Background

Iodine is an essential component of thyroid hormones that regulate normal growth and development. Across the world, iodized salt and seafood are generally the major dietary sources of this nutrient. In the United States, where addition of iodine to salt is not mandatory, most people get their iodine from dairy products and grains.

Iodine deficiency is the most preventable cause of mental retardation in the world. Iodine deficiency can also cause hypothyroidism, goiter, cretinism, and other growth and developmental abnormalities.

Most dietary iodine absorbed by the body eventually appears in the urine; so the most commonly recommended approach to determine a person’s iodine status is to measure urine iodine excretion.

Intake recommendations

The American Thyroid Association recommends all prenatal vitamins contain 150 micrograms of iodine and that North American women receive daily dietary supplements containing 150 micrograms iodine during pregnancy and while nursing.

Urine iodine levels in females by age group


Women 20-39 years of age had the lowest urine iodine levels compared to all other age groups. Iodine intake in young women merits special attention to ensure the best possible brain development of the fetus during pregnancy.

The Second Nutrition Report (www.cdc.gov/nutritionreport) provides:

- Reference information for physicians and scientists to detect high or low nutrient levels in people
- A look at nutrient levels over time to detect trends of health significance
- The nutrition status of specific populations for nutrient deficiencies

Additional information on iodine is available online at http://www.cdc.gov/immpact/micronutrients/index.html#Iodine