

THE 11 TO 14 WEEK SCAN

Nuchal translucency thickness is the black space (fluid) in the neck area of the foetus. Findings have shown that most have some fluid, but if there is more than the normal amount the risk of chromosomal abnormality is increased. We use a computer programme that combines the foetal nuchal translucency thickness and your age to calculate an estimate of your risk.

Maternal Age (years)	Chance of Down Syndrome At 12 weeks	Chance of Down Syndrome At birth
20	1 in 1070	1 in 1530
25	1 in 950	1 in 1350
30	1 in 630	1 in 900
32	1 in 460	1 in 660
34	1 in 310	1 in 450
35	1 in 250	1 in 360
36	1 in 200	1 in 280
38	1 in 120	1 in 170
40	1 in 70	1 in 100
42	1 in 40	1 in 55
44	1 in 20	1 in 30

This scan is offered in over 200 accredited centres in 41 countries; Pacific Radiology is one of these. Using this programme up to 80% of Down Syndrome pregnancies can be detected. However, the latest version of the software risk programme allows additional information to be assessed, and detection rates of up to 97% have been reported. This compares very favourably with risk assessment based on maternal age alone, even with the addition of blood test results (30% and 60% respectively).

The scan must be done between 11 and 14 weeks.

SOME FACTS

- The vast majority of babies are born normal.
- All women, whatever their age, have a small risk of delivering a baby with physical and/or mental handicap, such as Down Syndrome (trisomy 21).
- At the First Trimester Scan, we can assess the chance of the foetus having a chromosome abnormality based on your age and the scan result.
- To know for sure whether or not the foetus has a chromosome abnormality, an invasive test is needed (eg amniocentesis).

THE ASSURANCE OF QUALITY

The accuracy of the result relies heavily on the standard of the equipment and the skill of the sonographer. At Pacific Radiology you can rest assured that both of these are of the very highest standard. We only provide top of the range ultrasound machines which are regularly upgraded, and every aspect of our service meets international accreditation standards. We aim to provide a relaxing atmosphere for your scan, in comfortable air conditioned rooms with conveniently positioned television screens so that you can more easily see the scan in progress.

All of our branches are fully accredited by IANZ.



Pacific Radiology

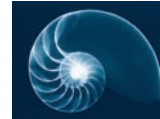
www.pacificradiology.co.nz

Ultrasound is available at the following Pacific Radiology branches:

Wakefield Hospital
Lambton Quay
Bowen Hospital
Johnsonville
Lower Hutt
Upper Hutt
Porirua
Paraparaumu

FOR AN APPOINTMENT
PLEASE TELEPHONE

04 978 5500



Pacific Radiology

ALL ABOUT PREGNANCY SCANS

Including the 11 to 14 week
scan for Down Syndrome



PARTNERSHIPS IN MEDICINE

WHAT IS AN 'ULTRASOUND SCAN'?

This is an 'echo picture' formed using very high frequency sound waves. The ultrasound machine sends out millions of tiny sound waves (at a frequency much higher than we can hear) and then 'listens' for the returning echoes from the baby and its surroundings. A powerful computer converts this information into a black and white image.

IS IT SAFE?

Absolutely. No ill-effects have been reported in 30 years of scanning and millions of scans.

HOW IS THE SCAN DONE?

You will lie down on the scan couch; some warm gel is placed on your abdomen. The sonographer places the sound probe on the gel to make the image. If you are less than 14 weeks pregnant, you will need to have a full bladder. After 14 weeks, please refrain from going to the toilet for one hour prior to your scan.

Occasionally when we need more detailed information we can do an internal scan. This is often helpful when we are trying to confirm an early pregnancy.

The scan times range from 5 minutes to half an hour, depending on the reason for the scan.

WHY HAVE A SCAN?

Everyone expects that their pregnancy will be normal and at the end they will deliver a healthy baby. Unfortunately, we have to remember that the world is not perfect and for a few there will be problems. Up to 2 in 100 babies will be born with some sort of abnormality. A lot of these are minor and will not affect normal growth and development, but some will be significant. It is these pregnancies that we are trying to detect when we scan, so that your maternity carer can arrange for any special intervention or monitoring that may be needed.

For the vast majority of pregnancies we are able to offer the reassurance that all seems to be well. However, a scan **cannot** guarantee your baby is normal.

DIFFERENT TYPES OF SCANS

THE EARLY SCAN

This is a scan done in the first trimester (the first third of pregnancy). There are two main reasons for a scan at this time:

1. To confirm the dates and check for twins.
2. Bleeding and/or pain.

6 weeks is generally the earliest we can see the developing embryo, where it is the size of a grain of rice. The developing heart can be seen beating, like a flickering star.

A word about when the scan dates are different from the dates your midwife or doctor works out for you:

The ultrasound dates are based on the size of the foetus. This is more accurate early in pregnancy where it should be +/- 5 days, but much less accurate later on (due to the normal variation in growth rates and size). A scan at 40 weeks will only be expected to be +/- 3 weeks. We will always keep to the dates you already have unless the ultrasound measurements are out of this range, when we have to decide why this is so. If there is a discrepancy we will generally use the dates from the earliest scan.

THE 11-14 WEEK SCAN

This is the first of the two routine scans that many women have. It is relatively new, and we use it to assess the risk of Down Syndrome and other chromosomal abnormalities.

This must be done between 11 and 14 weeks.

This is dealt with in more detail overleaf.

THE ANATOMY SCAN

This is the commonest scan, the one that most people are familiar with.

This is done around 20 weeks (half way through pregnancy). During the scan, the sonographer will carefully assess the major organ systems including the heart and spine, looking for problems. The foetus is now too big to fit on one ultrasound screen, but you should be able to make out individual structures, including limbs, hands and feet. We can most often see if you are having a boy or a girl if you want to know this (but remember, before you rush out and paint the nursery that there are no 100% guarantees!).

THE GROWTH SCAN

Requested by your maternity care giver to check on the foetal growth, placenta or umbilical cord blood flow. Sometimes these are done every few weeks to show the rate of growth.

These scans consist mostly of measurements and graphs, the images are usually less recognisable than on earlier scans.

Foetal face from a 20 week anatomy scan

