctor about how much folic acid to take if:

- You had a baby with spina bifida or anencephaly and want to get preg-

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nant 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.

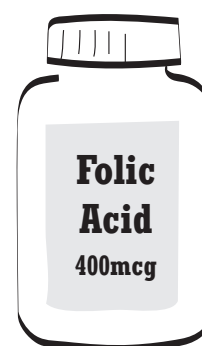
- You have a family member with spina bifida. Your doctor may give you a prescription for 4,000 mcg folic acid.
- You have spina bifida and want to get pregnant.
- You are taking medicines that affect how your body uses folate. These include some of the medicines for:
 - Epilepsy
 - Type 2 diabetes
 - 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.

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 they do. And they may contain harm-

ful 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
Folic Acid	400mcg	100
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

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



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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 B₁₂ in their bodies. People at risk for not having enough vitamin B₁₂ include:

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

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



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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>

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