



Abdominal CT Scan

How to prepare for your exam

An abdominal CT scan uses a special X-ray machine to take detailed pictures of the body. Read this handout to learn more about how an abdominal CT works, how to prepare for your scan, how the scan is performed, what to expect during the scan, and how to get your results.

What is a CT scan of the abdomen?

A CT scan (computed tomography, or CAT scan) of the abdomen uses a special X-ray machine to take detailed pictures of the organs and tissues of the abdomen. CT pictures are far more detailed than a standard X-ray.

CT is useful because it can show many types of organs (liver, spleen, pancreas, kidneys, lower gastrointestinal tract, colon, and rectum) at the same time.

How does the CT scan work?

Unlike standard X-rays, which produce pictures of the shadows cast by body structures of varying thickness, CT scanning uses X-rays in a much different way. Many X-ray beams are passed through the abdomen at many angles, and special detectors measure the amount of radiation absorbed by different tissues. The X-ray tube revolves around you, and sends and records data from many angles, forming cross-sectional pictures (slices) of the area. The pictures are then reviewed on a computer screen.

Modern CT units, called *spiral CTs*, produce higher-quality pictures in a shorter time, an important feature for children and patients who are elderly or critically ill, as well as for those who cannot hold their breath for a long time. Today's scanners can image large regions of the body during a single 20-second breath-hold.

How should I prepare for the CT scan?

- Wear comfortable, loose-fitting clothing for your CT exam.
- Metal objects can affect the image, so avoid clothing with zippers and snaps.
- You may be asked to remove hairpins, jewelry, eyeglasses, hearing aids, and any removable dental work that could obscure the images.
- Eat your regular diet until 6 hours before your scan.
- Drink clear liquids such as water, juices, or tea until your scan. Drinking water helps to protect your kidneys. It is important to drink often, both before and after your scan.
- Take your regular medicines as prescribed by your doctor.
- You may need to drink a liter of contrast 1 hour before your exam.
- Tell your doctor or the CT technologist if there is any chance you may be pregnant.

How is the CT scan performed?

1. The CT technologist will place you on the CT table, using pillows to help you maintain the correct position during the scan.
2. For the first few scans, the table will move quickly through the scanner to check the correct starting position. The rest of the scans are made as the table moves more slowly through the hole in the scanner.
3. A CT exam of the gastrointestinal tract requires the use of a contrast material to enhance the visibility of certain tissues. The contrast material may be swallowed or given by enema.
4. Before giving you the contrast material, the radiologist or technologist will ask whether you have any allergies, especially to medications or iodine, and whether you have a history of diabetes, asthma, a heart condition, kidney problems, or thyroid conditions. These conditions may indicate a higher risk of reaction to the contrast material or potential problems eliminating the material from your system after the exam.
5. A CT exam usually takes 5 to 30 minutes. When the exam is over, you may be asked to wait until the images are checked to find out if more images are needed.

Questions?

Call 206-598-6200

Your questions are important. Call your doctor or health care provider if you have questions or concerns. UWMC clinic staff are also available to help at any time.

Imaging Services:
206-598-6200

What will I feel during the procedure?

- CT scanning causes no pain, and with spiral CT, the need to lie still for any length of time is reduced.
- For exams of the abdomen and lower gastrointestinal tract, you may be asked to swallow either water or a positive contrast material, a liquid that allows the radiologist to better see the stomach, small bowel, and colon. Some patients find the taste of the contrast material mildly unpleasant, but most can tolerate it well.
- Your exam may require the administration of the material by enema if the colon is the focus of the study.
- You will be alone in the room during the scan. The technologist can see, hear and speak with you at all times. For pediatric patients, a parent may be allowed in the room with their child to help reduce fear and provide comfort. The parent will be required to wear a lead apron to prevent radiation exposure.

Who interprets the results and how do I get them?

A radiologist skilled in CT scanning will review and interpret the CT findings and will send a detailed report to your primary care or referring doctor, who will give you the results. The radiologist will not discuss the results with you.

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