



## THYROID AND PREGNANCY

### Pregnant women in the United States are at risk for low iodine intake

#### BACKGROUND

Iodine is required for making thyroid hormones and iodine deficiency can lead to hypothyroidism. In fact, iodine deficiency is the most common cause of hypothyroidism world-wide. However, this is rare in the United States. Both iodine and thyroid hormone are particularly important to the baby for normal brain development during pregnancy. This study, part of the National Health and Nutrition Examination Survey, was done to measure levels of iodine in the urine of individuals in the United States from 2005-2008. Urine iodine levels are a good reflection of iodine intake from the diet. They can only be used to study the iodine nutrition of large groups and are not useful for individuals. Similar measurements have been done since the early 1970s, which show that the United States is generally taking in enough iodine. However, there may be some parts of the population, particularly pregnant women, who might be low in iodine. Such populations would then be at risk for hypothyroidism.

#### THE FULL ARTICLE TITLE

Caldwell KL et al. Iodine status of the U.S. Population, National Health and Nutrition Examination Survey, 2005-2006 and 2007-2008. *Thyroid*. February 16, 2011 [Epub ahead of print].

#### SUMMARY OF THE STUDY

About 7600 individuals participated in the study. All of the individuals studied were similar to the general United States population in age, gender and race/ethnicity. The urine iodine levels showed that the United States is overall getting enough iodine, with children and the elderly having the highest average levels. However, 5% of children had severely low urinary iodine levels and 57% of pregnant mothers had urine iodine levels below the recommended level.

#### WHAT ARE THE IMPLICATIONS OF THIS STUDY?

The United States population is generally getting enough iodine in the diet. However, there are some groups of the population (such as children and pregnant women) who may not be receiving enough iodine. For this reason, women are encouraged to take a daily multivitamin containing 150 mcg of iodine during pregnancy and breastfeeding.

—Angela Leung, MD

#### ATA THYROID BROCHURE LINKS

Iodine Deficiency: [http://thyroid.org/patients/patient\\_brochures/iodine\\_deficiency.html](http://thyroid.org/patients/patient_brochures/iodine_deficiency.html)

Thyroid and Pregnancy: [http://thyroid.org/patients/patient\\_brochures/pregnancy.html](http://thyroid.org/patients/patient_brochures/pregnancy.html)

#### ABBREVIATIONS & DEFINITIONS

**Iodine:** an element found naturally in various foods that is important for making thyroid hormones and for normal thyroid function. Common foods high in iodine include iodized salt, dairy products, seafood and some breads.

**Hypothyroidism:** a condition where the thyroid gland is underactive and doesn't produce enough thyroid hormone. Treatment requires taking thyroid hormone pills.