Vitamin E

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

What is vitamin E?

Vitamin E is an essential vitamin that is used by the body as an antioxidant (protects cells from damage) and helps the immune system fight infections. Essential vitamins are nutrients that the body cannot make, so people need to get them from other sources. Vitamin E can be found in foods such as seeds, nuts, vegetable oils, leafy vegetables, and cereals that have had vitamin E added to them. Vitamin E is also available as a dietary supplement. Vitamin E deficiency (not having enough vitamin E in the body) can cause problems with the muscles, nerves, and immune system.

If you have been prescribed vitamin E by your healthcare providers, talk with them before making changes to how you take your supplement. Your healthcare providers can talk with you about the benefits of maintaining your nutrient levels and the risks of low nutrients during pregnancy. It is not recommended to take more than the recommended dietary allowance (RDA) of vitamin E unless you are doing so under the care of your healthcare provider.

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 ingredients and amounts can be reviewed. Herbal supplements are typically not recommended for use during pregnancy. For more information on herbal products please see our fact sheet at: https://mothertobaby.org/fact-sheets/herbal-products-pregnancy/.

How much vitamin E is needed by women who are pregnant?

The Recommended Dietary Allowance (RDA) is the amount people should aim to get each day. The Tolerable Upper Intake Level (UL) is the highest level of daily nutrient intake that is not expected to increase health risks for most people in the general population.

	Recommended daily allowance (RDA)	Upper limit (UL)
Pregnant and age 14 to 18 years old	15mg	800mg
Pregnant and age 19 years or older	15mg	1000mg
Breastfeeding and age 14 to 18 years old	19mg	800mg

Breastfeeding and age 19 years or older	19mg	1000mg

It is not recommended to take more than the RDA in a day unless it has been prescribed by your healthcare provider.

When looking at daily intake, remember to count amounts from foods, drinks, and from supplements. There are resources available online that list amounts of vitamin E typically found in foods, such as the United States Department of Agriculture (USDA) National Nutrient Database, found here: https://ods.od.nih.gov/pubs/usdandb/VitaminE-Food.pdf. Labels on supplements will list the amount of vitamin E in the product. Be sure to talk with your healthcare providers about your specific nutritional needs before, during, and after pregnancy.

I take vitamin E. Can it make it harder for me to get pregnant?
Taking vitamin E at the RDA and staying below the UL is not expected to make it harder to get pregnant.

Does taking vitamin E increase the chance of miscarriage?
Miscarriage is common and can occur in any pregnancy for many different reasons. There are no studies that suggest that taking more than the RDA, but less than the UL, of vitamin E or having too little vitamin E can increase the chance of miscarriage. Studies have not been done to see if taking more than the UL of vitamin E can increase the chance of miscarriage.

Does taking vitamin E 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. Taking vitamin E at the RDA and staying below the UL is not expected to increase the chance of birth defects.

One study reported an increased chance of heart defects when women took between 14.9 and 33.8 mg daily during pregnancy (more than the RDA but less than the UL). Another study reported an increased chance of heart defects when the woman who was pregnant did not get the RDA of vitamin E. This is not enough information to draw conclusions from these reports. There is no proven relationship between the amount of vitamin E taken and an increased chance of birth defects.

Does taking vitamin E in pregnancy increase the chance of other pregnancy-related problems?
It is not known if taking too much or too little vitamin E can cause 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). One study reported that mothers with blood concentration of vitamin E in the high end of the of the normal range had newborns who were large for gestational age (LGA) (weighing more than most other newborns) compared to mothers who had lower vitamin E levels that were still within the normal range. One study is not enough to make a conclusion about vitamin E having an effect on a newborn's size.

Does taking vitamin E in pregnancy affect future behavior or learning for the child?
Taking vitamin E at the RDA and staying below the UL is not expected to affect future behavior or learning for the child. Studies in humans have not been done to see if too much or too little vitamin E increases the chance for behavior or learning issues.

Breastfeeding while taking vitamin E:
Vitamin E is a normal part of breast milk. Women who are breastfeeding should continue to get the daily recommended amount of vitamin E unless otherwise directed by their healthcare provider. The RDA for breastfeeding is higher than for pregnancy. Refer to the chart above for the RDA and UL while breastfeeding.

Women who are breastfeeding should talk to their healthcare provider and their child's pediatrician about their

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 E, could it affect fertility or increase the chance of birth defects?

It is not known if too much vitamin E in could affect a man's fertility (ability to get a woman pregnant) or increase the chance of birth defects. Men with vitamin E deficiency (blood levels of vitamin E less than 4 mg/L) might make less sperm, which could affect the ability to get a woman pregnant. 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.

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