

## Children's (Paediatric) Barium Meal

### Consumer Information

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### What is a Children's (Paediatric) Barium Meal?

A Paediatric Barium Meal is a study performed to show whether the position and size of the stomach and small intestine (or bowel) is normal. It is most commonly performed to investigate causes of vomiting and upper abdominal pain (in the part of the body containing the stomach, intestines and other organs).

The study is sometimes performed with a barium "swallow", which is performed to show the oesophagus (the tube connecting the mouth with the stomach) or with a barium "follow through", which is performed to show all the small intestine or bowel.

### How do I prepare my child for a Paediatric Barium Meal?

Food in the stomach makes a Paediatric Barium Meal study difficult to perform and interpret so the most important preparation for your child is to not eat before the study. The length of time your child will need to go without food will depend on their age. Very young children will only be asked to fast for as little as 2 hours but older children will be asked to fast for up to 4 hours. This can be difficult for some children and parents. It is often best to make the Barium Meal appointment time early in the day so your child is awake for as little time as possible without being able to eat. If your child takes medications with clear liquids, this can be taken with a small amount of water up to one hour before an examination. If your child needs to take medication with food you will need to discuss with your doctor, the timing of the medication and Barium Meal study.

If your child is old enough to have some understanding of what is happening, talking about the study with your child before the test should help to reduce his or her anxiety. If a parent or carer who attends the study with a child is anxious, then the child usually notices this and will often also become anxious or frightened. As the parent or carer we encourage you to find out about the test to allay any fears you may have before you attend with your child.

Metal buttons and zips and some types of material can be seen on X-ray examinations, making interpretation of the X-ray images more difficult, so your child will be changed into a hospital gown. Your

child should wear clothing that is easy to remove for the appointment.

### What happens during a Paediatric Barium Meal?

Your child will be given a drink of a liquid called barium which shows up on X-ray images. The barium is like a thick, slightly chalky feeling milkshake with flavourings added to make the barium easier to drink. The X-ray machine used is called a fluoroscopy machine, which shows the X-ray pictures or images as they are happening so the study can be watched like a movie on a screen. Barium stops X-rays making a shadow which outlines the inside of the stomach and small intestine.

If your child is unable or "unwilling" to drink the barium, the barium may be given by bottle, "squirted" into the mouth with a syringe, or injected down a nasogastric tube (a thin tube passed into the stomach through the nose). Older children who prevent any of these techniques being used easily probably require reassessment and may need a different investigation. Children are not forcibly held down for an X-ray examination.

Your child will be asked to lie on his/her side or back on a bed called a fluoroscopy table when they start drinking the barium, and will usually be asked to change position on the table during the study as the barium moves through the stomach and small intestine. The position required will vary with the position of the barium in the stomach and small intestine.

If your child is having a follow-through examination, images of the abdomen will be taken over a longer period of time; usually 2 to 8 hours but sometimes longer. These images may be taken in a different X-ray room and your child may be encouraged to drink more barium or eat food to speed the passage of the barium through the bowel.

### Are there any after effects of a Paediatric Barium Meal?

The barium that is swallowed for the barium study will pass through the intestines and be seen in your child's bowel motions (faeces) as a white coloured paste. The barium can cause your child to be a little constipated so he/she should drink plenty of fluid and increase their fibre intake when the study is finished to reduce the risk of this occurring. One or two extra glasses of water or clear liquid and one or two extra serves of fruit or vegetable will be of benefit.

Your child can return to school, kindergarten, or child care after the study provided that there is no medical reason not to do so.

## How long does a Paediatric Barium Meal take?

A Paediatric Barium Meal will usually take about 10-20 minutes unless it includes a "follow-through" examination which can take many hours as the barium passes all the way through the small intestine to the large intestine. The follow-through examination involves taking images of the abdomen at intervals of between 10 minutes and over an hour. The longer that a follow-through examination goes on, the longer the time between the images. During the time between the images, the child may be encouraged to lie on his/her right side or more likely told to walk around; this can be outside the X-ray department if the child is not unwell.

If your child requires a follow-through examination, you and your child could need to be at the hospital or radiology practice for some considerable time. Talk to the staff about how you and your child's time at the facility will be managed during the study.

## What are the risks of a Paediatric Barium Meal?

The Barium Meal examination may not show an abnormality that is present and further investigation may be required to confirm a diagnosis. Your referring doctor will discuss the test results with you.

X-rays are invisible and pass through the body without any sensation. X-rays, like many other medical investigations and treatments, are not considered harmful if used appropriately (see [Radiation Risk of Medical Imaging for Adults and Children](#)).

## What are the benefits of a Paediatric Barium Meal?

A Paediatric Barium Meal easily shows the outline of the stomach and the first part of the small intestine and does not require your child to be sedated or admitted to hospital.

It is safer than an endoscopy, which has a camera on the end of a tube passed through the oesophagus (the tube between the throat and the stomach) into the stomach, used for diagnostic examination. The endoscopy shows the inside lining of the stomach better than a Barium Meal, but the Barium Meal usually shows any abnormal position of the stomach more easily.

## Who does the Paediatric Barium Meal?

The images are usually obtained by a [radiologist](#) who performs the study with the assistance of a [radiographer](#). A nurse will often assist the radiologist and radiographer to perform the test safely and with the least amount of distress to your child.

## Where is a Paediatric Barium Meal done?

Barium Meal studies are performed in a special X-ray fluoroscopy room of a private radiology practice or in a public or private hospital. Fluoroscopy is the imaging of the body as a movie that can be viewed directly on a screen and a fluoroscopy room has all the equipment necessary to perform this type of study.

## When can I expect the results of my child's Paediatric Barium Meal?

The time that it takes your doctor to receive a written report on the test or procedure your child has had will vary, depending on:

- the urgency with which the result is needed
- the complexity of the examination
- whether more information is needed from your child's doctor before the examination can be interpreted by the radiologist
- whether your child has had previous -rays or other medical imaging that needs to be compared with this new test or procedure (this is commonly the case if your child has a disease or condition that is being followed to assess their progress)
- how the report is conveyed from the practice or hospital to your child's doctor (in other words, email, fax or mail)

Please feel free to ask the private practice, clinic, or hospital where your child is having their test or procedure, when your child's doctor is likely to have the written report.

It is important that you discuss the results with the doctor who referred your child, either in person or on the telephone, so that they can explain what the results mean for your child.

### Please note:

This information is of a general nature only and is not intended as a substitute for medical advice. It is designed to support, not replace, the relationship that exists between a patient and his/her doctor. It is recommended that any specific questions regarding your procedure be discussed with your family doctor or medical specialist

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