For Pregnant women it’s a challenge to know if they have low levels of T4. Today, their best option is a laboratory exam which, can be time consuming, invasive for the patient, and requires trained personnel to perform the diagnostic test. Thus, women do not have their T4 levels tested frequently enough. There is a need for early and frequent detection of T4 levels which, if solved, could prevent cognitive damage to the fetus. This need can be solved by the application of an at-home, laminar flow test for immediate detection of low T4 levels in a urine sample and will be demonstrated by increased detection of hypothyroidism during pregnancy.