

ULTRASOUND in Pregnancy

You are pregnant. Your health-care provider suggests you have an **ultrasound**. Learn more about it.

What is an ultrasound?

Ultrasound comes from a machine that creates an image of the inside of your body. It shows what your baby looks like while still inside your womb (uterus). Ultrasound can tell you—and your health-care provider—many things about your baby, such as:

- the size of the baby
- how well the baby's heart works
- how well other organs (such as the spine, brain and kidneys) are growing
- the anticipated date of birth

The moving pictures from the ultrasound machine are like a movie. The pictures appear on a computer screen.

How does ultrasound work?

Ultrasound pictures are made from **sound waves** which are too high pitched to be heard by the human ear. The sound waves travel through your skin and are focused on a certain part of your body by a scanning device called a "transducer." It picks up the sound waves as they bounce back from organs inside the body. Ultrasound is different from x-rays because it does **not use radiation**. This makes it safer for you and your baby. Ultrasound is used in many areas of medicine.

Why is an ultrasound done?

An ultrasound can help to check on many aspects of a healthy pregnancy, such as:

- the number of babies
- whether the baby's size is right for his/her age
- how the baby's internal organs are growing
- whether the placenta (afterbirth) is in the correct place
- whether there are problems with the mother's uterus, fallopian tubes or ovaries

Experts in Canada **recommend that all women** have an ultrasound when they are pregnant. The best time to do this is between 18 and 22 weeks of pregnancy. You might be asked to have ultrasound at other times during your pregnancy. Your health-care provider may suggest this:

- to see what position the baby is in
- to check the placenta (afterbirth)
- to view how much fluid is around the baby
- to check the baby's growth and well-being
- to check for signs of a possible genetic problem

What will happen during the ultrasound?

Before you go for an ultrasound, you will get information on how to prepare and where to go. Sometimes, women are told to arrive with a full bladder, but not so full it causes pain. This helps the sound waves travel better through the skin and tissues. You may be asked to change from your own clothing into a medical gown. The person who does the ultrasound is called an **ultrasonographer**. Once you are lying down on the examining table, clear gel will be put on your skin. The gel allows the transducer to move easily on your skin and helps the sound waves to transmit into your body. You may feel light pressure on your tummy but no pain. An ultrasound exam takes about **30 minutes**. If more tests are needed, it could take longer. Sometimes, the ultrasound must be done through the vagina (birth passage). A special kind of transducer is placed into your vagina. Most women feel **no pain** during this type of ultrasound.

What can an ultrasound find?

You should make sure you are fully informed about why you are having an ultrasound. It is an important way to learn about problems. The results of an ultrasound may mean you will need to have more tests. Talk to your health-care provider **before** you have an ultrasound to make an informed decision. For most pregnant women, ultrasound assures them that their baby is healthy and all is well. Sadly, for a few, the ultrasound will find signs that all is not normal. Remember that the screening test only indicates an increased chance for concern and cannot tell you for sure if the baby does have a specific condition. Your health-care provider will be told if the ultrasound shows any signs of abnormality. They will discuss this with you. You may be referred to a centre that has expert doctors with experience in the field of fetal abnormalities.

Does a normal ultrasound mean I will have a healthy baby?

Ultrasound can detect many, but not all, abnormalities. Finding an abnormality depends on many factors, including the age and position of the baby, as well as the size and type of abnormality. The clarity of the pictures depends on the ultrasound equipment and how well the ultrasound can pass through the mother's abdomen. For example, ultrasound will be less clear when the mother's abdomen is thick or scarred.

Is ultrasound safe?

Ultrasound has been used on pregnant women for more than 30 years. Studies continue to make sure ultrasound is safe. So far, there is no reason to think that it harms mothers or babies. As with all medical tests, the benefits must always be greater than the risks. Health Canada regulates ultrasounds in Canada through two laws: *the Medical Devices Regulations of the Food and Drugs Act* and the *Radiation Emitting Devices Act*. This helps to ensure that ultrasounds are safe when used for medical reasons. The Society of Obstetricians and Gynaecologists of Canada and Health Canada have produced guidelines on diagnostic ultrasound. They state that ultrasound **should not be used** for any of these reasons:

- to have a picture of the baby, solely for non-medical reasons
- to learn the sex of the baby, solely for non-medical reasons
- for commercial use, such as trade shows or making videos of a baby

What are the benefits of ultrasound?

Ultrasounds provide pregnant women with important medical information. It helps Canadian women have healthy babies. Ultrasound must be used carefully to ensure that mothers and their babies benefit from what it offers. If your health-care provider recommends that you have an ultrasound, make sure you know:

- why it is needed
- the risks that may be involved
- how it will be done