

Alpha-Fetoprotein Screening

KEY POINTS

- Alpha-fetoprotein screening is a blood test to measure the level of alpha-fetoprotein (AFP) in the mother's blood. The baby's body makes this protein and some of it passes from the baby into the mother's bloodstream. If a baby has certain problems, the level of AFP may be unusually high or low.
 - A small amount of blood is taken from a vein in your arm with a needle. The blood is collected in tubes and sent to a lab.
 - Talk to your healthcare provider about what the test results mean and ask any questions you have.
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What is alpha-fetoprotein screening?

Alpha-fetoprotein (AFP) screening is a blood test to measure the level of a protein called alpha-fetoprotein (AFP) in the mother's blood. The baby's body makes this protein and some of it passes from the baby into the mother's bloodstream. If a baby has certain problems, the level of AFP may be unusually high or low.

The test is usually done between the 15th and 18th weeks of pregnancy with other blood tests.

Why is it done?

Most often, this test shows that your baby is developing normally and probably does not have a serious birth defect.

When the results are not normal, the test can help you and your healthcare provider manage your pregnancy better. Sometimes treatments are needed during pregnancy to help babies with a problem. Your provider may plan your delivery in a center equipped to deal with expected problems or help to make other plans for treatment of your baby after birth.

How do I prepare for this test?

You may need to avoid taking certain medicines before the test because they might affect the test result. Make sure your healthcare provider knows about any medicines, herbs, or supplements that you are taking. Ask your provider before stopping any of your regular medicines.

Certain medical conditions can affect the test. Make sure that your healthcare provider knows about your medical history.

Talk to your provider if you have any questions about the test.

How is the test done?

Having this test will take just a few minutes. A small amount of blood is taken from a vein in your arm with a needle. The blood is collected in tubes and sent to a lab.

Ask your healthcare provider when and how you will get the result of your test.

What does the test result mean?

A **high** level of AFP may mean that the baby has a higher chance of having certain birth defects. Examples of problems that can cause a high AFP are:

- Spina bifida (the spine has not closed normally)
- Kidney problems
- Severe skin problems
- All or part of the baby's brain is missing
- Intestines that are outside the baby's belly
- A defect in the baby's esophagus (food pipe)

A very high AFP can also mean a greater chance of other problems later in the pregnancy, such as:

- Slower growth than normal and low birth weight
- Too little fluid in the amniotic sac (the bag of fluid that surrounds the baby)
- Very high blood pressure during pregnancy, called preeclampsia
- A pulling away of the placenta from the inside wall of the uterus
- Death of the baby

A very **low** level of AFP may be seen with Down syndrome, but other tests are usually done for this genetic condition. Other possible causes of abnormal AFP levels are:

- The presence of more than 1 baby
- Miscarriage
- A baby who is smaller than normal
- An overweight mother, especially if the mother is African American
- A diabetic mother

The test is not always completely accurate. Sometimes a baby has a birth defect even though the AFP is normal, or a baby may be fine even though AFP levels are not normal. Also, an incorrect or uncertain due date can affect the accuracy of the result.

What if my test result is not normal?

Test results are only one part of a larger picture that takes into account your medical history and current health. Sometimes a test needs to be repeated to check the first result. Talk to your healthcare provider about your result and ask questions, such as:

- If you need more tests
- What kind of treatment you might need
- What lifestyle, diet, or other changes you might need to make

Because the test is not always accurate, your healthcare provider will usually order other tests if the AFP levels are high or low. If the results of the AFP test and follow-up tests show that your baby does have a serious problem, your provider will talk to you about your choices of treatment.

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