



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

**Cork University Maternity Hospital,
Health Service Executive,
Wilton
Cork.**

CUMH prenatal screening: Maternal Serum Quadruple Screening (QUAD TEST)

This leaflet has been provided to help answer some of the questions you may have about the QUAD TEST

What is the Quad test?

The Quad test is a screening test to determine your risk of having a baby with Down syndrome. This test involves a blood sample and is performed between 14+2 and 20 weeks gestation. This test measures the amount of some substances that are found naturally in the mother's blood. A computer program uses the results and the mother's details to work out a risk figure.

What is Down syndrome?

Down syndrome is caused by an extra copy of chromosome number 21 in the baby's cells. Anyone can have a baby with Down syndrome, regardless of age or family history. It is usually not inherited. However, a woman's risk of having a baby with Down syndrome increases with age.

Down syndrome occurs in one out of every 700 babies and is the most common cause of learning disabilities. Babies with Down syndrome are also at greater risk of heart defects and other medical problems. Babies with Down syndrome often miscarry, and about 10% die in infancy. Life expectancy in the rest is around 40-60 years, but the severity of the condition varies.

How good is the screening test?

The Quad test will correctly identify between 70 and 75% of babies with Down syndrome. Around 1 in 30 results will be reported as "high risk". Most pregnancies with a "high risk" result will not be affected by Down syndrome. The false positive rate for Quad testing is 3.5%.

What happens during the test?

The test measures the levels of four markers in the mother's blood that are produced by the fetus or placenta during pregnancy. These markers are called beta human chorionic gonadotrophin (b-hcg), alphafetoprotein (AFP), unconjugated oestriol (E3) and inhibin A (inh-A). A computer program in the laboratory will then use the results from the blood sample combined with the mother's age, weight, weeks of pregnancy, family origin and smoking details to calculate the overall risk of Down syndrome.

The Quad test is not as sensitive as other prenatal screening tests available but it is an option for women who do not have or are too late for first trimester screening.

What about the results?

Results are given as a '1 in ... chance' of the baby being affected, rather than a 'yes' or 'no'.

If your risk is less than 1 in 150, you will be considered low risk and no further tests will be offered. You will receive the results in the post within 5-7 working days.

If your risk is 1 in 150 or greater we will contact you by phone within 5 working days and you will be referred for a discussion with a Fetal Medicine Specialist. You will be offered a diagnostic test called an amniocentesis. Amniocentesis will give a definite 'yes' or 'no' answer about Down syndrome or other major chromosome abnormalities, but is associated with approximately a 1% (1 in 100) risk of causing a miscarriage.

What else can the test find out?

Quad testing will also tell you if you are at an increased risk of having a baby with a neural tube defect such as spina bifida. If your result shows an increased risk, you will be offered a detailed ultrasound scan between 21-23 weeks gestation.

How do I make an appointment?

This screening test is not available at your routine booking visit at 12 weeks or at your dating ultrasound between 10-14 weeks. It is a separate clinic that you can book if you are interested in prenatal screening.

Please contact the Fetal Assessment Unit at CUMH on (021) 4920602 for an appointment. You can make an appointment by ringing this number between 2-4pm on Monday-Thursday. There are a limited number of appointments available for this clinic.

What are the costs?

This test is not funded by the Health Service Executive or by CUMH. It is being made available to you on a cost basis. The charge is €100 for the Quad test. This includes administration costs, the laboratory charges for the blood tests and data analysis, as well as the courier charges to the laboratory in Birmingham.

How do I pay?

On the day of your appointment, please bring a cheque or bank draft for €100 with you. This should be made payable to "HSE South".

Who can I contact with questions?

If you have any questions about the second trimester quadruple screening or your test results, please contact the Fetal Assessment Unit from Tuesday to Thursday between 2-4pm only and ask to speak with one of the midwives working in the unit.