The aim of this guide is to provide information and easy-to-follow guidance on the day-to-day aspects of tube feeding, as well as handy tips from other people who are tube feeding, their family and carers. At first, all the information may seem overwhelming but, with practice and support, all of these things will become second nature to you and your family.

Nutricia Homeward supports patients to tube feed at home. If you have any questions please contact Nutricia Homeward: 0800 093 3672
Topics covered in this guide:

Types of feeding tube

• Nasogastric tube (NG tube) 2
• Nasojejunal tube (NJ tube) 2
• Gastrostomy and jejunostomy tubes (e.g. PEG, JEJ, PEG-J) 3

Equipment and administration

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• Tube feeding routine 9
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Daily life

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Your healthcare professional has recommended tube feeding for you or the person you care for. As with anything new, it’s natural to feel concerned or overwhelmed when you’re first faced with the prospect of tube feeding. Asking questions, such as “What happens next?” and “Can I manage this?” is normal at this stage.

Adjusting to life with tube feeding may take some time, and it’s likely that more practical questions will arise as you get into a routine. Over time, with the right information and support, you will adapt and live confidently with tube feeding in your life.

Do not feel nervous about discussing any concerns and questions you have with the healthcare professional (HCP) involved in your care. There are also a number of specialist organisations (details at the end of the guide) that can provide further advice and support.

Many people want to learn more at this stage, and have expressed the need for more general tube feeding information and practical tips, so they feel more confident when handling a feeding tube.

“It’s not the end of your life, it’s just the start of a different one. You are not alone — organisations are there to help.”
Lisa, living with tube feeding

Please note the feeding plan discussed with your dietitian/doctor is specific to you.
## TYPES OF FEEDING TUBE

When in hospital, your healthcare professional will recommend the type of feeding tube that best suits your unique circumstances.

The main types of feeding tubes are described below. Each feeding tube differs slightly in terms of placement, however their overall aim is the same — to provide you or the person you care for with the nutrients you need to maintain weight, and in some cases, support recovery, help respond to treatment, and maintain independence.

<table>
<thead>
<tr>
<th><strong>1. Nasogastric tube (NG tube)</strong></th>
<th><strong>2. Nasojejunal tube (NJ tube)</strong></th>
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<tbody>
<tr>
<td>An NG tube is inserted through the nose, down the oesophagus, and into the stomach. It is usually for short term use (6–8 weeks,) although the length of tube feeding can vary based on individual’s needs. NG tubes do not require surgery for placement but they are visible as the tube may be taped to the nose and tucked over the ear. NG tube insertion can be a little uncomfortable. The position of the tube must be confirmed before tube feeding can commence. These type of tubes may accidentally move out of place so tube position needs to be checked before each feed, dose of medications and flush of water.</td>
<td>An NJ tube is also inserted through the nose, down the oesophagus, through the stomach and into the small intestine (jejunum). These are less commonly used than other types of feeding tubes and are used when feeding into the stomach isn't possible. NJ tubes do not require surgery for placement but they are visible as the tube may be taped to the nose and tucked over the ear. An NJ tube may be placed using x-rays. These feeding tubes may accidentally move out of place. NJ tubes always have to be replaced in the hospital.</td>
</tr>
</tbody>
</table>
3. Gastrostomy and Jejunostomy tubes

Gastrostomy tubes, e.g. percutaneous endoscopic gastrostomy (PEG) or radiologically inserted gastrostomy (RIG), are placed directly into the stomach through a small opening in the abdomen's skin.

Jejunostomy tubes can be placed directly into the small intestine (jejunum) through a small opening in the abdomen's skin (jejunostomy). They can also be placed through the stomach and into the small intestine with a jejunal extension (PEG-J).

Gastrostomy and jejunostomy tubes are recommended for long term feeding, more than six weeks. They are less visible than NG or NJ tubes.

Gastrostomy and jejunostomy tubes require a procedure or surgery for placement where a stoma site is formed.

1. Endoscopy: The gastrostomy tube can be inserted using an endoscope. It is called a PEG if passed into the stomach or PEG-J when passed into the small intestine (jejunum).

2. Radiologically guided: The gastrostomy tube can be inserted using x-rays to place the feeding tube into the stomach. This is called a RIG, which may be bumper retained or a balloon retained (BRG) tube.

3. Surgically: The surgeon will make an opening into the stomach or small intestine (jejunum) and place the feeding tube through the skin into the stomach or jejunum. The stoma site is then stitched closed around the tube. The tube is called surgical gastrostomy if placed in the stomach, or jejunostomy if placed in the jejunum.

If the feeding tube has an external fixator, it is important to follow the advice that was given by the healthcare team on how to care for the fixation plate and feeding tube.

Your healthcare professional will provide advice on how to care for the tube.
EQUIPMENT & ADMINISTRATION

Once the feeding tube has been placed, your dietitian or doctor will advise you when it is safe to start tube feeding. You will probably have many questions about what you need to get started.

Equipment required to start tube feeding varies based on the method of feeding

- Feeding pump and feeding pump frame
- Tube feed
- Giving sets
- Spare feeding tube
- Syringe

Types of feed*

- Ready to use tube feeds only
- A combination of tube feeds, oral nutritional supplements and diet

Tube feeding methods*

- Continuous feeding
- Bolus feeding
- Combination of both

*Your dietitian will recommend the type of feed and feeding routine that best meets your needs.
EQUIPMENT REQUIRED TO START TUBE FEEDING

All the equipment you need to start tube feeding at home will be given to you by your healthcare team, who will also explain how to use it. You will receive training in hospital (and/or at home) by the healthcare team (and/or the Nutricia Homeward Enteral Nurse Specialist) and, if possible, should be given plenty of time to practice before being discharged home.

The equipment for home may include the following:

A feeding pump to deliver the feed through the giving set at a controlled rate recommended by the dietitian.

A feeding pump frame designed to hold the tube feed and feeding pump.

A spare feeding tube may be provided depending on the type of feeding tube you have.

A giving set is a flexible tube which helps to deliver the feed. It is attached to the tube feed bag at one end and the feeding tube with the pump in the middle.

Syringes* to administer feed, water, medication. Syringes come in different types and different sizes (e.g. 10 or 60 ml).

Additional equipment, e.g. pH paper, container, will be provided by the healthcare team or the tube feeding company.

*Syringes used for balloon checks are different to enteral flushing & feeding syringes.
TYPES OF TUBE FEEDS

Your dietitian will recommend the type of feed and feeding routine that best meets your needs. The choice will depend on a number of factors, including your nutritional needs, weight, height, activity levels, medical condition, lifestyle, and whether you can still eat and drink.

Ready to use tube feeds

Tube feeds are a liquid form of nutrition. The nutrients within the tube feed are similar to what you would get from normal food, and are also digested in the same way. Tube feeds must always be used under medical supervision of a healthcare professional. There is a wide range of tube feeds, including:

- Low or high energy requirements
- With or without fibre
- High protein needs
- Lactose (milk) intolerance
- With pre-digested nutrients making them easier to digest/absorb.

Additionally, ready to drink, flavoured nutritional supplements are often used for bolus feeding.

Tube feeds are:

- Specifically made for tube fed individuals
- Nutritionally complete and balanced
- Designed to help meet your nutritional requirements
- Sterile
- Convenient
- Designed to flow easily through the feeding tube so less risk of blockages
- Designed to be used alone or in combination with oral nutritional supplements and/or diet.

Nutricia’s range of Nutrison tube feeds are foods for special medical purposes and must be used under medical supervision.
Tube feeding routine

When it comes to deciding on the best tube feeding routine your dietitian will discuss the options with you based on your needs. Depending on your nutritional requirements, medical needs and lifestyle, there are three ways that tube feeding can be given:

Continuous feeding: Feed is given slowly over a number of hours using a pump that controls the flow rate of the feed. Continuous feeding can take place during the day, overnight or a combination of both.

Bolus feeding: Feed is given in smaller volumes (e.g. 200ml) one at a time, several times throughout the day, with the use of a pump, gravity, or a syringe.

Combination of both: A combination of these methods can be chosen based on a number of factors, for example, to give you more flexibility.

People who are able to consume food by mouth (as advised by the healthcare team) can combine diet with tube feeding. Some people like to eat during the day and feed at night, others like to feed through the feeding tube after meals if they cannot eat enough food by mouth.

Taking medications

If you are taking several medications a day your healthcare team may advise you to take the medication through the feeding tube.

You will need a syringe, your prescribed medications, and water (sterile or cooled boiled water). Since your feeding tube has been designed to take liquids only, where possible you should request your medication in liquid or soluble form from your pharmacist. Crushing tablets is a last resort as it greatly increases the risk of tube blockage — not all medications can be crushed and you should be given advice from your pharmacist on which medications are suitable before crushing any medications.

Do not try this without first discussing with your managing healthcare professional.
TUBE FEEDING ROUTINE

How do I put the feed in the tube?

Getting feed into the tube can be achieved using a pump or syringe. With the pump, you can programme the rate at which the feed flows through the tube so that you know exactly how much feed you or the person you care for has been given. Your choice of pump will depend on your circumstances and needs. Specific details on how to use the pump are provided by your Nutricia Homeward Enteral Nurse Specialist.

Gravity feeding is the method of feeding using an open syringe, where you slowly pour an enteral feed into the syringe or an extension set. The speed of delivery can be varied depending on the height of the syringe. If required, your dietitian/doctor will be able to provide more information on the differences between these feeding methods. The feed can also be pushed in using the syringe plunger instead of gravity.

Visit www.nutriciaflocare.com to learn more about pumps, feeding tubes and giving sets. The website also gives access to interactive training tools, such as an on-line pump simulator.

How long do I need to be tube fed?

Some people need tube feeding for short periods of time, while others may need it long term. The healthcare team will discuss the expected length of time you or your loved one will require a feeding tube. Progress will be reviewed regularly by your doctor and/or dietitian.
POSSIBLE COMPLICATIONS

Occasionally some people can experience complications when adjusting to tube feeding.

If you experience any complications, or you are in doubt about what to do with tube feeding, there are always places where you can seek help.

- If the pump stops working please contact Nutricia Homeward on 0800 093 3672
- You should contact your dietitian, Nutricia Homeward Enteral Nurse Specialist, or any other member of your healthcare team if, for example:
  - The tube becomes blocked
  - The tube falls out.
- Take particular caution, stop the feed immediately, and seek urgent medical advice if you experience any of the following:
  - Leaks of fluid around the tube
  - Pain on feeding
  - New bleeding.
The checklist below is a helpful reminder of things you need to do before and during feeding time. Your healthcare professional will provide additional information about the care of your feeding tube.

**Things to check at feeding time**

- Check the label of the tube feed to make sure it is the correct tube feed for you, and that it is in date.
- Follow the hygiene rules as outlined on the label of the tube feed.
- Check that the feeding tube is in the right position before feeding (your healthcare team will show you how to do this).
- Flush the tube through with water before and after adding the feed (or medication) to avoid blockages, or follow the instructions provided by your dietitian/doctor.
- It is important that you are in an upright position whilst feeding and for one hour after feeding. If this is not possible prop yourself up on at least two pillows at an angle of 45° or greater.

**Things to check every day**

- Clean around the site of the feeding tube every day, as advised by your healthcare professional.
- Look after the skin around the tube to avoid irritation — your healthcare team will advise you about what this entails.
- Make sure you stay hydrated with adequate water flushes through the tube, or by mouth if safe — your dietitian will advise you on how much water you need per day.
- Keep your teeth and gums healthy by cleaning your teeth twice a day even if you are not eating or drinking.

At the beginning, it may seem that there is lot to remember but, with time, all of these things will become second nature to you.
AWAY FROM HOME

You can plan holidays at home or abroad with family and friends with the support of Nutricia Homeward, who can help with the necessary arrangements and deliver the feed and equipment to your holiday destination (if applicable).

Your healthcare team will provide the relevant documents to allow you to obtain travel insurance, supply fitness to fly certificates (if applicable), and give practical advice on managing tube feeding away from home.

Use this checklist to help you plan your travel away from home, to ensure you have everything you need.

- Tube feed
- Medication, if applicable
- Water for flushing
- Syringes
- Feed container
- Feeding pump (if needed) and pump charger
- Spare giving sets, syringes and sterile water
- Spare feeding tube (if applicable)
- Towels, wipes, tape
- A way to hang the feeding bag (usually in a carry system)
- Plastic containers/bags to store feeding supplies
- Phone numbers for the healthcare provider
- Your tube feeding care plan (see next page)
- This booklet.

Nutricia Homeward Holiday Service — contact Nutricia Homeward at least six weeks in advance of a holiday abroad for information on the Holiday Service.
YOUR TUBE FEEDING PLAN

This page is designed for you to fill in and refer to, so you have all the information you need to feed for the day.
Please check with your dietitian that all of the details are correct.

☐ Type of feeding tube _________________________________________________________

☐ Size of feeding tube _________________________________________________________

☐ Date placed ____________________________________________________________________________________

☐ Type of giving sets ________________________________________________________________

☐ Type and number of syringes _______________________________________________________

☐ Feeding routine _________________________________________________________________

• Name of feed ______________________________________________________________

• Pack size _________________________________________________________________

• Amount of feed per day:
  Flow rate set on the pump is ____________________________ mls/hour
  Volume and number of bolus feeds ________________________________
  Dose or volume on the pump/for bolus feeding _________________________ mls/day

☐ Water flushes

• Amount before and after feeding ____________________________ mls

• Amount before and after medication ____________________________ mls

☐ Doctor’s name and number _________________________________________________

☐ Nutricia Homeward Enteral Nurse
  Specialist’s name and number _______________________________________________

☐ Dietitian’s name and number ________________________________________________

☐ Patients & carers helpline _____________________________________________________

☐ In case of an emergency, call ________________________________________________
FREQUENTLY ASKED QUESTIONS

What temperature should be the tube feed be? Can I warm it?
Tube feeds should always be administered at room temperature (20-25°C). Cold feeds can lead to gastrointestinal intolerance problems, such as upset stomach, nausea, vomiting or diarrhoea. Don’t warm the tube feed (i.e. with hot water or in a microwave) as there’s a risk of ‘cooking’ the formula, which will reduce its nutritional value. Warming the tube feed can also increase the risk of infection.

What’s the best position during tube feeding?
The ideal position when tube feeding is to sit up. However, if this isn’t possible prop yourself, or the person you care for, up on at least two pillows to lie at an angle of 45° of greater. You should remain in this position during tube feeding and for up to 30-60 minutes afterwards. It’s not safe to feed while lying flat.

What if the tube comes loose or falls out?
Your tube might become loose or dislodged with coughing, sudden movements, or accidental or excessive pulling of the tube. If this happens, stop feeding straight away. If you have an NG tube and you’ve been shown how to replace it, please do so. Otherwise you’ll have to go to hospital and have your NG or NJ tube replaced by a healthcare professional. A handy tip: contact the hospital beforehand to avoid waiting in the Accident & Emergency Department.

If you have a gastrostomy (PEG or RIG) or jejunostomy and it is accidentally removed, please put a dressing over the site and contact your Nutricia Homeward Enteral Nurse Specialist as quickly as possible as the stoma will start to close. You may be advised to go to the hospital Accident & Emergency Department to replace the feeding tube. Always follow local protocol if previously advised by your healthcare team.
FREQUENTLY ASKED QUESTIONS CONTINUED

What if the feeding tube gets blocked?
A feeding tube can get blocked because of:

- Medication that wasn’t crushed finely
- Inadequate flushing before and after feeding and administering medication
- A closed tube clamp.

If you experience a blocked tube, don’t panic — this is a common problem that can easily be resolved and prevented with precautions. Make sure to flush the tube before and after each feed or medication, you should use either sterile, tap, or cooled boiled water. Your dietitian will advise you on what type of water to use and how much you need for adequate flushing. However, if your gastrostomy or jejunostomy tube becomes blocked you can use the advice below.

- Using a gentle pull and push technique, flush the tube with a syringe using lukewarm water or soda water, the type and volume as recommended by your healthcare team. Do not use acidic solutions like fruit juices or cola as this could curdle the feed and block the tube further.
- Still blocked? Gently squeeze the tube between your fingers along the length of the tube and repeat flushing. It can take up to 30 minutes to unblock the tube. If this does not work, get in touch with your Nutricia Homeward Enteral Nurse Specialist or a member of your healthcare team.

If you have a blocked NG tube you should not attempt to unblock it yourself. Instead, seek assistance from a member of your healthcare team.
How should I store equipment and supplies?
It is important to store your feed in a way that keeps it at its very best. You should store feed in a cool, dry place (5-25°C), away from direct sunlight. Once you open the feed it is advised you handle it in a sterile way. Always check the best before date and shake the feed before opening. Rotating feed and using the oldest first can help to reduce the risk of the feed going out of date. The Nutricia Homeward delivery driver will be able to do this for you. Count the feed and equipment supplies each month and, when the Nutricia Homeward Customer Service team contact you to arrange the next delivery, let them know how many of each item you have. They will calculate how much feed and equipment you require for the next month so you do not end up over stocked.

What should I do with used equipment?
You can dispose of giving sets, reservoirs, containers, and used feed packs, with household waste.

Will I need the tube forever?
Some people need tube feeding for short periods of time, while others may need them long term. Your doctor/dietitian will discuss the expected length of time you will require a feeding tube. Your progress will be reviewed regularly by your doctor and/or dietitian.

If I need to take a break during feeding what should I do?
You can take a break from tube feeding if it has been recommended by your dietitian. It is important to remember that giving sets used for tube feeding should be discarded after 24 hours. If giving sets are connected, disconnected and reconnected multiple times a day the risk of any contamination is increased. Your dietitian should advise if it is recommended to disconnect and reconnect the giving set within a 24 hour period based on local policy and your medical condition.
Can I have baths, showers or swim?
For about 2-3 weeks after you’ve had the PEG or jejunostomy placed you should only take showers to give the stoma site a chance to heal. Thereafter, taking a bath, or even swimming, is possible as long as your tube is well protected and the wound area has healed and is healthy. You can protect the tube with a waterproof wound dressing. You should, however, avoid sources of poor quality water when swimming. If you’re unsure, speak to your doctor or dietitian about what’s safe and possible for you.

Can I eat normal foods while being tube fed?
Your healthcare team will let you know if you or the person you care for are able to eat while tube feeding. If you are able to eat, you’ll be given information about the types of food and amounts that are safe. If you’re being tube fed because of a swallowing difficulty, you might be visited by a speech and language therapist in hospital and/or at home, who will advise you on what types of food are safest for you or the person you care for.

Do I still need to look after my mouth when I am tube feeding?
Good oral healthcare remains important to help keep breath fresh, teeth healthy, and prevent infections and tooth decay. It is important to clean your teeth at least twice a day. If you have dentures, they should be cleaned with a brush and stored in a denture pot filled with fresh water overnight. Your mouth will still need to be cleaned and you should use mouth gel to keep your mouth moist (if needed). If you have any problems with a dry mouth, sore tongue, bleeding gums or blistered mouth, you should seek advice from your doctor or a member of your healthcare team.

I no longer require the feeding pump. What should I do?
It is important to return the pump to Nutricia Homeward when you have finished using it. You can arrange to return the pump by contacting Nutricia Homeward on 0800 093 3672. We will arrange to collect all the equipment and we will pay for any charges related to the return of equipment.
INFORMATION, ADVICE AND SUPPORT ABOUT TUBE FEEDING

PINNT:
A support group for people receiving artificial nutrition
www.pinnt.com

Nutricia Homeward
Nutricia Homeward is an additional service for Nutricia patients, carers or parents — available 24 hours a day — allowing people who are registered with Nutricia Homeward to place their next months order at a time that suits them.
www.nutriciahomeward.co.uk

Nutricia
A medical nutrition company that specialised in the delivery of advanced medical nutrition for the very young, the old, and the sick.
www.nutricia.co.uk

www.tubefeeding.co.uk
A support website dedicated to people who are tube fed, their families and carers.
## GLOSSARY OF TERMS

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bolus feeding</strong></td>
<td>The feed is given in smaller volumes (e.g. 200ml) one at a time, several times throughout the day (e.g. up to 7 feeds) with the use of a pump, gravity or a syringe.</td>
</tr>
<tr>
<td><strong>Clamp</strong></td>
<td>A small device on the feeding tube which, when pressed closed, prevents leakage from the feeding tube</td>
</tr>
<tr>
<td><strong>Continuous feeding</strong></td>
<td>The feed (e.g. 1000ml or 1500ml) is given slowly over a number of hours using a pump that controls the flow rate of the feed</td>
</tr>
<tr>
<td><strong>Endoscope</strong></td>
<td>A slender tube used to examine the inner part of the body with an attached instrument for biopsy or surgery</td>
</tr>
<tr>
<td><strong>Extension set</strong></td>
<td>A tube that can be attached between the giving set and feeding tube</td>
</tr>
<tr>
<td><strong>Flushes</strong></td>
<td>Water given via the tube to avoid any tube blockage and maintain hydration</td>
</tr>
<tr>
<td><strong>Giving set</strong></td>
<td>A flexible tube that helps to deliver the feed. It is attached to the tube feed bag at one end, and the feeding tube with the pump in the middle</td>
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<td><strong>NG tube</strong></td>
<td>A nasogastric tube is designed for tube feeding and placed through the nose, down the oesophagus and into the stomach. The position of the NG tube must be confirmed before each feed can commence</td>
</tr>
<tr>
<td><strong>NJ tube</strong></td>
<td>A nasojejunal tube is designed for tube feeding and usually placed in hospital and can’t be replaced in the community. The tube is placed through the nose, down the oesophagus, through the stomach and into the small intestine (jejunum)</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>PEG tube</td>
<td>A Percutaneous Endoscopic Gastrostomy tube is a gastrostomy tube inserted using an endoscope. The tube has an internal retention disc inside the stomach to prevent it from falling out.</td>
</tr>
<tr>
<td>Oesophagus</td>
<td>Often called food pipe, it is a part of the gastrointestinal system where food and drink are moved from the mouth to the stomach.</td>
</tr>
<tr>
<td>Overnight feeding</td>
<td>Feed that is typically given during night-time, often through a feeding pump.</td>
</tr>
<tr>
<td>Pump</td>
<td>A device that delivers feed through a feeding tube at a set rate and volume.</td>
</tr>
<tr>
<td>Pump feeding</td>
<td>Feeding that is given using a pump.</td>
</tr>
<tr>
<td>Stoma site</td>
<td>An opening from the outside of the body through the skin where the feeding tube enters into the stomach or the small intestine (jejunum).</td>
</tr>
<tr>
<td>Syringe</td>
<td>A medical device designed to administer fluid, feed or medications, or remove fluid.</td>
</tr>
<tr>
<td>Tube feed formula</td>
<td>Specifically formulated enteral nutrition products designed to meet the patient’s specific needs.</td>
</tr>
<tr>
<td>Tube feeding</td>
<td>A way of getting your body the nutrition it needs. Tube feeding is a liquid form of nutrition, intended for those whose dietary requirements cannot be achieved only by diet modification. It is delivered to your body (stomach or small intestine) through a flexible tube.</td>
</tr>
</tbody>
</table>
If the pump stops working or you have any questions please contact Nutricia Homeward:
0800 093 3672