Having a barium enema

This leaflet aims to answer your questions about having a barium enema. It explains the benefits, risks and alternatives, as well as how to prepare for your test, and what you can expect when you come to hospital. If you have any further questions, please speak to a doctor or nurse caring for you.

What is a barium enema?

A barium enema is an examination of your large bowel (colon and rectum). The bowel cannot normally be seen on x-ray images unless it is coated in a white liquid called barium contrast. The procedure is done by both:

- a radiologist (a doctor who uses x-rays to diagnose and treat illnesses); and
- a radiographer (a health professional that produces the images used to diagnose and treat illnesses).

The procedure uses a type of x-ray, called fluoroscopic imaging, to view images in real time. This makes it possible to see the bowel moving in your body. When the bowel is coated with the barium, the radiologist is able to check how it looks and how well it is working.

What happens during a barium enema?

You will be asked to change into a hospital gown. You may also be asked to remove jewellery, dentures, glasses and any metal objects or clothing that might interfere with the x-ray images.

Please tell the radiologist of any medicines you are taking, severe allergies, recent illnesses or other medical conditions.

You will be brought into the examination room and asked to lie on the x-ray table. The radiologist will then give you a small injection of medicine (called hyoscine) in your arm. Hyoscine will relax your bowel and help us get better images. It will also make the procedure more comfortable for you.

After examining your rectum (back passage), the radiologist will insert a small plastic tube. The barium liquid will flow through this tube into the bowel and coat the walls. Air will also be gently pumped through the tube to expand the bowel and make the bowel wall easier to see. A series of x-ray images will then be taken.

You may be repositioned often in order to get pictures of the colon from several angles. The x-ray equipment may also move in order to gain the best possible pictures. The radiologist and radiographer will be there with you at all times to help you.

Once the x-ray images have been taken most of the barium liquid will be drained away through the tube. The tube will then be removed from your rectum. You will probably want to go to the toilet and pass out the remaining barium and air. There is a toilet very close to the room for you to do this. Please allow 30-60 minutes for the examination to be completed.
Why should I have a barium enema?

Your doctor has referred you for this examination to help make a diagnosis or to help with your treatment plans. You may need to have a barium enema to find out more about what is causing symptoms such as constipation or diarrhoea, blood in your stool, abdominal (tummy) pain, unexplained weight loss, or anaemia (an iron deficiency).

What are the risks?

X-rays are a type of radiation known as ionising radiation. The dose that you get from a medical x-ray is very low and the associated risks are minimal. The radiographer is responsible for making sure that your dose is kept as low as possible and that the benefits of having the examination outweigh any risk. There are no risks associated with the barium liquid as it is not absorbed by the body. It only coats the walls of the bowel.

Female patients:
X-rays can be harmful for an unborn baby and should be avoided by women who are or may be pregnant. It is recommended that the examination is done within 10 days of the first day of the onset of your menstrual period. If your appointment is not within this time or if you think you may be pregnant please contact the x-ray department.

Are there any alternatives?

There may be other alternative imaging available. However, this has been considered to be the most appropriate test for you. If you have any questions please speak to the doctor that referred you or with the radiologist on the day of your examination.

How can I prepare for the examination?

It is important that your bowel is completely empty for this examination to make sure that it is effective. You will be given a laxative preparation, called sodium picosulphate, along with this leaflet. You need to take this as described below, to help empty your bowel before the start of the procedure. If you have not received the sachets and/or have any questions about the directions below please contact the x-ray department.

Please make sure that the doctor is aware of all of the medicines that you are taking, in case any of them interact with the sodium picosulphate. Please also let them know of any allergies you have to any medicines or latex.

If you are taking the contraceptive pill it may not be effective once you have taken the bowel preparation, so you must use other precautions. Please speak to your GP, pharmacist or family planning clinic for further advice on contraception.

Please take your regular morning medicines at least one hour before you take the sodium picosulphate, otherwise they may not be absorbed into the body. If you take any other medicines throughout the day, please make sure you do not take them within one hour of the second dose of sodium picosulphate. Any other medicines later in the day can be taken as usual, with clear liquid.

Where possible, try to take your usual morning medicines before 10am and your evening medicines after 9pm. Medicines taken between these times may not be fully absorbed. For more advice on when to take your medicines contact the Pharmacy Medicines Helpline (contact details are at the end of this leaflet).
The day before your appointment:

Only have small meals made up of foods called 'low residue foods', which will help the sodium picosulphate work properly. These include:

- fats such as butter and margarine – these should be used sparingly
- eggs, especially boiled and poached
- cereals including cornflakes and crisped rice cereal, **but not bran**
- cream, cottage cheese, or cheese sauce
- potatoes without the skins, boiled, creamed, mashed or baked, but not roasted or deep fried
- plain white pasta, noodles or boiled rice
- meat or fish – for example minced, well cooked, tender, lean beef, lamb, ham, veal, pork, poultry, fish and shellfish
- gravy made from stock cubes (white flour or corn flour can be used to thicken)
- white bread/toast
- sugar or sweetener
- clear jelly.

**Do not eat vegetables, fruit, brown bread, brown rice, brown pasta, jam, nuts, biscuits or crisps, and do not drink alcohol.**

The table below gives an example of how you should eat these foods and drink during the day before the procedure, and how you should take the sodium picosulphate.

<table>
<thead>
<tr>
<th>Time</th>
<th>Take the first sachet of sodium picosulphate:</th>
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<tbody>
<tr>
<td><strong>Before breakfast</strong></td>
<td><strong>8am</strong></td>
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<td></td>
<td><strong>Take the first sachet of sodium picosulphate:</strong></td>
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<td></td>
<td>- <strong>Step 1</strong>: mix the contents of the sachet in 150 millilitres (about one cupful) of cold tap water. Do this in a large glass or jug, as the mixture may fizz over.</td>
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<td></td>
<td>- <strong>Step 2</strong>: stir the solution for two to three minutes. If it becomes warm when you stir it, wait until it has cooled down before drinking the whole solution. Once the solution is ready, drink it immediately. The solution will appear cloudy.</td>
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<tr>
<td><strong>Breakfast</strong></td>
<td><strong>8am-9am</strong></td>
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<td>Please have your breakfast as guided below.</td>
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<td></td>
<td>Tea/coffee (with milk and sugar/sweetener, if needed) or other clear fluids such as water, clear soups, herbal tea, black tea or coffee, or diluted cordials/fruit juice.</td>
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<td><strong>Choose ONE of the following:</strong></td>
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<td>- 30 grams crisped rice cereal or cornflakes with 100 millilitres of milk</td>
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<td></td>
<td>- two slices of white bread/toast with a small spread of butter/margarine and honey</td>
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<td></td>
<td>- one boiled/poached egg and one slice of white toast/bread with a thin spread of butter/margarine</td>
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<tr>
<td></td>
<td>- 50 grams of cottage or cream cheese and one slice of white toast/bread with a thin spread of butter/margarine.</td>
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<tr>
<td><strong>Mid-morning</strong></td>
<td>Tea/coffee (with milk and sugar/sweetener, if needed).</td>
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<tr>
<td><strong>Lunch</strong></td>
<td><strong>12pm-1pm</strong></td>
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<td><strong>Choose ONE of the following:</strong></td>
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<td></td>
<td>- 75 grams meat/fish with gravy</td>
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<tr>
<td></td>
<td>- two boiled/poached eggs</td>
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<tr>
<td></td>
<td>- 100 grams cream or cottage cheese</td>
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Add ONE of the following:
- two slices of white bread/toast with a small spread of butter/margarine
- two egg-sized potatoes without skins with a small amount of butter/margarine
- two tablespoons of plain white pasta/rice

Drink plenty of clear fluids, preferably water. Tea and coffee should now only be black (no milk). As a guide try to drink about one glass every two hours during the day.

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>Afternoon 2pm-4pm</td>
<td>Take the second sachet of sodium picosulphate (prepare it the same way as before).</td>
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<tr>
<td></td>
<td>After you have had the second dose of sodium picosulphate, you must not have any solid food, milk or other dairy products until after the examination.</td>
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<tr>
<td>Afternoon/evening 4pm-9pm</td>
<td>DO NOT have any solid food. You are allowed to have clear soup or a meat extract drink and clear jelly.</td>
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<tr>
<td>Late Evening After 9pm</td>
<td>Do not eat any more food until after you have completed the scan, but continue to drink plenty of clear fluids (such as water, squash, fizzy drinks, clear strained soup or clear stock).</td>
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<tr>
<td>On the morning of your scan</td>
<td>On the morning of the scan drink clear fluids only e.g. tea/coffee (without milk)</td>
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<td></td>
<td>You can take your usual morning medicines with a glass of water by 8am.</td>
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</table>

Patients with diabetes or restricted diets for religious or ethical reasons should contact the x-ray department for further dietary advice.

Stay near a toilet once you have started taking the sodium picosulphate. You should expect frequent bowel movements and eventually diarrhoea, starting within three hours of the first dose. You may have some bloating or stomach cramps – this is normal. You can use a barrier cream, such as zinc and castor oil on your bottom, to prevent soreness.

Important: If you have an allergic reaction to the preparation such as a rash, itchiness, or redness call the x-ray department or your GP.

In very rare cases a reaction can cause swelling of the face, lips, tongue or throat. If this happens go straight to your local accident and emergency department (A&E).

Remember to keep drinking clear fluids to stop you becoming dehydrated. As a guide, try to drink about one glass every hour (during waking hours). Signs that you are dehydrated include dizziness, headache and confusion.

If you have diabetes:
If you take tablets to control your diabetes, you should have a morning appointment. If you take insulin, your appointment should be at 9am. Please contact the x-ray department if this has not been done.
If you take tablets for your diabetes - miss your morning dose on the day of the examination. Bring your tablets and some food with you to take after the examination.

If you are on insulin - You should miss the morning dose of insulin on the day of your examination. You may need to reduce the previous evening's dose. Please bring your insulin and some food with you to take after the examination. If you take a long-acting insulin, please do not stop taking it – speak to your diabetes team for advice.

Check your blood sugar regularly. If your blood sugar is below 4, then drink a small cup of sugary fluid, such as Lucozade, or have some boiled sweets.

Giving my consent (permission)
We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves. If you would like more information about our consent process, please speak to a member of staff caring for you.

Will I feel any pain?
You may feel some discomfort when the tube is put into your rectum. It will also feel quite strange as the barium contrast passes around your large bowel. The air pumped into your bowel can make you feel bloated and give a feeling similar to trapped wind. The examination should not be painful. If you are concerned please tell the radiographer.

What happens after the barium enema?
It is likely that you will want to use the toilet for a time after the examination to pass the barium contrast and air. There are toilets very close to the examination room. Once you are happy to leave, you are free to do so. Your bowel movements may be loose over the next few hours.

What do I need to do after I go home?
The injection of hyoscine may cause you to have a dry mouth and sometimes slight blurring of your vision. These effects usually disappear within half an hour. Do not drive until your vision has returned to normal.

You should restart your usual diet. The barium contrast may cause some constipation. To prevent this please drink plenty of fluids and eat plenty of fruit and vegetables (high in fibre). Some people find taking a mild laxative helps - these can be bought over the counter so please ask your local pharmacist for advice. The barium contrast can often make your stools pale for a few days – this is normal.

What should I do if I have a problem?
If you feel unwell following the examination or have any concerns please contact your GP or the x-ray department.

Will I have a follow-up appointment?
The pictures taken during the examination are carefully studied by the radiologist, who will produce a detailed report. The results will be sent to the doctor who referred you for the test. They will discuss the results with you and any treatment you may need. You should already have an appointment with the team who referred you. If not, please contact them to arrange one to discuss the results of this test.
Contact us
If you have any questions or concerns about having a barium enema, please contact the x-ray reception on **020 7188 5490** (Monday to Friday, 9am to 5pm).

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets)

Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.
**t:** 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.
**t:** 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk
**t:** 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language and Accessible Support Services
If you need an interpreter or information about your care in a different language or format, please get in touch:
**t:** 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111
Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.
**t:** 111

NHS Choices
Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.
**w:** [www.nhs.uk](http://www.nhs.uk)

Get involved and have your say: become a member of the Trust
Members of Guy’s and St Thomas’ NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:
**t:** 0800 731 0319 **e:** members@gstt.nhs.uk **w:** [www.guysandstthomas.nhs.uk/membership](http://www.guysandstthomas.nhs.uk/membership)