

# **Zinc**

This sheet is about exposure to zinc from diet and dietary supplements 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 zinc?

Zinc is an essential nutrient. This means the body cannot make zinc, so people need to get zinc from other sources. Zinc is naturally found in some foods such as meats and seafood or fish, and it is available as a dietary supplement. Zinc has also been added to some cereals and can be found in some prenatal vitamins. Zinc has also been found in homeopathic products marketed for colds. Denture adhesives may also contain zinc.

Because zinc is an essential nutrient, women who are pregnant will need to continue to get zinc from food, drinks, and supplements. 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 their amounts can be reviewed. Products that contain herbals 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/.

# What are the Dietary Reference Intakes of zinc for women who are pregnant?

Dietary Reference Intakes (DRI) help people know how much of each vitamin or mineral they should aim to get each day. DRIs include the Recommended Daily Allowance (RDA) and a Tolerable Upper Intake Level (UL). The Recommended Dietary Allowance (RDA) is the amount people should aim to get each day from food, drinks, and supplements. The Tolerable Upper Intake Level (UL) is the dose at which people can start to have side effects. RDAs and ULs are there to help guide us in getting enough of a good thing but also to keep us from getting too much of a good thing.

	Recommended Daily Allowance (RDA)	Upper Limit (UL)
14 to 18 years old and pregnant	12 mg per day	34 mg per day
19 years old or older and pregnant	11 mg per day	40 mg per day

Most people can get enough zinc from a balanced diet. It is unlikely that you will get too much zinc if your only source of zinc is in your food and drink. There are resources available online that list amounts of zinc typically found in foods. Labels on supplements will list the amount of zinc in the product.

People who do not eat meat or seafood, have had bariatric surgery (such as gastric bypass), have medical conditions that might affect how their body absorbs nutrients (such as cancer, eating disorders, kidney disease, malabsorption, or substance misuse), or have exposure to cigarette smoke, should talk with their healthcare providers about their specific nutritional needs.

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## I take zinc. Can it make it harder for me to get pregnant?

If a woman is getting recommended amounts of zinc (not too much and not too little) it would be unlikely to make it harder to get pregnant. It might be harder for a woman to get pregnant if her zinc levels are too low.

# Does taking zinc increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Studies have not been done to see if zinc intake below the RDA (too little) or at doses higher than the UL (too much) can increase the chance of miscarriage.

# Does taking zinc 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. Zinc intake between the RDA and the UL is not expected to increase the chance for birth defects. Some studies have suggested that having blood zinc levels that are too high or too low might be linked to a higher chance of spina bifida (opening in the spine) in the fetus.

## Could taking zinc increase the chance of other pregnancy-related problems?

Some studies found that low blood levels of zinc in the woman who is pregnant might increase the chance of pregnancy-related problems, such as: low birth weight (weighing less than 5 pounds 8 ounces [2500 grams] at birth), high blood pressure (pregnancy-induced hypertension), preeclampsia (a serious pregnancy-related condition that can cause symptoms such as high blood pressure or fluid retention), and stillbirth.

There are some studies looking at zinc supplementation (between 20mg to 30mg) in pregnancy among women known to have low blood zinc levels. These studies were looking to see if zinc supplementation might reduce the chance of some pregnancy-related problems for women with low levels of zinc. These studies did not consistently find either benefit or harm to the baby from this supplementation.

Pregnancy-related problems from high zinc levels have not been well studied.

# Does taking zinc in pregnancy affect future behavior or learning for the child?

Studies have not been done to see if zinc intake below the RDA (too little) or at doses higher than the UL (too much) can cause behavior or learning issues.

#### **Breastfeeding while taking zinc:**

Zinc is a normal part of breastmilk. The RDA for breastfeeding is different from pregnancy. See the chart below for the Recommended Daily Allowance (RDA) and a Tolerable Upper Intake Level (UL) of zinc while breastfeeding.

	Recommended Daily Allowance (RDA)	Upper Limit (UL)
14 to 18 years old and breastfeeding	13 mg per day	34 mg per day
19 years old or older and breastfeeding	12 mg per day	40 mg per day



People who do not eat meat or seafood, have had bariatric surgery (such as gastric bypass), have medical conditions that might affect how their body absorbs nutrients (such as cancer, eating disorders, kidney disease, malabsorption, or substance misuse), or have exposure to cigarette smoke, should talk with their healthcare providers about their specific nutritional needs.

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

A few studies have found that low zinc levels are linked to infertility (ability to get a woman pregnant). Zinc supplementation might help to improve fertility for some men but not for others. It is not clear how too much zinc would affect fertility. In general, exposures that fathers or sperm donors have are unlikely to increase the risks to a partner's 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.

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