

**Non-Stress Test & Biophysical Profile**

The Florida Law for Midwifery Practice, Chapter 467 states that;

(5) The midwife shall refer a patient for consultation to a physician with hospital obstetrical privileges if any of the following conditions occur during the pregnancy:

(e) Gestational age between 41 and 42 weeks.

Between 41-42 weeks, standard protocol is to send the client for consultation with an obstetrician to have specific fetal monitoring done. These tests are called a Biophysical Profile and a Non-Stress Test.

**Biophysical Profile (BPP):**

The BPP is a composite test that collects 5 indicators of fetal well-being;

1. fetal heart rate reactivity
2. breathing movements
3. gross body movements
4. muscular tone
5. quantitative estimation of amniotic fluid volume.

The assessment of fetal heart rate is accomplished by performing a non-stress test, whereas the latter 4 variables are observed using ultrasonography. Two points are awarded for each parameter when present, and 0 when absent after 30 minutes of ultrasound observation. The higher the score, the better. Equal weight is given to each of the 5 parameters. When each of the 4 ultrasound variables is normal, the non-stress test may be excluded as it adds little to the predictive accuracy of the BPP.

**Non-Stress Test:**

A Non-Stress Test is used to evaluate fetal well-being. The goal of a non-stress test is to provide useful information about your baby's oxygen supply by checking his or her heart rate and how it responds to your baby's movement. The test consists of fetal heart rate monitoring using two monitors. One monitor measures the fetal heart rate and the other monitor measures contractions.

A Non-Stress Test typically takes about 20-40 minutes. If two or more **accelerations*in the heart rate*** occur within a 20-minute period, the result is considered reactive or "reassuring." A normal acceleration is defined as 15 beats per minute above baseline, lasting between 15-120 seconds in a fetus older than 32 weeks. A reactive result means that for now, it does not appear that there are any problems.

A nonreactive result is one in which not enough accelerations are detected in a 40-minute period. It can mean several things. It may mean that the baby was asleep during the test. If this happens, the test may last 40 more minutes, or the baby may be stimulated to move with sound projected over the mother’s abdomen. A nonreactive result can occur if the woman has taken certain medications. It also can mean that the fetus is not getting enough **oxygen**.

**Why is this testing done between 41-42 weeks?**

The American College of Obstetrics and Gynecology (ACOG) published Practice Guidelines of Management of Late-Term and Post-term Pregnancies. ACOG defines Late-term gestation as pregnancy occurring between 41 0/7 and 41 6/7 weeks, while post-term gestations extend to 42 0/7 weeks and beyond.

The risk of stillbirth increases beyond 41 weeks.Additional fetal risks of post-term pregnancies include macrosomia, which increases the likelihood of operative vaginal deliveries, cesarean deliveries and shoulder dystocia, as well as neonatal seizures, meconium aspiration syndrome, and low 5-minute Apgar scores. Oligohydramnios is more common in post-term pregnancies and has been associated with cord compression, fetal heart rate abnormalities, meconium-stained amniotic fluid, and fetal acidosis. Maternal risks are generally those associated with macrosomia and related dysfunctional labors, including severe perineal lacerations, infection, and postpartum hemorrhage.

The original practice guideline recommendation was to offer mothers whose pregnancy has progressed past their 41st week of pregnancy, with certain dating, an elective induction. If the **expectant management** is chosen by the mother, assessment of fetal health should be initiated. Therefore standard protocol is to initiate non-invasive specific fetal monitoring using a Non-Stress Test and/or a Biophysical profile.

**References**

1. ACOG. (2004). Management of postterm pregnancy. ACOG practice bulletin: Clinical management guidelines for obstetrican-gynecologists. No 55.
2. Daniels, S.M., & Boehm, N. (1995). Auscultated fetal heart rate accelerations: An alternative to the nonstress test. Journal of Nurse-Midwifery, 36(2), 88-94.
3. Dublin, S., Lydon-Rochell, M., Kaplan, R.C., Watts, D.H., & Critchlow, C.W. (2000). Maternal and neonatal outcomes after induction of labor without an identified indication. Am J Obstet Gynecol, 183(4), 986-994.
4. Menticoglou, S.M. & Hall, P.F. (2002). Routine induction of labour at 41 weeks gestation: nonsensus consensus. BJOG: an International Journal of Obstetrics and Gynaecology: 109, 485-491.



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**Informed Consent**

**Consent**: I have read the information provided and understand the importance of late term fetal monitoring. I understand why assessing fetal well-being is recommended. I have been provided resources for further research and education regarding the late/post term pregnancies and fetal monitoring testing. I have read and understand this information and have had an opportunity to ask questions. I will in no way hold Growing Families liable for my decision. I am fully aware of the risks of refusing testing and have freely chosen to take the following action:

**Initial next to your decision:**

\_\_\_\_\_\_ I consent for a consultation with an obstetrician to conduct specific fetal monitoring such as a Non-Stress Test and/or a Biophysical Profile.

\_\_\_\_\_\_ I understand the risks of refusing Late-term fetal monitoring and would like to refuse the Non-Stress Test and Biophysical Profile anyway.

Date of Consent:\_\_\_\_\_\_\_/\_\_\_\_\_\_\_\_\_/\_\_\_\_\_\_\_\_

Client’s Printed Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Client’s Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Midwife’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_