

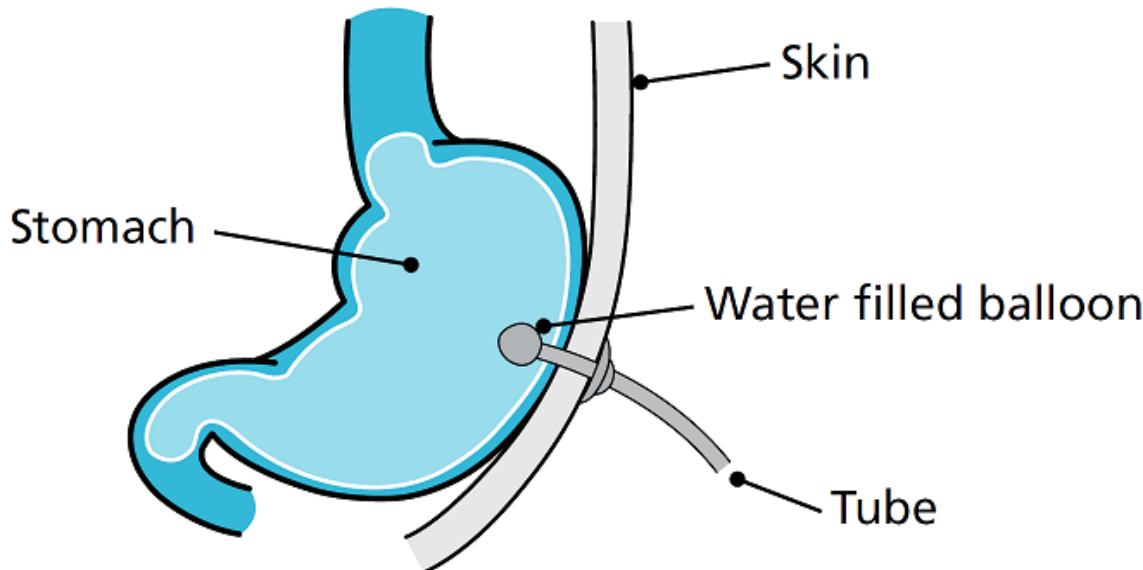
# Radiologically Inserted Gastrostomy

This leaflet explains about radiologically inserted gastrostomy (RIG), including the benefits, risks and any alternatives and what you can expect when you come to hospital. If you have any further questions, please speak to a doctor, nurse or dietitian caring for you.

## What is radiologically inserted gastrostomy (RIG)?

A narrow plastic tube is placed (inserted) through your skin and directly into your stomach, so that liquid feed, fluids and medicines can go straight into your stomach. There is a balloon on the end of the tube which is filled with water to hold it in place.

The RIG is put in using x-ray guidance.



*A balloon retained gastrostomy in the stomach*

## Why should I have radiologically inserted gastrostomy?

The two main reasons for having this procedure are that you are not able to eat and drink due to a risk of food going into your lungs or you need extra energy and protein in addition to what you are able to get by eating and drinking normally.

An RIG might also be put in just in case you need extra energy and protein in this way in future (prophylactic RIG insertion). You may not need to use the RIG straightaway if you are managing to eat and drink enough normally.

You may already have a feeding tube in your nose (nasogastric or NG tube) or have had one in the past. The RIG is much better to use for a longer time and should be more comfortable and easier to manage at home.

## What are the risks?

Major complications of RIG insertion happen to about three in every one hundred people, or 3%.

They include:

- bowel perforation
- bleeding
- abdominal inflammation or infection (also known as peritonitis).
- chest infection.

There is a less than two in one hundred (<2%) risk of dying as a result of RIG insertion.

Sometimes but not often, it might not be possible to insert the tube safely. If this happens, other options will be discussed.

Minor complications might be:

- temporary redness and sore skin around the tube site which may be a sign of infection or leakage. This can be treated with antibiotics if necessary.
- the balloon inside the stomach that holds the tube in place bursts and the tube falls out. This is a small risk and the tube can usually be reinserted if this happens, as long as help is sought quickly.

Please make sure you fully understand these risks before going ahead with the RIG procedure. Ask your doctor, nurse or dietitian any questions you have.

## Are there any alternatives?

There are other feeding tubes available including a nasogastric tube but these can be more difficult to manage at home. Another option is to have a gastrostomy tube inserted in endoscopy or surgery but a RIG tube is considered to be best for your needs. If you have further questions about other options, please ask your dietitian or nutrition clinical nurse specialist.

## How can I prepare for radiologically inserted gastrostomy?

The radiologist will need to know all the medicines you are taking, including medicines that affect the way your blood clots (anti-coagulants or anti-platelet drugs). Please inform the doctor if you have been prescribed any of the following:

Warfarin, Aspirin, Enoxaparin, Dalteparin, Clopidogrel, Tinzaparin, Bemiparin, Fondaparinux, Danaparoid, Rivaroxaban, Coumarins, Acenocoumarol, Phenindione, Lepirudin, Dibigatran, Bivalirudin, Argatroban, Apixaban.

On the day of your operation, you must not eat or drink for four hours beforehand. This includes tube feeding which also needs to stop four hours before.

If you have any allergies, or if you have ever had a reaction to the dye which is used in x-ray departments, please inform your doctor.

Prior to the procedure, you will be asked to sign a consent form.

## **Asking for your consent**

It is important that you feel involved in decisions about your care. You will be asked to sign a consent form to say that you agree to have the treatment and understand what it involves. You can withdraw your consent at any time, even if you have said 'yes' previously. If you would like more details about our consent process, please ask a nurse or doctor in charge of your care.

## **What happens during radiologically inserted gastrostomy?**

You'll need to come into hospital for the procedure. A cannula or needle will be inserted into a vein in your hand or arm. This can be used to give you a sedative to help you to be calm if you need this. You will also be given an antibiotic beforehand.

If you don't have one already, a doctor or nurse will pass an NG feeding tube through your nose and into your stomach. This is so that the stomach can be filled with air so it can be easily seen on the x-ray. A doctor called a radiologist will insert the RIG. This will take place in the radiology department.

You will lie flat on your back on the x-ray table. You may have a monitor attached to your finger and chest and you may have oxygen given through a small tube in your nose.

The skin below your ribs will be cleaned with antiseptic solution. The radiologist will choose the best place to insert the tube (usually below your left ribs). You will have a local anaesthetic injection to numb the area which may sting at first. Air will be put into your stomach through the tube in your nose which will move the stomach closer to the abdominal wall. This will be secured by three small stitches held in place by plastic buttons which you will see on your skin. You may be given an injection of Buscopan to prevent muscle spasms if this is needed.

The radiologist will then pass a thin hollow needle into your stomach and when the hole is wide enough, a feeding tube will be inserted. A balloon at the end of the feeding tube will then be filled with water to hold the tube in place.

Once the gastrostomy has been inserted and feeding has started on the ward with no reported problems, the tube in your nose can be removed.

You will be in the x-ray department for about one and a half hours.

## **Will I feel any pain?**

It may hurt for a very short time, but if it does your pain will be controlled with painkillers. When the local anaesthetic is injected, it will sting at first but this will soon wear off. Then you will notice the tubes being passed into your stomach but this should feel like pressure not pain.

There will be a nurse looking after you the whole time. If you feel any pain, you will be able to have more painkillers.

## **What happens after radiologically inserted gastrostomy?**

You will be taken back on a bed to the ward. Nurses will keep checking you e.g. taking your pulse and blood pressure, to make sure you are fine. You will need to stay in bed for a few hours.

For the first six hours, the tube cannot be used and you won't be able to eat and drink.

After six hours, water will be given through the tube for a further six hours.

Then you will be able to eat and drink if you were doing so safely before the procedure.

When you come into hospital, the dietitian will check to see if you need to use the RIG for feeding straight away.

If you do, this will be started after the six hours of water has finished, so 12 hours after the RIG was put in.

Over the next few days, if you are able, you can practise using the RIG with the nurses' support and you and/or your family will be trained to care for your RIG. When it is time for you to leave hospital (be discharged), the nurses and dietitian will check that someone will be able to safely look after your RIG, either you, a family member, a carer or a district nurse.

## **What do I need to do after I go home?**

Your stitches will dissolve and the plastic buttons will fall off. If this doesn't happen after two weeks, the stitches can be removed by a nurse.

A dietitian will contact you to talk about different feeding plans and help you make any changes to make sure your feeding plan works for you.

Your RIG tube will need to be changed after three-six months dependent on tube type. This will be done in your home by a Nutricia specialist nurse. Nutricia is a company which delivers advanced medical nutrition and has specialist nursing care for you in the

community. Your Dietitian will discuss this with you and arrange your home deliveries for your feed and equipment.

The water inside the balloon will need to be checked weekly after the first two weeks. You or your family can be trained on how to do this or it can be done by district nurses. If you do not need to use the tube for feeding straight away, you must flush the tube with water daily. Your dietitian will give more information about this.

## **Will I have a follow-up appointment?**

You will be referred to the community nurses (Nutricia) who will be able to support you at home with your RIG tube. They will arrange and carry out your tube changes. You will be asked to see your practice nurse for removal of your stitches. You will also continue to be under the care of a dietitian.

## **Useful sources of information**

PINNT is a support group for patients receiving parenteral or enteral nutrition therapy.

Their website is [www.PINNT.com](http://www.PINNT.com)

Their address is:

PINNT  
PO Box 3126  
Christchurch  
Dorset  
BH23 2XS

## **Contact us**

If you have any questions or concerns about radiologically inserted gastrostomy, please contact the St George's Hospital dieticians on 020 8725 3049, the St George's specialist nutrition nurses on 020 8725 2280 or the Nutricia nurses on 08457 623 673, (Monday to Friday, 9am to 5pm). Out of hours, please contact Homecare on 0845 155 5000 where you will receive telephone advice 24 hours/day.

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

## Additional services

### Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough wings (near the lift foyer).

**Tel:** 020 8725 2453 **Email:** [pals@stgeorges.nhs.uk](mailto:pals@stgeorges.nhs.uk)

### NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

**Web:** [www.nhs.uk](http://www.nhs.uk)

### NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

**Tel:** 111

### AccessAble

You can download accessibility guides for all our services by searching 'St George's Hospital' on the AccessAble website ([www.accessable.co.uk](http://www.accessable.co.uk)). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.



**Reference:** MAX\_RIG\_05 **Published:** January 2026 **Review date:** January 2028