CT scan also known as a CAT scan is a series of computer images taken by a 360 degree x-ray beam. This special x-ray equipment produces multiple images of the body via a computer and joins them together in cross sectional or overlapping views for a more precise, clearer image than conventional x-ray machines.

**Test Description**
The CT scan is a large machine with a donut like hole in the center which is called the gantry. You will lie on the table which slides in and out of this tunnel. In many cases the use of a contrast medium such as barium sulfate, or another type of contrasting liquid will need to be used for a highlight in the image. For this procedure you be asked to lie on your side so that the barium sulfate or other contrast medium can be inserted into your body through a very well lubricated tube into your rectum. That tube is attached to the bag of barium sulfate allowing it to gently flow into your colon and a small balloon at the tip of the tube can be slightly inflated to keep the medium intact.

Once the contrast medium has been inserted the electronic x-ray detectors and x-ray tube rotate from different directions around you while you lie in a comfortable position and remain very still.

This testing procedure can generally last up to an hour even though the actual image procedure takes only a few minutes, so to help remain relaxed and still ask for a headset for music, if you have any apprehension or claustrophobic issues talk to your doctor in advance about a possible sedative. The majority of patients have no problems during this painless testing, but for the few it’s worth the consult with the doctor prior to the test.

Once you are in position the technician will be in a separate room from you monitoring the procedure from a computerized workstation. Although you will be in the room alone there is an intercom in the room so you are in constant communication and visual contact with the technician at all times.

**Test Preparation**
Because your CT Scan testing will be focused on your large intestine, you will be more than likely asked to cleanse your colon prior to testing either by laxative or enema. Follow your physician's directions exactly to insure a successful test.

**What To Expect During the Test**
Communication with the technician is the key to a successful test. The CT scan is virtually painless, during the testing you will be placed in as comfortable position as possible on a table that can be adjusted up or down, pillows or straps should be available to help you stay in a still position. As the table slowly moves you through the gantry the x-ray tube rotates around your body, you will need to hold your breath to help with the clarity of the pictures. You may also hear a series of clicking or whirring motor noises which is perfectly normal of the x-ray machinery.
If you have a contrast medium enema you may also have the urge for a bowel movement, a feeling of fullness, a slight discomfort, or even medium cramping. If you have any level of extreme discomfort let the technician know right away to get yourself into a better position for the procedure.

**Purpose of Test**
The results from a CT Scan image is generally the highest clarity available allowing the technicians and physicians to come to a better understanding of a patients condition and diagnosis.

It is also a safer test to run if there is any suspicion of a diverticulitis attack.

**Test Results**
Sometimes the radiologist may go over your test result will you right away; however keep in mind though that it could take 1 – 2 days to get a proper diagnosis.

*Normal*
- The barium should fill the colon equally, showing regular bowel shape and position with no blockages.

*Abnormal*
- Anything out of the ordinary will be generally caught right away. The main focus will be on any diverticular pockets, infections, or possible perforation. Other intestinal conditions may be found also.

**Risks**
CT scan risks are similar to those of conventional X-rays. During the CT scan, you're briefly exposed to radiation, X-rays are always regulated and monitored so as to have only the smallest amount of radiation exposure needed to produce the correct images. There is also the slight risk of a perforated colon, or allergic reaction. Many experts feel strongly that the risks far outweigh the benefits of what can be discovered. Keep in mind that pregnant women and children are more sensitive to the exposure of an x-ray.