

What is Ultrasound Imaging of the Abdomen?

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.

An abdominal [ultrasound](#) produces a picture of the organs and other structures in the upper abdomen.

A Doppler ultrasound study may be part of an abdominal 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.

How should I prepare?

You should wear comfortable, loose-fitting clothing for your ultrasound exam. You may need to remove all clothing and jewelry in the area to be examined. To ensure the best possible image quality, your stomach must be empty of food. Therefore, **you should not eat or drink anything (including any medications taken by mouth, especially antacids) and to refrain from chewing gum and smoking after midnight on the day of the examination**

You may be asked to wear a gown during the procedure. Tell your doctor if you have had a barium enema or a series of upper GI (gastrointestinal) tests within the past two days. Barium that remains in the intestines can interfere with the ultrasound test.

Other preparations depend on the type of ultrasound you are having.

- For a study of the liver, gallbladder, spleen, and pancreas, you may be asked to eat a fat-free meal on the evening before the test and then to avoid eating for eight hours before the test.
- For ultrasound of the kidneys, you may be asked to drink four to six glasses of liquid about an hour before the test to fill your bladder. You may be asked to avoid eating for eight before the test to avoid gas buildup in the intestines.
- For ultrasound of the aorta, nothing to eat or drink after midnight.