FTS First Trimester Combined Screening

FTS is a screening test for chromosome conditions and birth defects. It is available to all women between 11 weeks and 13 weeks 6 days of pregnancy.

With FTS, two measurements are used, together with your age, to estimate your chance of having a baby with Down syndrome, trisomy 18, or trisomy 13. The first measurement is the nuchal translucency (NT) measurement, taken by ultrasound, and the second is a blood test.

The Nuchal Translucency (NT) Measurement

The NT measurement involves a special ultrasound done between 11 weeks and 13 weeks 6 days of pregnancy. A measurement of the fluid at the back of the baby’s neck (called nuchal translucency) is taken. All babies will have some fluid here. The fluid is more likely to be increased in pregnancies with Down syndrome.

The NT ultrasound also:

- confirms that the baby is alive
- confirms your dates
- diagnoses a multiple pregnancy
- checks for birth defects that may be visible at this stage

The Maternal Blood Test

The maternal blood test measures two substances (PAPP-A and free Beta-hCG), which are normally found in the blood of all pregnant women. In pregnancies with Down syndrome, the levels of free Beta-hCG and PAPP-A tend to be out of the expected normal range.

FTS has an 82 percent detection rate for Down syndrome. This means that 82 percent of pregnancies with Down syndrome will be identified at increased risk with FTS.

What type of results should I expect from FTS?

You will be given a personal risk estimate that tells you how likely it is that your pregnancy will be affected with Down syndrome, trisomy 13, or trisomy 18. In the FTS report, this is called the “adjusted risk”.

Your prenatal care provider will receive your FTS report within 7 - 10 days. Please discuss with doctor how you will receive your result.
What happens after FTS?

Your FTS result can be used to decide about other prenatal testing options (such as amniocentesis). Women who receive a risk result that places them at an increased risk for Down syndrome, trisomy 18, or trisomy 13 are offered the option of having a diagnostic test such as amniocentesis or CVS. Regardless of a woman’s age or FTS results, the decision to have a diagnostic test is a personal one.

Prenatal genetic counsellors are available throughout the province to provide information and assist you in making a decision about testing. Please speak with your doctor about a referral to a genetic counsellor.

Diagnostic Tests

Amniocentesis and chorionic villus sampling (CVS) are diagnostic tests. Samples collected from these tests contain cells from the baby. The laboratory looks at the chromosomes within these cells in detail to determine whether or not the baby has a chromosome condition. These procedures are not routinely offered to all women, as they place the pregnancy at an increased risk for miscarriage. Most women undergoing an amniocentesis or chorionic villus sampling do not have complications following the procedure and receive reassuring chromosome results.

Benefits of FTS

- Early, more accurate screening gives peace of mind to many women.
- The FTS personal risk estimate can be used to assist women in making a more informed choice about diagnostic testing.
- Some major birth defects can be detected during the NT scan, but not all.

Limitations of FTS

- About 1 in 20 women will receive an increased-risk result. It is normal to be worried when you hear you are at an increased risk. Most women with an increased risk result do have healthy babies.
- An increased-risk result does not mean that the baby has a chromosome condition.
- A reduced-risk result does not guarantee a healthy baby.

* Information in this leaflet provided by Alberta Health Services. For more information visit www.capitalhealth.ca