



## **Tests of Fetal Well-being**

### **Introduction**

Under some circumstances, the physician may recommend one of several tests which can assess fetal health (fetal well-being) during the pregnancy. These tests are designed to evaluate the status of the afterbirth (placenta) and whether or not oxygen and nutrition transferred to the fetus are being affected. These tests are in addition to the routine prenatal care which is recommended for all pregnant women.

### **Non-Stress Test (NST)**

The NST measures the fetal heart rate during normal activity. This may last 20 to 40 minutes, during which time the mother is monitored with a fetal monitor strap on her abdomen which detects the fetal heart tones. During the test, as the baby moves, the heart rate should increase in response to the movement. Occasionally, the fetus may not move for extended periods of time, in which case it is likely sleeping or resting. In these cases, if the mother eats or drinks something or if the baby is stimulated with a buzzer, the fetal activity may resume.

The monitor tracing is interpreted by the physician to determine whether or not further testing is necessary. For example, if the heart rate does not increase after the baby moves, another test may be ordered to determine whether or not the NST is correct or not. It is possible that the test suggests that there is a problem with the pregnancy when actually the fetus is having no problems.

### **Bio-Physical Profile (BPP)**

BPP utilizes ultrasound technology to visualize the baby and to evaluate its movements. The movements of the arms and legs, breathing, and stretching motions are evaluated for 10 to 30 minutes. The amount of activity is a measurement of the health of the baby. The amount of amniotic fluid is also an important factor. The total score of the BPP is determined by the sum of the scores given for each of the five factors: heart rate, breathing, body movement, muscle tone, and amount of amniotic fluid.

### **Amniotic Fluid Index (AFI)**

This test is a measurement of the amount of amniotic fluid present. The provider will estimate this by ultrasound measurements.

### **Kick Counts**

Not all tests require special equipment. For instance, you can monitor your fetus's movements yourself by keeping a *kick count* in late pregnancy.

To record a kick count, you simply note the number of times the fetus moves over a certain period. Your doctor can tell you when and how to perform this test, and what the result might mean. If your fetus does not move in a 12 hour period, let your doctor know.

### **Summary**

The tests of fetal well being mentioned here may be ordered by the doctor as an additional check for the health of the fetus. If a test suggests that there might be a problem, this is not always necessarily found to be the case. Further testing will be done to determine whether or not intervention is needed. The goal is for both mother and baby to be healthy, and these tests are just one part of the overall treatment plan available to the physician.