

First Trimester Nuchal Translucency Measurement

The nuchal translucency (NT) is the fluid between the soft tissue of the spine and the skin of the neck. This space is present in all fetuses; however, it tends to be wider in fetuses with chromosomal abnormalities as well as other birth defects. The measurement of the nuchal translucency has become an integral part of many first trimester and integrated screening programs for chromosomal abnormalities.

The screening ultrasound is performed between 11 and 14 weeks of gestation and involves measuring the NT in a very precise manner. This measurement, along with first trimester (and in some protocols second trimester) blood work provides a risk estimate that a baby may have a chromosomal problem. This is a screening test that detects risk. It is not a diagnostic test and does not give you a yes/no answer.

At the time of your ultrasound, we will evaluate your baby's size by measuring the Crown-Rump Length. The width NT will be measured in a very standardized precise manner. This study can take as little as 10 minutes or greater than 30 minutes depending on the position of the baby, the position of your uterus and the presence of other factors, such as fibroids and maternal weight. When we have ascertained a reliable measurement, we will provide this information to your physician.

The measurement of the nuchal translucency *alone* (without blood work) does not provide a risk for chromosomal problems and cannot be used to screen for Down syndrome. In a small minority of patients, the NT is thick and therefore raises the risk of a chromosomal abnormality considerably. In that event, it would be unlikely that the information obtained from your blood work would significantly decrease your risk and we will discuss with you the option of a diagnostic procedure which will tell you for certain whether your child has a chromosomal problem or not.

