Virtual or CT Colonography

CT Department
Ground Floor, Lanesborough Wing

Please contact the CT department on 020 8725 1730 to confirm your appointment.

This information leaflet is for patients who are having a CT colonography. It explains the procedure, how to prepare for it and what happens afterwards.

What is CT colonography?

CT colonography is a CT (computed tomography) examination to investigate the large bowel. The CT scanner uses x rays to obtain images through the body and produces images in two and three dimensions.

Are there alternatives to CT colonography?

There are two other ways of looking at the large bowel – barium enema and colonoscopy (or sometimes called endoscopy):

1. Barium enema has been available for many years but does not provide as much information for doctors and is often uncomfortable for patients.

2. Colonoscopy is the standard way of examining the large bowel. A thin tube with a camera on the end (a colonoscope) is passed into the back passage and moved up and around the large bowel. The procedure is more invasive than CT colonography and usually requires sedation. However it does allow tissue to be removed for testing (a biopsy) or polyp removal if needed.

These two tests will only give information about your large bowel. CT colonography also provides information about the other structures inside your abdomen.
Are any special preparations required?

It is essential that the large bowel is prepared, in order for the examination to show the bowel clearly. Please read the section titled How to prepare for your CT colonography on page 4 which explains:

- what you should eat and drink, starting one week before the procedure
- how to take the bowel preparation powder (laxative) – you must read this carefully. Please note you will not be able to go to work as you need to stay very close to a toilet for the day before your examination.

You should continue to take your usual prescribed medication. (If you are diabetic, please read the information below carefully).

Direct Line to CT Scanning Department: 020 8725 1730

Please contact the CT department on this telephone number if any of the following apply and have not already been discussed with the doctor requesting your x-ray examination:

- if you are diabetic on either insulin or tablets
- if you are a woman of child bearing age and have not had a period within 10 days or may be pregnant
- if you cannot attend your appointment.

On the day of the examination

You can bring a relative or friend, but they will not be able to accompany you into the x-ray room. This is for safety reasons as it is important people are not exposed to x-rays unnecessarily.

Arriving at the hospital:

Please report to the CT reception desk in Lanesborough Wing Scanning Department. Once you have told us you have arrived, we will ask you to sit in a waiting area and a radiographer will come to collect you. There are toilets within the department which are clearly signposted, should you need to use one at any time.

Before the examination:

We will show you to a changing cubicle where we will ask you to undress. You will put your clothes and personal items into the carrier bag provided, which you will keep with you. We will ask you to put on the gown provided.
Please tell the radiographer if:

- you are diabetic
- you may be or are pregnant.

We will have asked you about this when you made the appointment, but it is important you tell us if anything has changed since then.

**What does the examination involve?**

The examination will take place in the CT scanner room. A radiographer (a specialist in taking x-rays and other images) and possibly a radiology department assistant will help you. You will lie down on the scanner couch, on your left side at first. A soft plastic tube will be inserted into your anus (back passage). This should not hurt. Carbon dioxide (a harmless gas) will be passed into the bowel through this tube. You may be given a small injection called Buscopan, into your arm, at the beginning of the examination. This helps to relax the bowel for a short time and improve the images. You may also be given an injection of some x-ray contrast (dye) into your arm.

You will then lie on your back on the couch, which will move through the scanner to obtain one set of images. You will then lie on your front and a further set of images will be obtained. The tube remains in the back passage throughout the examination. The examination usually takes about 20 minutes.

**Are there any risks or side effects?**

As with any test to examine the bowel, there is a small risk of making a perforation (tear) in the lining of the bowel. The risk of that happening with this test is approximately one in three thousand, which is safer than barium enema or colonoscopy.

When the bowel is full of carbon dioxide, you may feel some discomfort, or cramp-like pain. This should not persist for long afterwards. It is important to try and hold the carbon dioxide within the bowel by keeping the muscles of your bottom very tight.

If you are given any drugs during your test, the radiographer performing the test will explain any potential risks or side effects they may have.

**After the examination:**

You may want to visit the toilet immediately after the examination. There is one outside the examination room. We also advise you to remain within reach of a toilet for the **next few hours**. You may wish to stay within the department or hospital for a while, as you may need to use the toilet.

Occasionally some people feel unwell because they have not eaten for a while. You may also experience some discomfort due to the carbon dioxide within the bowel, but this should subside quickly. Some people are happy to go on to work afterwards, but most prefer to have several hours at home, recovering before resuming normal activity.
Can you eat and drink afterwards?

You may eat and drink normally.

When will you get the results?

After the procedure, the images will be examined further by the radiologist, who will then write a report. This may take some time to reach the doctor who referred you, but is usually less than 14 days. You will get the results from the clinic or doctor who referred you for the test.

If you have any questions:

If you have a query about having the virtual colonoscopy investigation, please ring the CT scanning department 020 8725 1730 between 09:00 and 17:00 hours Monday to Friday. The receptionist will either be able to advise you or will refer you on to a senior member of staff.

Further information:

You may find some helpful information from NHS Direct:

- Helpline 0845 46 47 (24 hour service with nurse advisors)
- Website: www.nhsdirect.nhs.uk
How to prepare for your CT colonography

In order to get a clear picture during the examination, your bowel must be completely empty.

- **For one week before** your examination:  
  Do not take stool bulking agents such as bran, isogel, Fybrogel, Regulan or iron tablets in the week before your examination.

- **Two days before** your examination:  
  Eat only foods that are low in fibre. Examples are:

<table>
<thead>
<tr>
<th>Main meal</th>
<th>Snack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear soup</td>
<td>Plain biscuits/ plain crackers</td>
</tr>
<tr>
<td>White bread</td>
<td>Cheese/pate/salami</td>
</tr>
<tr>
<td>Lean meat, chicken or fish in sauce/ gravy</td>
<td>Chocolate</td>
</tr>
<tr>
<td>Peeled potato, white rice or pasta</td>
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</tr>
</tbody>
</table>

Avoid high fibre foods, such as cereals, wholemeal bread, salads, fruit or any food containing fibre, nuts or seeds.

- **The day before** your examination:  
  You may have a light breakfast – tea and white toast. After this you can have only clear fluids, no solid food. For example, glucose drinks, tea, coffee with sugar but no milk, Bovril.

For a morning appointment:

- **At 07.30 hours on the day before your appointment:** Pour 200 ml (8 fl oz) of hot water into a wide-mouthed measuring jug. Open one sachet of bowel preparation powder and empty the contents into the water. Stir thoroughly until dissolved and allow to cool.
- **At 08:00 hours** pour the solution into a suitable glass and drink.
- For the rest of the day drink as much fluid as possible. **Do not** eat any solid food. The bowel preparation will cause diarrhoea. Stay close to a toilet after taking it.
- **Take the second sachet at 17:00 hours,** prepared as above. Continue to drink as much fluid as possible.
For an afternoon appointment:

- **At 12.30 hours on the day before your appointment.** Pour 200 ml (8 fl oz) of hot water into a wide-mouthed measuring jug. Open one sachet of bowel preparation powder and empty the contents into the water. Stir thoroughly until dissolved and allow to cool.

- **At 13:00 hours** pour the solution into a suitable glass and drink.

- For the rest of the day drink as much fluid as possible. **Do not** eat any solid food. The bowel preparation will cause diarrhoea. Stay close to a toilet after taking it.

- **Take the second sachet at 07:30 hours on the day of your examination,** prepared as above. Continue to drink as much fluid as possible.

- **On the day of your examination**
  
  Keep drinking clear fluids. **Do not eat any solid food** until after the examination.

**Diabetic Patients**

If you are **diabetic** you will be given an appointment in the morning.

The change in your diet may upset your diabetes. This will not cause you any long term harm. You may, on the days leading up to your investigation, be at risk of having a hypo (blood sugar too low). On the day that you drink only clear fluids only you should take sweet drinks every two to three hours during the day to avoid this problem.

**On the day before the examination:**

Take your medication as usual and supplement your fluid intake with glucose-containing drinks such as:

- Lucozade
- Ribena
- Lemonade and Coke
- squash/barley water
- added sugar to your tea/coffee.

Monitor your blood sugar regularly.

If you have any questions about controlling your diabetes whilst taking your preparation, please contact your diabetes care team.

**On the day of the procedure:**

If you are on insulin of tablets for your diabetes, do not take your usual morning dose, but bring your medication and some food to have when your test is completed.
Important general information about the bowel preparation powder (laxative)

- **Do not** take any oral medication (tablets or medicine by mouth) within one hour of taking the bowel preparation laxative as it may be flushed from the gut and not absorbed.

- **You will have diarrhoea** after taking the bowel preparation powder. Please be sure that you have ready access to a toilet at all times following each dose, before the effects wear off. It is unlikely that you will only open your bowels once so stay close to a toilet even after your first episode of diarrhoea.

- **Drink plenty** of clear fluid, preferably water, when taking the bowel preparation powder. This will stop you getting dehydrated. You can supplement your fluid intake with glucose containing drinks such as Lucozade (55mls), Ribena (15mls), Lemonade (200mls), Coke (100mls), squash/barley water (35mls), or added sugar to tea and coffee (2tsp).

- Diarrhoea can lead to **fluid loss** (dehydration) with or without proper fluid and salt replacement. If any of the following symptoms occur, increase your fluid intake and seek medical advice if they do not improve:
  - dizziness
  - headache
  - confusion.

- **There are normal side effects** of taking the bowel preparation powder that will not last long. They include:
  - nausea
  - mild headache
  - bloating
  - abdominal pain
  - irritation at the back passage
  - sleep disturbance.

- It is possible that you may have an **allergic reactions** to the bowel preparation powder. If you experience any of the following, please seek medical advice:
  - rash
  - itchiness
  - redness
  - swelling.

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