



Thyroid Function in Pregnancy

Why is the thyroid important in pregnancy?

- Thyroid hormone is essential for a baby to develop normally during pregnancy. For at least the first half of pregnancy, the fetus receives all its thyroid hormone from the mother, so it is important that the mother has normal thyroid function during this time.
- Additionally, thyroid function may affect pregnancy outcomes. There is some evidence that subclinical hypothyroidism, defined as TSH levels >4 mIU/L, is associated with miscarriage and adverse pregnancy outcomes. There is also some evidence that thyroid autoimmunity, defined by the presence of anti-thyroperoxidase (TPO) antibodies, is associated with infertility and miscarriage.

What is considered normal thyroid function?

- In the non-pregnant woman, normal thyroid function is attributed to a TSH level in the range of 0.5 – 4 mIU/L. However, the definition of a normal TSH during pregnancy has changed over time. In 2007, The Endocrine Society recommended that all women on thyroid hormone replacement therapy (levothyroxine or Synthroid) have a TSH < 2.5 mIU/L during the first trimester and < 3 mIU/L throughout pregnancy.
- The Endocrine Society now recommends TSH values be < 2.5 mIU/L during the first trimester. When a patient's TSH falls between 2.5-4.0 mIU/L, and TPO are present, your doctor may recommend thyroid treatment. Your doctor may also recommend treatment if your TSH falls between 2.5-4 mIU/L and you test negative for TPO, depending on your history (notably if you have had a history of miscarriage).



If you are instructed to take thyroid medication:

Your doctor may recommend levothyroxine replacement to bring the TSH value <2.5mIU/L. This does not mean that you have or will develop clinical hypothyroidism after your baby is born. It is just a way to make sure that the increased thyroid hormone needs of your growing baby are being met, and that your body is in balance to support the pregnancy.

It is important to take medication on an empty stomach at the same time each morning. Wait at least 30 minutes prior to eating. Do not take Iron or Calcium supplements at the same time as your thyroid medication; it is best to take thyroid medication at a different time than all other medications.

Safety information:

Levothyroxine (Synthroid) is one of the few Category A medications during pregnancy, meaning that controlled human studies show no risk to a fetus during pregnancy. On the contrary, as demonstrated above, a significant risk exists if a fetus is deficient in thyroid hormone. *It is important to ensure that your TSH values are stabilized and that you do not become hyperthyroid with medication. Therefore, your thyroid levels should be rechecked 4-6 weeks after starting medication, and once a trimester during pregnancy.