

By: ~~13/09/2008~~ Stef Whitei, Science Editor

[The Gender of a Child Determined at 6 Weeks of Pregnancy](#)

Analyzing DNA from the blood of the mother

Are you eager to know the sex of your unborn child? Normally, you have to wait 4-5 months until ultrasound scanning can tell you that but, now, it is possible that you wait a shorter period of time. Many women are not even aware they're pregnant at the date when this new method can already tell them if it's a he or she they're expecting. Lorgen GP (a spin-off of the University of Granada) and Fetal Medicine Unit of the Maternity Hospital Virgen de las Nieves of Granada have developed a DNA trial that detects the sex of the fetus from the 8th week of pregnancy, separating the fetal DNA from the blood plasma of the pregnant woman. The technique has been verified in 120 pregnant women by the team led by Dr Sebastián Manzanares (Fetal Medicine Unit). The method has an efficiency rate of 98%. The test can be made starting with the sixth week of pregnancy, but more reliable results are delivered from the eighth week. This method takes advantage of the fact that, in pregnant women, 3.4 to 6.2% of the total DNA free in blood plasma comes from the fetus. Thus, a simple blood sample can deliver a non-invasive prenatal diagnosis. The mother can even send a blood sample to Lorgen and get the results 48 hours later. The test goes beyond simple detection of the gender of the embryo: it could also detect monogenic diseases connected to X chromosome, like hemophilia or Duchenne muscular dystrophy, more often manifested in boys. Knowing the gender of the child as soon as possible would eliminate invasive prenatal procedures like amniocentesis, chorionic villus biopsy or cordcentesis, which can threaten the life of the fetus, at an age when abortion of the diseased embryos does not affect much the health of the woman. However, critics fear sex-related abortions if parents are unhappy with the test result. In 2007, a similar British DNA testing kit, available on the Internet, could tell you the sex of a baby at just 6 weeks. The kit, traded by DNA Worldwide, costs £189 (\$377 or 280 Euro) and can be mailed to you, complete with a prepaid return envelope. The technique uses the same DNA analysis in the mother's blood.