Vitamin C

This sheet is about exposure to vitamin C in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare providers.

What is vitamin C?
Vitamin C is also known as ascorbic acid and dehydroascorbic acid. It is an essential vitamin. Essential vitamins are nutrients that the body cannot make, so people need to get vitamin C from other sources. Vitamin C is naturally found in some foods such as fruits and vegetables. Vitamin C is also available as a dietary supplement.

What is the Dietary Reference Intake of vitamin C for people who are pregnant?
The Recommended Dietary Allowance (RDA) is the amount people should aim to get each day. It is not recommended to take more than the RDA in a day. The Tolerable Upper Intake Level (UL) is the dose that people can start to have side effects.

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<tr>
<th>Recommended daily allowance (RDA)</th>
<th>Upper Limit (UL)</th>
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</thead>
<tbody>
<tr>
<td>Pregnant and 14 to 18 years old</td>
<td>80 mg per day</td>
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<tr>
<td>Pregnant and 19 years old or older</td>
<td>85 mg per day</td>
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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 C typically found in foods. Labels on supplements will list the amount of vitamin C in the product.

Most people can get enough vitamin C from a balanced diet. It is unlikely that you will get too much vitamin C if your only source of vitamin C is in your food and drink.

People who have exposure to cigarette smoke or who have medical conditions that might affect how their body absorbs vitamins (such as cancer, eating disorders, kidney disease, malabsorption, or substance misuse) should talk with their healthcare providers about their specific nutritional needs.

I take vitamin C. Can it make it harder for me to get pregnant?
This has not been studied. If a person is getting recommended amounts of vitamin C (not too much and not too little) it would be unlikely to make it harder to get pregnant.

I just found out I am pregnant. Should I stop taking vitamin C?
It is not recommended to take more than the RDA of vitamins unless you are doing so under the care of your healthcare provider. Talk with your healthcare providers about all supplements/vitamins that you take.
bottles or photos of the labels with you so that all ingredients and their recommended daily levels can be reviewed. Products that contain herbal supplements are typically not recommended during pregnancy. For more information on herbal products please see our fact sheet at: https://mothertobaby.org/fact-sheets/herbal-products-pregnancy/.

Does taking vitamin C increase the chance for miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. While vitamin C has not been well studied in relation to miscarriage, if a person is getting recommended amounts of vitamin C (not too much and not too little) it would be unlikely that vitamin C would increase the chance for miscarriage. There are studies where Vitamin C was given to pregnant people prior to 20 weeks in an effort to reduce miscarriage or other pregnancy complications; no reduction in miscarriage was found.

Does taking vitamin C increase the chance of birth defects?

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. Vitamin C has not been well studied in relation to birth defects, and it is recommended that pregnant persons take the RDA of vitamin C unless their health care provider prescribes something different. However, based on the studies reviewed, vitamin C intake below the RDA or at doses higher than the UL is not known to increase the chance for birth defects.

Could taking vitamin C increase the chance of other pregnancy related problems?

There are several studies which involved giving vitamin C supplementation to pregnant persons in the second and third trimester in an attempt to reduce the frequency of complications such as preeclampsia (elevated blood pressure), preterm delivery (birth before week 37) and low birth weight (weighing less than 5 pounds 8 ounces at birth). These studies did not consistently find benefit or harm to the baby from this supplementation. There is a report of two babies exposed to levels higher than the RDA (more than 400mg per day during pregnancy); after delivery the babies had rapid metabolism of vitamin C and showed signs of vitamin C deficiency.

Does taking vitamin C in pregnancy affect future behavior or learning for the child?

Studies have not been done to see if vitamin C intake below the RDA or at doses higher than the UL can cause behavior or learning issues.

Breastfeeding while taking vitamin C:

Vitamin C is a normal part of breastmilk. People who are breastfeeding should continue to get the daily recommended amount of vitamin C. The RDA for breastfeeding is different from pregnancy.

<table>
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<th>Upper Limit (UL)</th>
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<tr>
<td>Breastfeeding and 14 to 18 years old</td>
<td>115 mg per day</td>
</tr>
<tr>
<td>Breastfeeding and 19 years old or older</td>
<td>120 mg per day</td>
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</tbody>
</table>

People who have exposure to cigarette smoke or who have medical conditions that might affect how their body absorbs vitamins (such as cancer, eating disorders, kidney disease, malabsorption, or substance misuse) should talk
with their healthcare providers about their specific nutritional needs. Talk to your healthcare provider about all of your breastfeeding questions.

**If a male takes vitamin C, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?**

A few studies have found that vitamin C might help to improve fertility (ability to get partner pregnant) for some men but not for others. People who are experiencing infertility should discuss treatment options with their healthcare providers. In general, exposures that fathers or sperm donors have are unlikely to increase the 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.