What is a Radiologically Inserted Gastrostomy?
Radiologically Inserted Gastrostomy is a technique whereby a narrow plastic tube is placed through the skin, directly into your stomach. Once in place the tube can be used to give you liquid food directly into your stomach, to provide nutrition.

How do I prepare for a RIG?
As it is important that the Radiologist placing the RIG knows exactly where certain parts of your bowel are you may be required to take some oral preparation (a drink of diluted Barium) over 2 days prior to your appointment. This will be sent to you with instructions at the time your appointment is scheduled.
You will need to come into hospital on the day of your procedure and stay at least one night afterwards.

What actually happens during a RIG?
You will lie on the x-ray table, generally flat on your back. You need to have a cannula put into a vein in your arm so that the radiologist can give you a sedative or pain killers. You will have a monitoring device attached to your finger and will possibly receive oxygen through a small tube in your nose. A small tube will also be passed from your mouth into your stomach to enable air to be introduced. This helps expand your stomach and makes it easier for the Radiologist to find a suitable access point.

The radiologist will keep everything as sterile as possible and will wear a theatre gown and operating gloves. The skin below your ribs will be cleaned with antiseptic and the rest of your body will be covered with a theatre towel. The radiologist will use the x-ray equipment to decide on the most suitable point for inserting the feeding tube. This will generally be below your left lower ribs. The skin in this area will be anaesthetised with a local anaesthetic. This can sting a little to start with, but rapidly wears off.
The radiologist will then pass a thin, hollow needle into your stomach using x-rays as a guide.
Once the needle is in your stomach, a guide wire will be placed down through the needle into your stomach. The needle is then removed, leaving the guide wire in place, and then a series of small tubes are passed over the wire, one after another, to enlarge the pathway from the skin into your stomach. Once this pathway is wide enough, a tube (catheter) can be put in through the skin and into your stomach over the guide wire.
The guide wire is then removed. The tube will be used to give you food, and is large enough to ensure that you receive adequate nutrition.

Once this tube is in place, the radiologist will secure the stomach to the muscles underneath the skin with stitches that have small buttons on your skin surface to prevent the tube falling out. These buttons will fall off after a few days as the stitches that hold them in place dissolve. It may also be necessary to secure the tube
itself with stitches to the skin’s surface, this is to make it secure.

Will it hurt?
Unfortunately, while the procedure is being done, it may hurt, but any pain that you have will be controlled with painkillers. When the local anaesthetic is injected, it will sting to start with, but this soon wears off, and the skin and deeper tissues should then feel numb. Later you will be aware of the tubes being passed into your stomach, but this should just be a feeling of pressure and not pain. There will be a nurse or another member of staff standing next to you and looking after you. If the procedure does become painful for you then they will be able to arrange for you to have more painkillers through a cannula in your arm. Generally, placing the catheter in the stomach takes only a short time and once in place it should not hurt at all.

What happens afterwards?
You will be taken back to your ward on a bed. Nurses on the ward will carry out routine observations, such as taking your pulse and blood pressure, to make sure that there are no problems. If you have been up and about previously, then you will generally need to stay in bed for a few hours afterwards, until you have recovered.

What happens when I go home?
When you go home you will be referred to the district nurses who will help you take care of the tube and supply you with the equipment you need. They will be able to answer any questions that you have about the care of the tube. The doctor that referred you for this procedure will be able to arrange any follow up if required.

Are there are risks or complications?
RIG is a very safe procedure. However, there are some risks and complications that can arise, as with any medical treatment.
The biggest problem could be not being able to get the tube into your stomach. This can sometimes happen if you have not been able to eat for a long time and your stomach has shrunk quite a lot. It may not be possible to find it with a small needle. If this happens you may need an operation to place the tube.

Sometimes there is a leak around the tube. This is less likely to happen if the stomach has been attached to the muscles beneath the skin, but it can still sometimes occur. This can lead to the skin around the tube becoming very red and sore. An attempt will be made to treat this but it may become necessary to remove the tube for healing to occur. You need to keep the area around the tube very clean and very dry.

Occasionally, despite being secured, the tube may fall out, if this happens please contact your doctor as soon as possible. They may request that you present to the Emergency Department so that a small tube can be placed to keep the path to your stomach open until it is possible to replace the RIG.

Rarely, inflammation of the lining of the abdomen can occur, this can be caused by an infection introduced at the time of the insertion of the RIG, if you experience a fever or significant abdominal pain after the procedure, contact your doctor or go to the Emergency Department.

Very rarely, a blood vessel can be punctured accidentally when passing the needle into the stomach. This can result in bleeding. This may stop by itself, or if not, you may need a blood transfusion. Occasionally it may require another procedure to block the bleeding artery. This would be done by a radiologist using a fine plastic tube put into the artery. It may need an operation to stop the bleeding. However, this is a very rare complication.

Need help?
Call us on: (04) 806-0261
Our normal hours are:
Monday to Friday 8.00am - 4.00pm

General
There are no lockable facilities in Radiology. We strongly recommend that any valuables are left at home.

Please be aware that CCDHB does not take responsibility for any loss or damage of personal property belonging to patients whilst on CCDHB premise.