

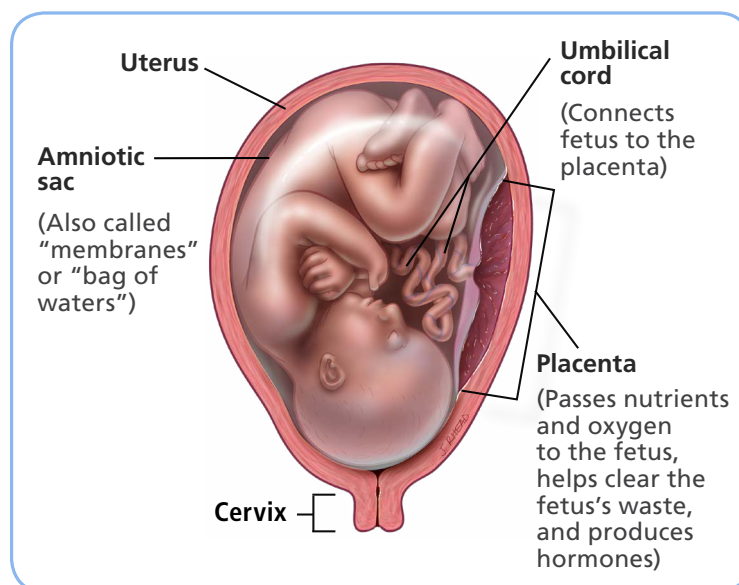
Fetal Testing: Nonstress test, amniotic fluid assessment, and biophysical profile

What is fetal testing?

Fetal testing is a way to check the health of the baby (fetus) during pregnancy. Tests can be done to:

- Check the **placenta**, the organ that nourishes the fetus in the **uterus** (womb).
- Measure the amount of fluid in the **amniotic sac**. (See the picture at right.)

When the tests suggest that the baby is doing well, the findings are called **reassuring**. Reassuring findings are common, and usually mean that your care and pregnancy can continue as before. At other times, the testing suggests that your care should change or that your baby should be delivered.



Why do I need fetal testing?

Testing allows your healthcare provider to monitor your pregnancy more closely. It's done any time your medical team needs more information about your baby's health. Your healthcare provider will explain why testing is recommended for you. Fetal testing is often done when:

- **You have a chronic medical condition** such as diabetes.
- **You have a pregnancy-related condition** such as preeclampsia.
- **You had a problem in an earlier pregnancy**, such as a previous preterm birth or a stillbirth.
- **You are pregnant with more than one baby**. Multiple gestation pregnancies have a higher chance of complications than other pregnancies.
- **Your pregnancy has lasted more than 40 weeks**. After 40 weeks of pregnancy, certain risks to your baby may increase.
- **Signs or other test findings raise questions**. For example, your baby may be moving less than normal, or may seem to be smaller than expected. A previous ultrasound may have shown that your baby has an abnormality or that there is too much or too little fluid inside the amniotic sac.
- **The sac around the fetus has ruptured (premature rupture of membranes, or PROM)**. PROM carries risks to the fetus, and testing can help detect problems.

Learn about the special fetal tests on [page 2](#).

Nonstress Test

What is it? The nonstress test measures your baby's heart rate and records any contractions of your uterus.

Why is it needed? This test helps track your baby's well being. Normally, a baby's heart will beat faster (**accelerate**) during their movements. This suggests that the placenta is delivering enough oxygen to your baby's brain and heart and that your baby is doing well.

How is it done? You'll lie down or recline, and two straps with monitors will be placed around your abdomen (belly). One monitor measures your baby's heart rate and the other picks up any contractions.

▶ Good to Know

- If your baby has 2 heart rate accelerations within 20 minutes, this reassuring finding is called **reactive**.
- If there isn't much movement, your baby may be asleep. A noisemaker may be used to wake up your baby.
- If you stop hearing your baby's heartbeat during the test, it's because your baby has moved away from the monitor.
- This test is completely safe for your baby. Your baby may startle if a noisemaker is used, but it won't cause any pain.

Amniotic Fluid Assessment

What is it? This test estimates the amount of fluid surrounding your baby. Amniotic fluid cushions the baby and helps protect the umbilical cord from too much squeezing. Most of the fluid is sterile (clean) urine from the baby.

Why is it needed? Measuring the fluid around the baby helps check how well the placenta is working. If there is too little fluid, it could be because the placenta isn't working well. More blood may be going to the baby's brain, while less may be going to the kidneys and other organs. As a result, the kidneys may produce less urine, so there is less fluid.

How is it done? This test relies on ultrasound, a technology that uses sound waves to make an image. The nurse or medical technician will have you lie down on your back and will move the ultrasound transducer over your abdomen.

You'll be able to see your baby on the monitor as the pockets of fluid that surround the baby are measured. The measurements are added up to give your baby a score called an **amniotic fluid index**, or **AFI**.

▶ Good to Know

- It's normal for the amount of fluid to decrease toward the end of the pregnancy. Your medical team will compare the AFI score to established guidelines. In most situations, an AFI between about 5 cm and 24 cm is reassuring.
- If your amniotic sac has broken, a lower volume of fluid is expected.
- If you are carrying twins or other multiples, the amniotic fluid will be measured differently.

Biophysical Profile (BPP)

What is it? This test combines several tests into a single score to measure your baby's well being.

Why is it needed? The BPP score may help by giving an overall view of your baby's health.

How is it done? This test uses the same technology and techniques as the other two tests. Points are assigned accordingly:

- Nonstress tests (2 points for a reactive result)
- Amniotic fluid assessment (2 points for adequate fluid)

- Fetal muscle tone assessment (2 points for a clenched hand or an extension of the arm or leg)
- Fetal movements (2 points for adequate movement)
- Fetal breathing movements (2 points for hiccups or continuous breathing for 30 seconds—note that here, "breathing" means your baby is exercising their breathing muscles by drawing amniotic fluid, not air, into their lungs)

▶ Good to Know

A score of 8 to 10 points is considered reassuring.

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