

PREGNANCY Recognizing the need for increased thyroid hormone

Thyroid-hormone needs increase throughout pregnancy, with requirement returning to baseline soon after delivery.



These changes are due primarily to 1) increased binding protein due to estrogen, and 2) increased type 3 deiodinase activity at the placenta which inactivates T4.

Normal thyroid is able to increase thyroid hormone production to meet these needs. Patients with underlying thyroid dysfunction however, may be unable to do so and develop hypothyroidism in pregnancy.

Patients on levothyroxine replacement will need a dose increase (usually 30%) to account for these needs. This adjustment should be done as soon as patient knows she is pregnant, as the fetus is dependent on maternal thyroid hormone for neural development for the first trimester.

