

# Computer Tomography (CT or CAT) Preparation Instructions

Note: The following preps are for adult outpatient care only.

#### What is a CT Scan?

**Computed tomography,** called CT or CAT scanning, is an x-ray system that uses a computer to take detailed images of the head, spine, chest, pelvis, abdomen, extremities, and other areas of the body. These pictures look like cross-sections or "slices" of the body that are then put together by the computer.

Some CT scans require the use of a **contrast** material, sometimes called "contrast dye" or "iodinated contrast material". If you have a **known allergy** to contrast material you need to **call** the Radiology Department at (734) 936-4500 as soon as you can before the test. We need to know about your allergy and what type of reaction you have had. This information will allow the radiologist to arrange for pre-medication for you through your referring doctor or make necessary arrangements.

#### How is the test done?

To produce the scans, we will ask you to lie on a table. The table slides into the doughnut-shaped ring in the center of the scanning machine. An x-ray tube rotates around the area of your body that we need to scan. Sensors in the ring detect x-rays passing through your body. Information from the sensors is processed by a computer and displayed as an image on a video screen.

Frequently, we will use a colorless liquid called a contrast agent (sometimes called contrast "dye") to see the part of your body we need to study. If you need

contrast material for your exam you will either swallow it (oral contrast), or it will be injected directly into your vein through an I.V. (intravenously) usually in your arm or leg.

A radiologist (specialized medical doctor skilled with medical images) will interpret your images.

## How do I prepare for a CT scan?

## What are my diet instructions?

Do not eat solid food for **2 hours before** the appointment time. You may drink clear liquids up until 30 minutes before the appointment time (unless otherwise instructed).

Clear Liquids Allowed:

- Tea/black coffee
- Apple or cranberry juice
- Lemon or Lime Jello-O
- Clear Chicken or Beef Broth
- Clear Sodas (7-UP, Sprite, Ginger Ale)
- Water

If you are having a "CT enterography" (a specialized CT scan designed to evaluate your intestines), then do not eat solid food for **2 hours before** the appointment time

### What are my medications instructions?

Take your medication as prescribed with a small amount of water unless the Radiology Department instructs you differently.

If you are diabetic and taking a medication that contains metformin for kidney problems, you may need to stop taking it before or at the time of your

examination. Please refer to the Patient information pages supplied to you with the medicine by your Pharmacy for instructions or ask your doctor. If your instructions are to discontinue your medication, do not take it again until 48 hours after your examination. At that time, your kidney function should be reevaluated by your doctor. You can resume taking metformin when they tell you your kidney function is normal. In the USA, metformin is sold as a generic drug and is also present within other drugs. Examples include: Glucophage<sup>®</sup>, Glucovance<sup>®</sup>, Avandamet<sup>®</sup>, and Metaglip<sup>®</sup>.

#### Special instructions for an abdominal (stomach) or pelvic CT

You will need to arrive one hour before your scheduled appointment time for oral preparation called Readi-Cat<sup>®</sup>2. This means that you will drink several portions of barium liquid or water during specific times in the hour leading up to your scan. Barium is a dry, white, chalky powder that is mixed with water to make a thick, milkshake-like drink. The Barium and water work as contrast dyes and allow the scanner to show your organs in more detail, as the dye circulates throughout the body.

The 60 minute barium preparation is:

- 1. Drink 450 milliliters 60 minutes before your scan
- 2. Drink 450 milliliters 30 minutes before your scan

Occasionally, water will be used as an oral preparation. The 60 minute water preparation is:

- 1. Drink 480 milliliters of water 60 minutes before scan
- 2. Drink 480 milliliters of water 30 minutes before scan
- 3. Drink 480 milliliters immediately before scan.

#### **Special instructions for CT Guided Biopsy**

You will need to fill out a questionnaire through the CT scheduling office. In

addition, we will need to take blood tests before your biopsy. The blood tests are:

- Prothrombin Time (PT)
- Partial Thromboplastin Time (PTT)
- Platelet Count (PLT)
- international Normalized Ratio (INR)
- Creatinine (CREATE)
- Urea Nitrogen (UN)

If you have any questions regarding CT scheduling, please call (734) 936-4500.)

On the day of your scheduled biopsy: Do not eat solid food for **6 hours before** the appointment time. You may drink clear liquids up until 30 minutes before the appointment time (unless otherwise instructed).

You will need to have someone with you during a CT guided biopsy. All biopsies are scheduled for a two-hour period, but the length of the procedure may be longer or shorter. Sometimes, we will give you a medication to help you relax during the procedure. After the biopsy, you will be sent to a recovery area in the Radiology Department for approximately two to six hours.

# What can I expect on the day of my CT?

- Please arrive by your appointment time.
  - If you are having a body CT or Spine CT Scan you will need to change into a gown or robe (clothing with metal on it will interfere with the exam).
  - o If you are having a **neck or chest CT Scan** you will need to remove all necklaces, earrings, hair pins, bras, hearing aids, metal buttons, etc.
- We will ask you to lie on a narrow table.
- Before to the scan, you might receive more oral contrast or an I.V. to inject contrast into your veins. During the injection, many patients feel a warm or

flushed sensation, while others feel a minor discomfort that usually lasts about two minutes.

- The technologist will position your body inside the scanner's doughnut shaped ring. As the procedure begins, you will hear humming, buzzing or clicking sounds from the CT machine.
- You may be asked to follow simple breathing instructions. Remaining still helps make the clearest images, so try your best to stay still when the scanning is happening. The total scanning time will be likely less than 5 minutes for a diagnostic CT scan.

# What should I expect after the procedure?

The radiologist will send a report to your doctor after the images have been studied. It is best to ask your doctor for the exam results.

For questions about any of these preps, please contact the Radiology Call Center, at (734) 936-4500 for more information.

Disclaimer: This document contains information and/or instructional materials developed by University of Michigan Health for the typical patient with your condition. It may include links to online content that was not created by U-M Health and for which U-M Health does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.

Patient Education by <u>University of Michigan Health</u> is licensed under a <u>Creative Commons</u> Attribution-NonCommercial-ShareAlike 4.0 International Public License. Last Revised 04/2022