



Iodine, Pregnancy & Lactation

Women
(Pregnant,
New Moms
& Breastfeeding)

Infants
(Under One Year)

Children
(Under Five Years)

Maryland WIC Program

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Baltimore, MD 21201

Iodine Sufficiency: Not as Reliable as It Used to Be

The American Thyroid Association recommends that all pregnant and lactating women receive 150 mcg of supplemental iodine daily.

This recommendation has been adopted by the Supplemental Nutrition Program for Women, Infants, and Children (WIC).

Although iodization of salt has virtually wiped out goiter and cretinism in the United States, recent changes in the food supply have raised concerns that pregnant and lactating women's iodine intake has become marginal and may harm both the mental and physical development of their children.



Iodine deficiency, even in some developed countries, is associated with:

- ☑ Preventable mental retardation
- ☑ Attention deficit hyperactivity disorder
- ☑ Decreased cognitive function in children

The fetus is totally dependent in early pregnancy on maternal thyroxine for normal brain development. Iodine is needed by the thyroid gland to produce thyroxine.

Facts About Iodine Insufficiency



- ☑ Pregnant women's Urinary **iodine** Excretion has dropped to a mildly low 125 mcg/L.
- ☑ 30% of U.S. and Canada consumers do not choose **iodized** salt.
- ☑ 70% of US salt intake comes from processed foods, which are typically not **iodized**.
- ☑ Use of **iodine** in cattle feed and iodophor sanitizers has decreased.
- ☑ Use of **iodate** dough conditioners in commercially baked bread has decreased.



American Thyroid Association Recommendations

Be Sure Your Patients Are Getting Enough Iodine

Review the iodine content of the prenatal vitamins you typically prescribe to your pregnant patients. Since many do not contain iodine, you can do one of these two things to be sure your patients get enough iodine for a healthy pregnancy:

1. Ask a pharmacist to suggest a prescription prenatal vitamin that contains **150 mcg of iodine**, along with other needed nutrients (**800 mcg folic acid, 30 mg iron, and at least 600 IU vitamin D**).
2. Recommend that your patient choose an over-the-counter prenatal vitamin that contains all the above nutrients, including 150 mcg of iodine.



What You Need to Know About U.S. Prenatal Multivitamin Iodine Content

- ☑ Only 87 of 122 reviewed non-prescription prenatal multivitamins contained iodine.
- ☑ Only 27 of 96 reviewed prescription prenatal multivitamins contained iodine.
- ☑ 25 brands providing iodine from kelp contained an inconsistent range of 33 to 610 mcg of iodine per daily dose.
- ☑ 35 randomly selected prenatal vitamins with iodine from potassium iodide contained a mean level of only 119 mcg of iodine per daily dose.
- ☑ The American Thyroid Association encourages manufacturers to use only potassium iodide and to include 197 mcg potassium iodide per daily dose to ensure a consistent 150 mcg iodine supplement.

Source: Leung et al. NEJM 2009;360:939-40



Iodine Recommendations from the Institute of Medicine

| Population Group | Adequate Intake (mcg/day) | Recommended Dietary Allowances (mcg/day) | CAUTION: UL Tolerable Upper Intake Level (mcg/day) |
|------------------|---------------------------|--|--|
| 0-6 months | 110 | | ND |
| 7-12 months | 130 | | 200 |
| Adults | | 150 | 1,100 |
| Pregnant | | 220 | 1,100 |
| Lactating | | 290 | 1,100 |

*National Health and Nutrition Examination Survey (NHANES) data. ** 2005-2008

QUESTIONS? Contact the Maryland State WIC office at 410-767-5242

Thank you for your continued support of the Maryland WIC Program!

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