

Adult barium enema

X-ray Department

Ground Floor, St James' Wing

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

What is a barium enema?

This is an x-ray examination to investigate the large bowel. A small, soft tube is placed in the anus (back passage). Through this, liquid called Barium and some air are introduced into the large bowel. X-ray images are taken. The barium allows the bowel to be seen on the x-rays.

Are there alternatives to Barium enema?

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

1. 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 a barium enema and usually requires sedation. However it does allow tissue to be removed for testing (a biopsy) or polyp removal if needed.
2. CT colonography is a CT (computed tomography) examination to investigate the large bowel. A soft tube is passed into the back passage and carbon dioxide, a harmless gas, is passed into the large bowel. An injection of buscopan may be given into the arm, to relax the bowel. You may also have contrast (an x-ray dye) injected into the arm. The CT scanner uses x-rays to obtain images through the body, with you lying on your back and then on your front. CT colonography also provides information about 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 barium enema** on page 5 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 the X-Ray Department: 020 8725 1485/6

Please **contact the x-ray 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 reception desk in the St James' Wing Radiology 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 a special x-ray room. A radiologist and/or a radiographer will be there. A radiologist is a doctor who specialises in diagnosing conditions through images acquired using x-rays and a radiographer is a specialist in taking these images.

You will need to lie down on the x-ray table, on your left side at first. The radiologist or radiographer will insert the soft plastic tube into the rectum. This should not hurt. The barium liquid is passed through the tube and around your bowel. This is watched on a screen. You will be asked to move into different positions, to help the barium flow better and show other parts of the bowel. Once sufficient barium is within the bowel, air is also introduced through the same tube. This expands the bowel further and helps ensure the images are clear. You may also be given a small injection called Buscopan, into your arm, at the beginning of the examination, to help relax the bowel and improve the images.

At this stage, several x-rays will be taken, either with you in an upright position, whilst leaning back on the x-ray couch, or with you lying on your side. The tube remains in the back passage throughout the examination.

The examination usually takes about 45 minutes.

Are there any risks or side effects?

When the bowel is full of barium and air, you may feel some discomfort, or cramp - like pain, which may persist for a while afterwards. It is important to try and hold the barium and air within the bowel by keeping the muscles of the bottom very tight.

After the examination:

You will want to visit the toilet immediately after the examination. There is one outside the examination room and for emergencies there is a commode in 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, as you will probably need to use the toilet a few times.

Your stools will appear white and may remain discoloured for a few days. Occasionally some people feel unwell because they have not eaten for a while. You may also experience some discomfort due to the air within the bowel, but this should subside fairly 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 should drink plenty of fluid for at least three days to prevent becoming constipated. You may eat normally. A high fibre diet (including All Bran and wholemeal bread) will help restore normal bowel function, which will usually return within a day or two.

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 barium enema investigation, please ring the radiology department 020 8725 1485/6 between 9:00 a.m. and 5:00 p.m. Monday to Friday. The receptionist will advise you or refer you 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 barium enema

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, Regular or iron tablets in the week before your examination.
- **Two days before** your examination:
Eat only foods that are low in fibre. Examples are:

Main meal	Snack
Clear soup	Plain biscuits/ plain crackers
White bread	Cheese/pate/salami
Lean meat, chicken or fish in sauce/ gravy	Chocolate
Peeled potato, white rice or pasta	

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 or 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 of 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 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 reaction** to the bowel preparation powder. If you experience any of the following, please seek medical advice:
 - rash
 - itchiness
 - redness
 - swelling.

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