

Fetal Testing in the 3rd Trimester:

The Non-stress Test (NST) and Amniotic Fluid Index (AFI)

What are these tests?

Testing is a normal part of routine prenatal care. However, some pregnancies require an extra degree of monitoring to ensure that the placenta (the organ that nourishes the fetus) is functioning optimally, especially in the last trimester. There are 2 special tests that allow your provider to monitor the health of your pregnancy more closely- the non-stress test (or NST) and the amniotic fluid index (AFI), collectively referred to as **antenatal testing**. Both tests are painless, non-invasive and completely safe for your baby.

Why do I need them?

The goal of antenatal testing is to make sure your baby is healthy and your placenta is functioning well. Monitoring allows your provider to identify a potential problem early and improve birth outcomes. We may advise antenatal testing in a number of common situations:

- You are 40 or older
- You have Gestational Diabetes or elevated blood pressure
- Your pregnancy goes beyond the 40th week
- You have a twin pregnancy
- You have a history or preterm delivery or still birth
- You are a smoker
- Your amniotic fluid level if too much (polyhydramnios) or too little (oligohydramnios)
- You report decreased fetal movement
- You have certain chronic medical conditions or other special circumstances

What if my testing shows a problem?

If testing is not reassuring then we may recommend delivery of the baby (induction of labor) rather than waiting for labor to occur on its own. Some common reasons for induction include: suspected growth restriction, high blood pressure, low amniotic fluid, postdates pregnancy, gestational diabetes, and other risk factors for stillbirth. If you choose to undergo fetal surveillance/antenatal testing, we hope that you will be open to any recommended intervention(s) to keep you and your baby safe

When and where are these tests done?

In general antenatal testing is done on a weekly or twice-weekly basis until your baby is delivered. In some cases these tests can be done here at clinic as part of your regular prenatal appointment. Other times, testing takes place at the Birth Center or through the radiology department at Mad River Hospital.

Antenatal Testing

Amniotic Fluid Index (AFI) Assessment

This test uses an ultrasound machine to estimate the amount of amniotic fluid surrounding your baby. It is done to make sure the placenta is healthy and functioning well to support your baby.

The Non-stress Test (NST)

This test measures your baby's heart rate and records any contractions of your uterus. It is used to assess your baby's health. Normally a baby's heart rate will speed up when he or she makes a movement or in response to uterine contractions. This suggests that the placenta is working well to deliver oxygen to the baby.

The test can be done at the birth center or in the clinic and takes 20-40 minutes. 2 belts with monitors are placed around your abdomen while your lay in bed. One monitor measures your baby's heart rate and the other picks up any contractions of the uterus. The data is then graphed on a machine. If your baby has 2 heart rate increases within a period of 20 minutes the NST is said to be "reactive" and normal. This test is completely safe for your baby. No preparation is needed prior to the test.

