

# Vitamin K

---

This sheet is about exposure to vitamin K in pregnancy and while breastfeeding. This information is based on published research studies. It should not take the place of medical care and advice from your healthcare provider.

## **What is vitamin K?**

Vitamin K is an essential vitamin that is used by the body to help the blood clot (stick together) properly. Essential vitamins are nutrients that the body cannot make, so people need to get them from other sources. Vitamin K can be found in foods such as green leafy vegetables, vegetable oils, and some fruits. Vitamin K is also available as a dietary supplement or an injection (shot).

Vitamin K deficiency (very low levels of vitamin K in the body) can cause symptoms, such as bleeding more than usual or bruising easily. Not all people with a vitamin K deficiency will have symptoms. Sometimes, other health conditions or taking medications that interact with how vitamin K is absorbed can increase the chance of having serious symptoms.

Vitamin K comes in 7 forms, known as vitamins K1, K2, K3, K4, K5, K6, and K7. Vitamins K1 and K2 are natural forms of vitamin K. Vitamins K3, K4, K5, K6, and K7 are synthetic (lab-made) forms of vitamin K. Vitamin K3 (also called menadione) is no longer used in dietary supplements or fortified foods. The information in this sheet will apply to forms of vitamin K that are found in dietary supplements, fortified foods, or naturally occurring in other foods (all forms except for vitamin K3).

If you have been prescribed vitamin K by your healthcare providers, talk with them before making changes to how you take this supplement. Your healthcare providers can talk with you about the benefits of maintaining your nutrient levels and the risks of low vitamin K during pregnancy.

Talk with your healthcare providers about all supplements/vitamins that you take. Have the bottles or photos of the labels with you so that all reported ingredients and their amounts can be reviewed.

## **How much vitamin K is needed in pregnancy?**

The Adequate Intake (AI) is the amount of vitamin K that people should aim to get each day. There have been no side effects reported in the general population with intake of vitamin K above the adequate intake level.

| Adequate Intake (AI)                     |              |
|--|--------------|
| Pregnant and age 14 to 18 years old      | 75 mcg / day |
| Pregnant and age 19 years or older       | 90 mcg / day |
| Breastfeeding and age 14 to 18 years old | 75 mcg / day |
| Breastfeeding and age 19 years or older  | 90 mcg / day |

Most people get enough vitamin K from their diet. When adding up how much vitamin K you are getting, remember to count amounts from foods, drinks, and from any supplements you are taking. There are resources available online that

list amounts of vitamin K typically found in foods, such as the United States Department of Agriculture (USDA) National Nutrient Database, found here: <https://nal.usda.gov/sites/default/files/page-files/Vitamin%20K.pdf>. Factors like diet, medications, and certain medical conditions can cause someone to have low levels of vitamin K. Some people, including pregnant women, might need to take a vitamin K supplement. Be sure to talk with your healthcare providers about your specific nutritional needs before, during, and after pregnancy.

### ***Can vitamin K make it harder for me to get pregnant?***

Vitamin K at the adequate intake level is not expected to make it harder to get pregnant. It is not known if having a vitamin K deficiency can make it harder to get pregnant.

### ***Does vitamin K increase the chance of miscarriage?***

Miscarriage is common and can occur in any pregnancy for many different reasons. Vitamin K at the adequate intake level is not expected to increase the chance of miscarriage. Studies have not been done to see if having a vitamin K deficiency can increase the chance of miscarriage.

### ***Does vitamin K increase the chance of birth defects?***

Birth defects can happen in any pregnancy for different reasons. Out of all babies born each year, about 3 out of 100 (3%) will have a birth defect. We look at research studies to try to understand if an exposure, like vitamin K, might increase the chance of birth defects in a pregnancy. Vitamin K at the adequate intake level is not expected to increase the chance of birth defects.

In one collection of case reports, 14 infants whose mothers had vitamin K deficiency during pregnancy were reported to have poor development of the bones in the skull and changes in the way the brain formed. Case reports cannot provide enough information to know if vitamin K deficiency actually caused these findings. In some of these cases, vitamin K deficiency was caused by severe nausea and vomiting during pregnancy (called hyperemesis gravidarum). This makes it hard to know if the vitamin K deficiency or other factors, such as a health condition, caused the reported issues. For more information on nausea and vomiting of pregnancy, please see our fact sheet here: <https://mothertobaby.org/fact-sheets/nausea-vomiting-pregnancy-nvp/>.

### ***Does vitamin K increase the chance of other pregnancy-related problems?***

Vitamin K at the adequate intake level is not expected to increase the chance of other pregnancy-related problems such as preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth).

Having a vitamin K deficiency can increase the chance of hemorrhage (blood loss from a broken blood vessel) in the pregnant woman and intracranial (in the brain) hemorrhage in the fetus.

### ***Does vitamin K affect future behavior or learning for the child?***

Vitamin K at the adequate intake level is not expected to affect future behavior or learning for the child.

Studies have not been done to see if having a vitamin K deficiency alone can increase the chance of behavior or learning issues for the child. Intracranial hemorrhages or issues with the skull or brain due to vitamin K deficiency could affect future behavior or learning for the child.

### ***Breastfeeding and vitamin K:***

Vitamin K is a typical part of breast milk. Breastfeeding women should continue to get the daily recommended adequate intake of vitamin K unless otherwise directed by a healthcare provider. The adequate intake level for breastfeeding is the same as pregnancy and can be found in the chart above.

Breastfeeding women should talk to their healthcare provider and their child's pediatrician about their specific nutritional needs before, during, and after breastfeeding. Be sure to talk to your healthcare provider about all your breastfeeding questions.

### ***If a man takes vitamin K, could it affect fertility or increase the chance of birth defects?***

Vitamin K at the adequate intake level is not expected to affect men's fertility or increase the chance of birth defects. Studies have not been done to see if a vitamin K deficiency could affect men's fertility (ability to get a woman

pregnant) or increase the chance of birth defects. In general, exposures that fathers or sperm donors have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at <https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/>.

**Please click [here](#) for references.**

**Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at [MotherToBaby.org](https://mothertobaby.org).**

---

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, February 1, 2025.