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Iodine and Pregnancy

This sheet talks about iodine during pregnancy. With each pregnancy, all women have a 3% to 5% chance of having a baby with a birth defect. This information should not take the place of medical care and advice from your health care provider.

What is iodine?

Iodine is a naturally occurring element that our body needs for our thyroid gland to work properly. Iodine can be found in foods, nutritional supplements, medications, and topical disinfectants. The Recommended Dietary Allowance (RDA) for iodine in pregnancy is 220 micrograms (μg) daily.

How can I find out if I am getting the right amount of iodine in my diet or in my supplements?

The best way to make sure that you are getting the right amount of iodine in your diet is to use iodized salt when cooking and at the dinner table. In addition, you can take a daily prenatal vitamin that contains at least 150 micrograms of iodine. You should take a prenatal vitamin with iodine if you are already pregnant or are planning to become pregnant. However, if you have a known thyroid disease, you should check with your physician before taking any iodine supplements. Be sure to check the label on your prenatal vitamins since many do not contain iodine. Potassium iodide is the preferred source of iodine for prenatal vitamins, as the iodine levels are the most consistent.

Can low levels of iodine in my system make it harder for me to become pregnant?

Your body uses iodine to make thyroid hormones. Women who have low levels of thyroid hormone (called hypothyroidism) may

have a harder time getting pregnant. Therefore, it is important to take a vitamin containing iodine if you are trying to become pregnant.

Can low levels of iodine in my system increase my risk of miscarriage?

Possibly. If you do not have enough iodine in your body, your levels of thyroid hormone may be low. Women who have lower than normal thyroid hormone levels during pregnancy have an increased risk for miscarriage.

Can low levels of iodine in my system cause birth defects or affect my baby's development?

Possibly. Low iodine levels in the body could result in low thyroid hormone levels. Women who have lower than normal thyroid hormone levels during pregnancy can have babies who are smaller for gestational age, and who are born earlier than expected.

Women who have *very* low iodine levels are said to have "severe iodine deficiency." Severe iodine deficiency during pregnancy can lead to babies being born with learning problems; however, it is very rare for women in developed countries to have severe iodine deficiency. It is possible that mild iodine deficiency during pregnancy could lead to problems with learning and behavior, but this has not been proven in studies.

Can high levels of iodine in my system cause pregnancy complications?

If you have a pre-existing thyroid condition, or if you take a medication that has a large amount of iodine, these very high levels in your system could result in hyperthyroidism, which can lead to medical problems for both you and the baby. It is difficult to reach very high levels of iodine from diet alone. Even consuming foods in moderation that contain high amounts of iodine (such as fish, seaweed, and dairy products) will not result in high iodine levels in your body. Overall, a well-balanced diet should be the goal.

Should my iodine levels be checked in pregnancy?

It is difficult to accurately test for the amount of iodine in your body. Your doctor will test your thyroid hormone levels as one of the standard blood tests during pregnancy. If your thyroid hormone levels are normal and you are taking prenatal vitamins containing 150 micrograms of iodine daily, you do not need to worry about your iodine levels.

Can high or low levels of iodine in my system be harmful while I breastfeed my baby?

A baby receives all of his iodine (for making his own thyroid hormone) from his diet. If you are breastfeeding, your baby gets all of his dietary iodine from your breast milk. Therefore, it is important that you get enough iodine while breastfeeding. The Recommended Dietary Allowance (RDA) for iodine during breastfeeding is 290 micrograms daily, a bit higher than during pregnancy. Because you will get some iodine from the foods you eat, continuing to take your iodine-containing prenatal vitamin while breastfeeding will likely give you the right amount of iodine.

My baby's father has low iodine in his system. Can this affect our chances to get pregnant or our chances to have a healthy child?

There are no studies in this area, but it is unlikely that a man's iodine levels would affect his chances to conceive or affect his baby's development.

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If you have questions about the information on this fact sheet or other exposures during pregnancy, call OTIS at 1-866-626-6847.