

# Maternal Serum-Triple Screen

*A Test That Lets You Know  
About the Risks Your Baby May Face*



## Maternal Serum-Triple Screen *A Test That Lets You Know About the Risks Your Baby May Face*

### **This pamphlet will explain:**

- What the maternal serum-triple screen is
- What the maternal serum-triple screen tests for
- What the test results mean
- What happens after the test

### **What is the Maternal Serum-Triple Screen?**

The maternal serum-triple screen (Triple Screen) is a blood test for pregnant women to help identify their baby's risk for **birth defects**. Birth defects can occur in any pregnancy, even if everyone in your family is healthy.

The Triple Screen is done between 15 and 20 weeks of pregnancy. The test only estimates the risk that your baby may have a birth defect, it does not prove that the baby will have a birth defect.

### **What Types of Genetic Disorders Does the Triple Screen Test For?**

**Down Syndrome:** A genetic disorder which occurs when the baby has an extra **chromosome**. Babies with Down Syndrome have problems such as mental retardation, and heart and intestinal defects.

**Neural tube defects:** Birth defects that affect the baby's brain and spinal cord.

**Trisomy 18:** A genetic disorder which occurs when the baby has three copies of chromosome 18 instead of the usual two copies. Trisomy 18 causes serious problems in the baby's heart, digestive tract, kidneys, and mental abilities. Most babies with Trisomy 18 do not survive.

## How Does the Triple Screen Work?

The test measures three substances in the mother's blood which are **alpha-fetoprotein (AFP)**, **human chorionic gonadotropin (HCG)** and **free estriol (uE3)**.

The doctor can find out what your baby's risks are for neural tube defects, Down Syndrome, or Trisomy 18 based on the amounts of AFP, HCG and UE3 in your blood.

If you have...	Then...
High HCG Low AFP Low uE3	Your baby may be at risk for Down Syndrome.
High AFP	Your baby may be at risk for neural tube defects.
Low HCG Low AFP Low uE3	Your baby may be at risk for Trisomy 18.

### Words to Know

**Birth defect:** A physical or mental problem which is present in the baby at birth. It is a result of an abnormal **gene** or other causes such as injury, infection, etc.

**Chromosome:** Structures that carry genes inside cells. Humans have 46 chromosomes (organized in 23 pairs).

**Genes:** Genes provide information on how our bodies grow and function. They are passed on from our parents. They can determine features such as eye color, hair color, height and certain genetic disorders.

## “My test results came back abnormal. Does this mean I will have a baby with a birth defect?”

If the test results are abnormal, remember that the Triple Screen only indicates a risk that your baby *may* have a birth defect. It does not mean that your baby *will* have a birth defect.

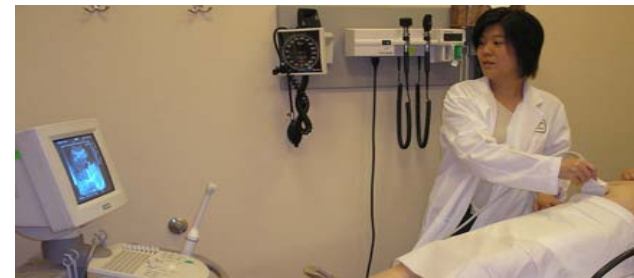
You can have a healthy pregnancy even if your test results are abnormal. And normal test results do not always mean a healthy baby. The Triple Screen can detect most cases of Down Syndrome, particularly if the mother is over the age of 35. A genetic counselor can more fully explain the test results to you.

## What Happens After the Triple Screen?

Your doctor may have you get more tests for you to find out with greater certainty if your baby has or does not have a birth defect. Common tests are ultrasound and amniocentesis.

An **ultrasound** can find out the age of your baby which makes your Triple Screen results more accurate. During an ultrasound, the baby's body will be measured and checked for major physical problems.

**Amniocentesis** is a test that can help find neural tube defects, and diagnose Down Syndrome or Trisomy 18 in your baby.



Picture of a doctor performing an ultrasound.

**The Charles B. Wang Community Health Center has more information about genetic testing and counseling.**

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If you have any questions regarding the information contained in this brochure, please call our health educators at (212) 966-0228 ext. 132.

如果你對本小冊子的內容有任何問題，請和我們的健康教育員聯系，電話：(212) 966-0228，分機132。

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