

## WHAT IS A CT SCAN?

CT (Computed Tomography) uses a combination of x-rays and high-powered computers to obtain cross-sectional images of the body. These images show all types of tissue including lungs, brain, bone, muscles and abdominal organs with great clarity. CT scans are often used to guide fine needle biopsies, nerve root injections and other minimally invasive procedures.

Our CT scanners utilise the very latest in CT technology, producing extremely high quality images in a very short time. As well as obtaining detailed two-dimensional images of nearly all parts of the body, advanced software also enables 3D reconstruction of some scans.

Coronary Artery Calcium scoring (CACS or 'HeartCheck' scans), Virtual Colonographies and CT Coronary Angiography (CTCA) are done on the scanner at our Ascot Hospital site. This scanner delivers exceptional image quality and its advanced technology also helps to significantly reduce radiation dose to the patient.

We have CT scanners located at our Ascot Hospital, AUT Millennium, Green Lane Imaging and Mauranui Clinic branches.

THE GE REVOLUTION EVO CT SCANNER



## FURTHER INFORMATION

on CT can also be found on our website:  
[www.ascotrad.co.nz/Our-Services/  
Computed-Tomography](http://www.ascotrad.co.nz/Our-Services/Computed-Tomography)



## CT SCANS

are available at these Ascot Radiology branches:

**ASCOT HOSPITAL:** 90 Green Lane East, Remuera  
TEL: (09) 520 9550 EMAIL: [ct@ascotrad.co.nz](mailto:ct@ascotrad.co.nz)

**AUT MILLENNIUM:** 17 Antares Place, Rosedale  
TEL: (09) 478 6640 EMAIL: [millennium@ascotrad.co.nz](mailto:millennium@ascotrad.co.nz)

**GREEN LANE IMAGING (Located at Ascot Central):**  
Ground Floor, 7 Ellerslie Racecourse Drive, Remuera  
TEL: (09) 555 9556 EMAIL: [gli@ascotrad.co.nz](mailto:gli@ascotrad.co.nz)

**MAURANUI CLINIC:** 84 Great South Road, Epsom  
TEL: (09) 555 9557 EMAIL: [ct@ascotrad.co.nz](mailto:ct@ascotrad.co.nz)

## TO MAKE AN APPOINTMENT,

Please call us during office hours,  
8.30am - 5pm Monday to Friday,  
or go to our website:

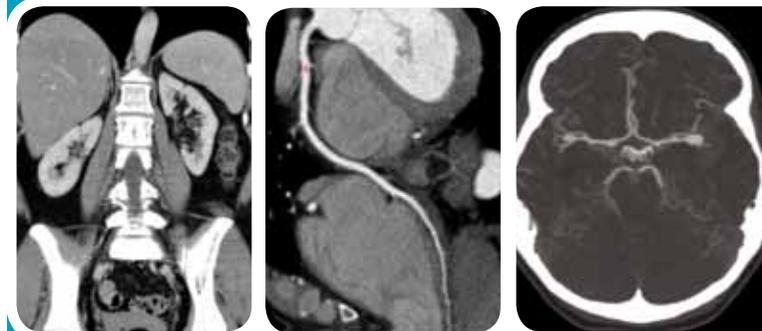
[www.ascotrad.co.nz/Book-A-Scan](http://www.ascotrad.co.nz/Book-A-Scan)

 **ASCOT RADIOLOGY**  
[www.ascotrad.co.nz](http://www.ascotrad.co.nz)

FRONT COVER IMAGES (LEFT TO RIGHT): CT OF THE ABDOMEN, CT OF THE CORONARY ARTERIES, HEAD CT & 3D RECONSTRUCTION OF THE LUMBAR SPINE  
THIS PAGE: 3D RECONSTRUCTION OF THE BLOOD VESSELS OF THE BRAIN

 **ASCOT  
RADIOLOGY**

**CT**  
(COMPUTED TOMOGRAPHY)



ASCOT HOSPITAL • AUT MILLENNIUM  
GREEN LANE IMAGING • MAURANUI CLINIC

### CT SCANS ARE USED TO:

- diagnose muscle and bone disorders, such as bone tumours and fractures
- pinpoint the location of a tumour, infection or blood clot
- guide procedures such as surgery, biopsy and radiation therapy
- detect and monitor diseases and conditions such as cancer, heart disease, lung nodules, liver masses and kidney stones
- detect internal injuries and internal bleeding after trauma
- look at the coronary arteries and heart vessels:
  - CT Coronary Angiography (CTCA)
  - Coronary Artery Calcium Scoring (CACS or 'HeartCheck')
- construct a 3D image of the inside of the bowel (Virtual Colonography) - see below.



### BEFORE A CT SCAN

How you prepare for a CT scan depends on which part of your body is being scanned. You may be asked to:

- change into a gown
- remove any metal objects, such as a belt or jewellery.

Specific instructions for preparation will be given to you when you book your appointment. You may also be asked to stop eating for a few hours before your scan.

**Because CT scans use x-rays, women should always inform their doctor, or the radiographer prior to the scan, if they think they may be pregnant or are trying to become pregnant.**

### CONTRAST

A special x-ray dye called 'contrast' is needed for some CT scans to help visualise blood vessels, intestines or other structures. Contrast can be introduced to your body in a variety of ways:

- **ORALLY:** If you are having an abdominal and/or pelvic scan, you may be asked to drink several glasses of liquid containing contrast before your scan. The contrast will highlight your bowel on the scans and differentiate it from other organs and soft tissues.
- **BY INJECTION:** Contrast can be injected through a vein in your arm during the scan, to help visualise certain blood vessels. You may experience a feeling of warmth during the injection or a metallic taste in your mouth.

### DURING A CT SCAN

- CT scanners are shaped like a large doughnut standing on its side.
- You will be lying on a table that will move into

the middle of the scanner just before the scan begins.

- Straps and pillows may be used to help you stay in position.
- The table will move slowly through the scanner during imaging.
- If you need an injection of contrast, it will be administered just prior to and during your scan.
- You may be asked to hold your breath at certain points during the scan to avoid blurring the images.
- Due to the advanced technology of modern CT scanners, the actual time you spend being scanned is very low. You may spend as little as five minutes on the CT table.

### AFTER A CT SCAN

- After the scan you can return to your normal routine.
- If you were given an injection of contrast, you will be asked to wait for a short time before leaving the department.
- You will be told to drink lots of fluid to help your kidneys flush the contrast material from your body.
- Results from your CT scan will be sent to your referring doctor, usually in 1 - 2 days, although this timeframe does depend on the type of CT scan you have had.

### RISKS OF A CT SCAN

- Because CT scanning uses x-rays, you will be exposed to some radiation during the scan.
- **If you are pregnant or think you may be pregnant, you should not have a CT scan due to radiation exposure.**