

About barium meals and swallows

 **Information for patients**
Radiology



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What is a barium meal or barium swallow?

A barium meal or swallow is a procedure that allows a doctor, called a radiologist, to look at the lining of the stomach and gut. It is very difficult to see the lining of your stomach but if you drink some barium solution, which is a white liquid that shows up on X-rays, we can get some good images of your stomach and gut. To get better images your radiologist will sometimes need to produce some gas in your stomach by asking you to swallow a spoonful of powder then a spoonful of a special fluid that mixes together in your stomach to produce gas bubbles similar to that produced by fizzy drinks.

If your doctor has asked us to also look at your gullet, or oesophagus, it is examined at the same time. The examination is called a barium swallow and meal.

Why do I need it?

You will have recently seen a consultant or GP because you have had some problems with your stomach. Some reasons for having a barium meal or swallow test are:

- frequent upset stomachs
- unresolved indigestion
- blood in your vomit
- weight loss
- abdominal pain
- difficulty swallowing

The barium meal or swallow will allow the doctors to see if there are any problems with your stomach or gut.

What do I need to do to prepare for the procedure?

Your stomach should be completely empty for this procedure as any food makes it difficult to see the stomach properly and may make the test more difficult to interpret.

You will be asked not to eat or drink anything after midnight the night before your procedure.

You should not take medications before you come for the test as some take quite a long time to dissolve in the stomach and can produce false readings.

You are advised to bring your medications with you; we normally do these procedures in the morning so that you can take your medications afterwards.

If you have any worries about not taking your medications please discuss this with your doctor or telephone the Radiology department on the number on your appointment letter.

If you are diabetic you should ensure that you eat plenty the day before the procedure to maintain your blood sugar levels. If you are diabetic we will make your appointment as early in the morning as possible so that you can have something to eat and your diabetic tablets or insulin as soon as the test is complete.

If you are diabetic and have concerns about this procedure please telephone the Radiology department so that you can discuss your worries with a member of the staff.

Please remember to bring normal medications with you.

Women who are still having periods should have this procedure during the 10 days after the start of their menstrual period. (Your menstrual period includes the time that you are menstruating). A suitable appointment will be negotiated with you.

We do not do this procedure for women who are pregnant. If you are, or suspect that you are pregnant please telephone us on:

0114 271 4726

and discuss this with one of the nursing staff.

What do I do when I arrive?

Your appointment letter will indicate where you should go to for your procedure.

You should go to the radiology / X-ray reception and inform the receptionist that you are here.

Next, a member of the radiology staff will collect you from the waiting area and show you to a changing cubicle where you can remove your clothes and put on a hospital gown. We ask you to change so that you don't get barium on your clothes and some clothes can prevent us getting good pictures. If you need help changing please ask the assistant.

The nurse or assistant will stay with you throughout the procedure so that he or she can help you to get on and off the X-ray table and explain things as they happen.

What happens during the procedure?

Firstly, we will take you into the X-ray room where your radiologist or radiographer will check all your details and ask you a few questions about your health. This is done to make sure that you are well enough to go through with the barium meal/swallow. They will also explain what is going to happen during the procedure.

For the procedure we will ask you to stand on a special step on the X-ray table. Your back will be against the X-ray table. The assistant

radiographer or radiologist will give you a cup with some barium in. They will ask you to drink a mouthful and hold it. Once the X-ray machine is in the correct position you will be asked to swallow the barium.

As the barium mixture is swallowed your radiographer will take some pictures as the barium passes into your stomach.

If your doctor has asked us to look at the lining of your stomach you may be asked to swallow a dessert spoon full of granules followed by a dessert spoon full of liquid that will fizz up to produce some gas in your stomach, similar to that produced by fizzy drinks. This will make the stomach slightly larger for about 30 minutes making it easier to see on the X-ray.

Once your radiographer has taken some pictures, the X-ray table will move so that you are lying down. Some more pictures will be taken with you lying in different positions on the table so that all of the stomach can be seen.

What happens after the procedure?

Once all the pictures have been taken the assistant will help you from the X-ray table and you will be able to get dressed and go home.

How will I feel after the procedure?

After the procedure you may find that you feel very bloated due to trapped wind caused by the gas that we put into your stomach. This usually settles within a few hours.

As it can take some time for the barium to pass through your bowel from your stomach, you may notice white barium in your stools for up to 2 weeks after the test although you should pass most of it within the first couple of days.

When can I eat and drink normally again?

You can resume eating and drinking as normal right away, although we do ask that you drink lots of fluids: approximately 2 - 3 litres of water per day for the next few days. You should also eat plenty of fresh fruit and vegetables as this and the water will stop you becoming constipated.

Are there any risks?

There are very few risks involved in having a barium meal/ swallow. However, the risks include:

Constipation

This tends to be more of a problem if you are older. You can reduce the effects of this if you eat plenty of fruit and vegetables and drink lots of fluid in the few days after the procedure. If the constipation continues for more than a couple of days after the procedure you might need to take a mild laxative, which you can buy over the counter, for example senna based products. If you do need to take laxatives and are taking the oral contraceptive pill, remember that the diarrhoea caused by taking the laxatives may make the pill less effective; therefore we advise that you take extra precautions until your next period.

Allergic reaction

A much rarer side effect is an allergic reaction to the barium liquid. Such reactions have included migraine and a skin rash. If this occurs while you are in the X-ray department we will be able to advise you what to do but if it occurs when you are at home you should see your GP.

Radiation

There is very little risk from the radiation that you will receive during this procedure. The new technology has ensured that the dose of radiation that you receive is as low as possible. Public Health England estimate

that the radiation dose you will get from this procedure is equivalent to 16 months of natural background radiation, with a 1 in 6,700 risk of developing terminal cancer in the future.

Procedure is not diagnostic

This procedure is a very good diagnostic test. However occasionally the procedure does not show small changes well and therefore you may need further investigations. This will be discussed with you by your doctor.

Will it hurt?

You should feel no pain during the procedure, although you may have some discomfort from the gas that we put into your stomach.

When and how will I get my results?

A radiologist will look at the X-rays from the barium meal in detail within 2 - 3 days of your procedure and then send a report to your consultant.

You should have an appointment booked with your consultant at which you can discuss the results. If you do not have an appointment to see your consultant, your consultant's secretary will send one out to you.

What do I do if I have any problems when I get home?

It is extremely unlikely that you would have any side effects from this procedure but if you become unwell please seek medical advice from your GP, 111 or in an emergency via Accident and Emergency.

Where can I find more information about barium meals or swallows?

Information is also available from the Royal College of Radiologists' website:

- www.rcr.ac.uk/

Alternatively, you can telephone the X-ray department and ask to speak to one of the nursing or radiographer staff on:

- **0114 226 8000**



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