American Thyroid Association.....www.thyroid.org/

# Hypothyroidism in Pregnancy



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#### WHAT IS THE THYROID GLAND?

The thyroid gland located in the neck produces thyroid hormones which help the body use energy, stay warm and keep the brain, heart, muscles, and other organs working normally.

## **1** OVERVIEW

#### WHAT ARE THE NORMAL CHANGES IN THYROID FUNCTION ASSOCIATED WITH PREGNANCY?

During normal pregnancy, TSH is usually normal, but may be low in the first trimester and then returns to normal for the rest of pregnancy. The thyroid gland can increase in size during pregnancy.

### **2** HYPOTHYROIDISM

#### WHAT ARE THE MOST COMMON CAUSES OF HYPOTHYROIDISM DURING PREGNANCY?

The most common cause of hypothyroidism is an autoimmune disorder known as Hashimoto's thyroiditis (see *Hypothyroidism brochure*). A woman may also have hypothyroidism during pregnancy due to previous thyroid surgery (thyroidectomy) or previous treatment with radioactive iodine.

#### WHAT ARE THE RISKS OF HYPOTHYROIDISM TO THE MOTHER AND CHILD?

Inadequately treated, severe hypothyroidism has been associated with pre-eclampsia, placental abnormalities, low birth weight infants, postpartum hemorrhage (bleeding), and impaired intellectual development in the child.

#### WHEN DOES HYPOTHYROIDISM OCCUR IN PREGNANCY?

Hypothyroidism can occur early in pregnancy, even in women without previous thyroid problems. When a woman is already taking thyroid medication (levothyroxine), the dose frequently needs to be adjusted early in the first trimester. This is why it is important to contact the physician as soon as a new pregnancy is confirmed if the mother is taking thyroid hormone medication.

#### WHO SHOULD BE TREATED FOR HYPOTHYROIDISM DURING PREGNANCY?

Women who are not on thyroid hormone before pregnancy, should be treated with thyroid hormone (levothyroxine) if the TSH is above 10 mIU/L. When the TSH is between 2.5 and 10 mIU/L, treatment should depend on whether or not the mother has thyroid antibodies present in the blood and a discussion with her doctors. Women who are not taking thyroid medication with a TSH below 2.5 mIU/L during pregnancy do not need thyroid hormone.

#### IS LEVOTHYROXINE SAFE DURING PREGNANCY?

Yes. Levothyroxine is exactly the same hormone as your natural thyroid hormone so giving this in pregnancy to achieve normal levels is safe. For women taking levothyroxine, the dose should be increased by ~30% as soon as pregnancy is confirmed.

### CAN I TAKE "NATURAL THYROID HORMONE" (I.E. ARMOUR THYROID) DURING PREGNANCY?

No. The T3 portion of desiccated thyroid does not cross the placenta. This is also true of T3/T4 combination therapy. When women are treated with T3-containing therapies in pregnancy there is a risk that the baby could be hypothyroid even if the mother's thyroid hormone levels remain normal.



#### **FURTHER READING**

Further details on this and other thyroid-related topics are available in the patient information section on the American Thyroid Association® website at <a href="https://www.thyroid.org">www.thyroid.org</a>.

