



## Expecting, lactating moms should boost iodine intake

It is estimated that about 1 out of 3 pregnant women in the U.S. are at least marginally iodine deficient. The American Academy of Pediatrics is concerned about iodine deficiency during pregnancy or breast-feeding because it's known that this deficiency can seriously impair brain development in infants. However, it is not so clear how marginal iodine deficiency in the mother affects brain development of the fetus during pregnancy and in the infant during breast-feeding.

**Question:** Why are so many women iodine deficient?

**Answer:** There are many possible reasons for a lowered iodine status in U.S. women. Of primary concern is that the iodine content of the U.S. diet has declined over the past few decades.

Previously, much, if not most, of our iodine came from iodized salt. But many people have reduced iodine intake by salting their food less to lower salt intake. Most processed food and restaurant food uses plain salt with no added iodine.

In the past, milk also contained significant amounts of iodine because iodine was in sanitizers used with cows. Now milk and milk products have little iodine.

Additionally, many people are eating or juicing more food that contains naturally occurring toxins

that interfere with iodine use by the thyroid. These toxins are called goitrogens.

**Q:** What foods contain goitrogens?

**A:** The most popular foods that contain goitrogens are cruciferous vegetables. In addition to cabbages, these vegetables include broccoli, kale, bok choy, choy sum, kai choy, collards and cauliflower.

Yes, these are all those "good for you" vegetables associated with a reduced risk of cancer and so on. When iodine intake is adequate, consuming moderate amounts of these foods is not a problem.

But powering down the kale and broccoli juice daily can be a problem, especially if iodine intake is marginal or low. Vegan diets are generally low in iodine and can be high in goitrogens.

**Q:** Is iodine deficiency contributing to the rising incidence of autism and related conditions?

**A:** Possibly. A number of studies have linked autism to low iodine status. Iodine deficiency impairs thyroid hormone production and can lead to a hypothyroid condition characterized by lower than normal thyroid hormone levels.

One study reported that women with severe hypothyroidism during early pregnancy were about four times as likely to have an autistic child.

Most likely, there are multiple factors contributing to the rise in autism. Iodine deficiency may be one of those factors.

Some studies also implicate iron deficiency in increased risk of autism. Since iron deficiency can impair thyroid hormone production, if iodine and iron deficiency coexist in a pregnant woman, it would make sense that the risk of having an autistic child would be even greater.

**Q:** How much iodine is needed during pregnancy and breast-feeding?

**A:** Recommended iodine intake for adults is 150 micrograms per day. This increases to 220 mcg per day during pregnancy and to 290 during breast-feeding.

These amounts of iodine are difficult to obtain from common foods. Consequently, the American Academy of Pediatrics recommends that pregnant and breast-feeding women take a daily supplement that contains at least 150 mcg of iodine and use iodized salt to reach a total intake of at least 290 mcg per day during breast-feeding.

The amount of iodine in most food is quite variable. The most consistent iodine source is seafood. Sea salt, however, is very low in iodine.

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