

What is Obstetrical Ultrasound Imaging?

Ultrasound imaging, also called ultrasound scanning or [sonography](#), involves exposing part of the body to high-frequency sound waves to produce pictures of the inside of the body. Ultrasound exams do not use [ionizing radiation](#) (as used in [x-rays](#)). Because ultrasound images are captured in real-time, they can show the structure and movement of the body's internal organs, as well as blood flowing through blood vessels.

Ultrasound imaging is a noninvasive medical test that helps physicians diagnose and treat medical conditions.

Obstetrical ultrasound provides pictures of an embryo or fetus within a woman's uterus.

A Doppler ultrasound study may be part of an obstetrical ultrasound examination.

[Doppler ultrasound](#) is a special ultrasound technique that evaluates blood velocity as it flows through a blood vessel, including the body's major arteries and veins in the abdomen, arms, legs and neck.

During an obstetrical ultrasound the examiner may evaluate blood flow in the umbilical cord or may in some cases assess blood flow in the fetus or placenta.

How should I prepare?

You should wear a loose-fitting, two-piece outfit for the examination. Only the lower abdominal area needs to be exposed during this procedure.

If an ultrasound is ordered by your clinician early in your pregnancy (1st Trimester), you will need to drink 32 ounces of fluid (water, juice, coffee, or tea) **finished** one hour prior. Be sure to not void. A full bladder is needed for the procedure. Air interferes with sound waves, so if your bladder is distended, the air-filled [bowel](#) is pushed out of the way by the bladder and an image of the [uterus](#) and embryo or fetus is obtained.

The [radiologist](#) or [sonographer](#) may elect to examine an early pregnancy by means of [transvaginal](#) ultrasound. This requires an empty urinary bladder. You should ask for specific instructions for this imaging study when you make your appointment.