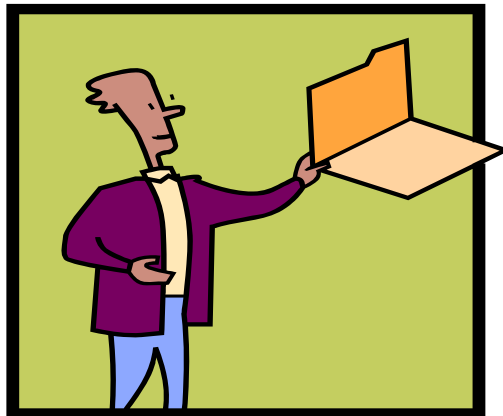


TUBE FEEDING AT HOME



Adapted from the former 'Taming the Feeding Tube', Royal North Shore Hospital.
Revised 2005, 2007, Jan 2009



Where do I find information in this booklet?

Only the pages that you need will be in your booklet

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What information was used to help prepare this booklet?

- 'Guidelines for the use of parenteral and enteral nutrition in adult and paediatric patients', Journal of Parenteral and Enteral Nutrition 2002; volume 26, No.1 Supp
- 'Adult Enteral Nutrition Policy and Procedure, 2004', Queensland Health-Fraser Coast Health Service District, Phone Hervey Bay Hospital Dietitian (07) 4120 6670



How do I contact health carers with questions and concerns?

Doctor's name: _____ Phone: _____

Nurse's name: _____ Phone: _____

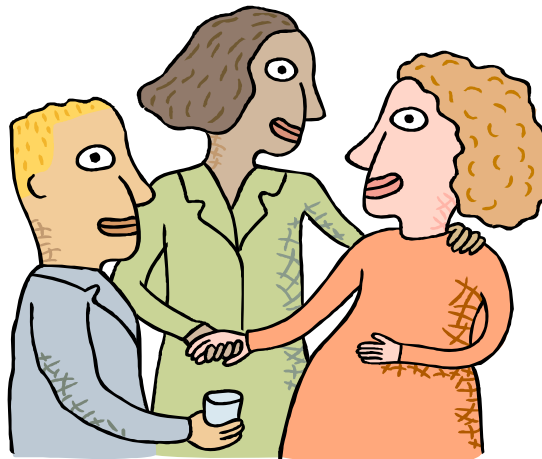
Dietitian's name: _____ Phone: _____
(For questions about your feeding plan)

Speech Pathologist's name: _____ Phone: _____
(For questions about your swallowing)

Nearest Hospital: _____ Phone: _____

Other: _____ Phone: _____

Contact your doctor or nearest hospital if your feeding tube comes out.



Where do I get feeds and equipment?

Your hospital dietitian will help you arrange this.

Formula: _____

Giving sets (bags/ bottles): _____

Syringes: _____

Replacement tubes (NG or PEG): _____

Profile/ Button feed tube attachments: _____

* Feeds and plastics should be provided by the hospital (QH enteral feeding policy)





Weight Chart

- Weigh yourself every week
- If you are gaining or losing weight, and shouldn't be, contact your dietitian
- Ideal Weight: _____

Date	Weight

Date	Weight





What is tube feeding?

Tube feeding, also called enteral nutrition, is a way food can get into your body if you are unable to eat or unable to eat enough.

Food in liquid form is given through a tube into the stomach or small intestine.

How much formula do I need?

The dietitian will advise you of your nutritional needs. You will be prescribed a liquid formula to give your body all that it needs. This includes protein, fat, carbohydrate, fluid, vitamins and minerals. Do not cut down on the amount of formula prescribed for you. Do not give other liquids in place of your formula.

How are tube feeds given?

- Tube feeding can be given in 3 different ways – using a pump, using gravity drip or using a syringe.
- A pump is used for continuous or intermittent feeds where the formula is given without stopping over 8-24 hours.
- A gravity drip is used to give larger amounts of formula over a shorter period of time usually 4 to 6 times each day.
- Feeding using a syringe is the fastest method where larger amounts of formula are given at a time. Feeding using a syringe or gravity drip can also be called bolus feeding.



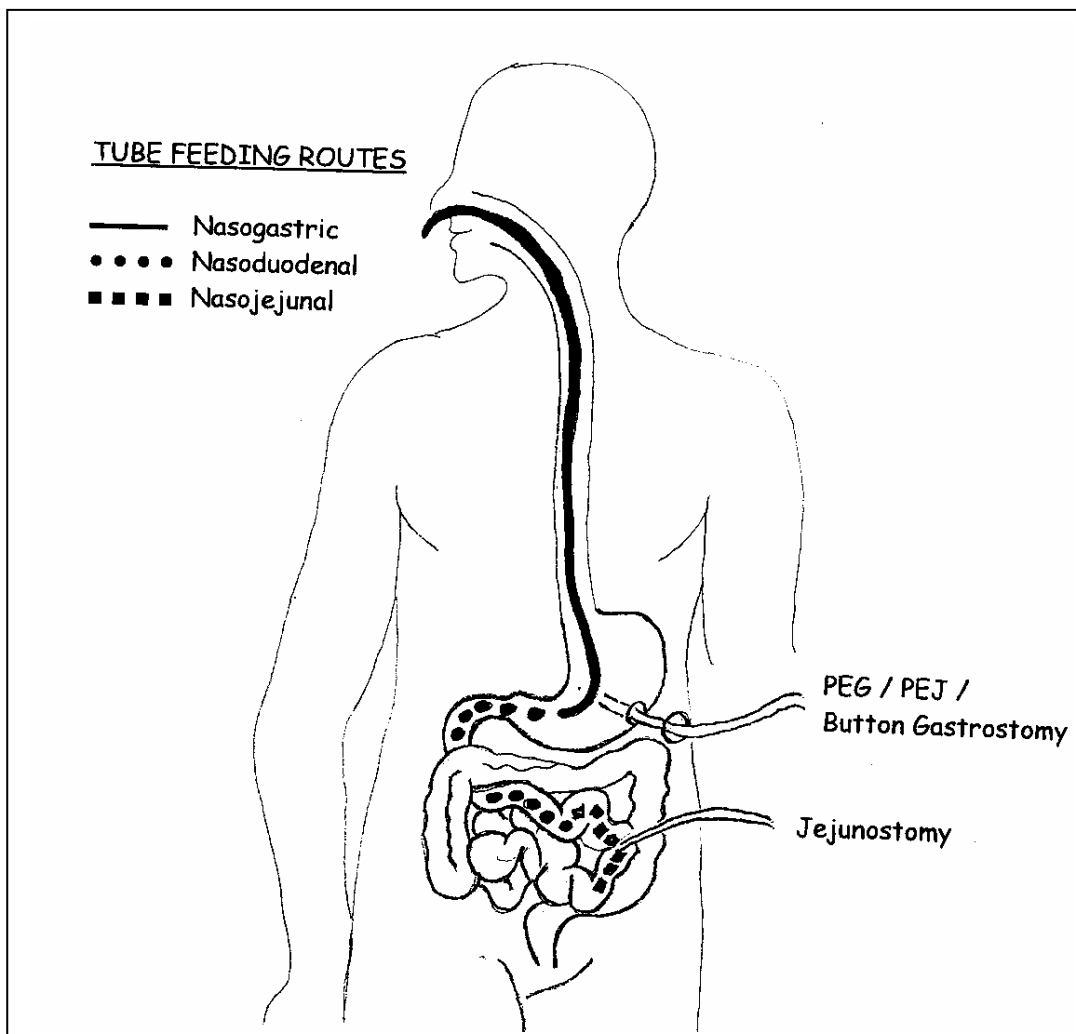
Where does the feeding tube go?

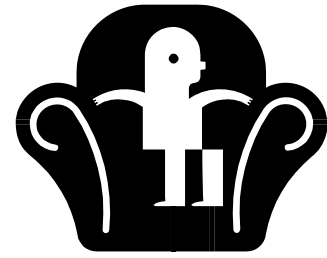
Tubes can be placed in different places along your gastrointestinal tract.

- A **nasogastric tube** is a tube that is put up the nose and down into the stomach.
- A **gastrostomy**, sometimes called a PEG, (percutaneous endoscopic gastrostomy) is placed in the stomach during a procedure. Some PEG's have a tube always hanging out, and some replacement PEGs are flat ('profile', or 'buttons').
- A **feeding jejunostomy** is placed in the middle part of the small intestine, called the jejunum, during surgery.

Your feeding tube is called a _____

The picture below shows where your tube is:





What is the correct feeding position?

- You should never give your feeds while lying flat.
- Sit in a chair or lie with your head raised to at least 30 degrees or on three pillows.
Try to remain in this elevated position after feeding e.g. for 30-60 minutes after a feed.

IMPORTANT: If you start to cough, choke or have difficulty breathing while feeding; stop the feed. Contact your health carer immediately.

How do I care for my feeding tube?

There are different types of feeding tubes. Each type will have its own way it needs to be looked after. Talk to your health carer about the care of your feeding tube such as:

- The correct position of the tube.
- How to care for your skin around the feeding tube.
- When your feeding tube should be changed.

Use the following to help you remember the tube you have and when it was changed

Date tube put in: _____ Name of tube: _____

Number on tube: _____ Gauge size of tube _____

Dates tube changed		

Contact your health carer:

- If you notice redness, pain or swelling, or excess discharge around your tube site.
- If the feeding tube moves out of position.



How do I make my formula from powder?

Step 1 Making formula

- Wash your hands
- Use clean equipment
- Use the directions given on the tin, or as recommended by the dietitian_____
- Measure powder and fluids carefully
- Mix the powder into the fluid well. Make sure there are no lumps left in the feed



Step 2 Storing formula

- Store tins of powder in a dry, cool place
- Keep unused, made-up formula covered and in the fridge
- Throw away any made-up formula after 24 hours
- Do not heat the formula



How do I use ready-to-hang formula?

Step 1 Get the formula ready

- Wash your hands with soap and warm water
- Use clean (not necessarily new) equipment
- Shake bottle well before connecting to equipment

Step 2 Storing formula

- Store unopened formula in a dry, cool place
- Keep unused, opened formula in the fridge
- Throw away any opened formula that has not been used in 24 hours
- Do not heat the formula



How do I use formula in cans or long-life cartons?

Step 1 Get the formula ready

- Wash your hands
- Use clean (not necessarily new) equipment
- Shake can or carton well before opening it
- Wipe top of can or carton with a clean, damp cloth



Step 2 Storing formula

- Store unopened cans of formula in a dry, cool place
- Keep unused, opened formula in the fridge
- Throw away any opened formula not used in 24 hours
- Do not heat the formula



What is my tube feeding plan using a pump?

Formula name: _____

How much you need each day: _____ mL

Number of cans/bags/bottles: _____

Pump rate (mL per hour): _____

Time to start and finish feeds: _____

How much water to flush with (in mL): _____

When to have water flushes: _____

(Remember to flush before and after each medicine)

How much fluid in total you are getting a day: _____

How much energy you are getting a day: _____
(kilojoules or calories)

Notes: _____



What texture foods am I allowed to eat? _____

What thickness fluids am I allowed to drink? _____



What is my tube feeding plan using bolus feeds?

Formula name: _____

How much you need a day: _____ mL

Number of cans/bottles _____

How much formula you will use at a feed: _____
(mL or cans)

How much water to flush with (in mL): _____

(Remember to flush before and after each medicine)

How many feeds a day: _____

Time of feeds: _____

How much fluid you are getting a day: _____

How much energy you are getting a day: _____
(kilojoules and calories)

Notes: _____



What texture foods should I eat? _____

What thickness fluids should I drink? _____





How do I give formula or fluids using gravity drip?

Step 1 Assemble all equipment

- IV pole or suitable way of hanging the feed container
- Formula
- Feed container and giving set
- Tap water

Step 2 Wash hands well with soap and water

Step 3 Give feed (see your tube feeding plan)

- Fill syringe with the set amount of warm water and gently push it through the feeding tube (this is a flush).
 - Pour the set amount of formula into the feed container
 - Attach giving set to container
 - Hang feed container on pole (or a hook 50cm above your head)
 - Squeeze the drip chamber of the giving set until it is 1/3 full
 - Open the flow regulator clamp on the giving set
 - Let the formula run to the end of the giving set tube to clear the air out
 - Close the flow regulator
 - Clamp/Kink your feeding tube to prevent spillage, and attach the tip of the giving set tube, to your feeding tube.
 - Open the flow regulator clamp to allow the feed to run in by gravity. Use the clamp to adjust formula flow rate
 - When you have finished the feed, close the clamp
 - Fill syringe with the prescribed amount of warm water and gently push it through the feeding tube
 - Take giving set off container
 - Wash, dry and store the giving set and syringe as directed
- * **Do not hang formula for longer than 4 hours.**
- * **Ask your health carer to show you how to give your formula using gravity drip**





How do I give formula or fluids using a syringe?

Step 1 Assemble all equipment

- Formula
- Feed container and giving set
- Tap water
- Syringe
- Measuring cup



Step 2 Wash hands well with soap and water

Step 3 Give feed (see your tube feeding plan)

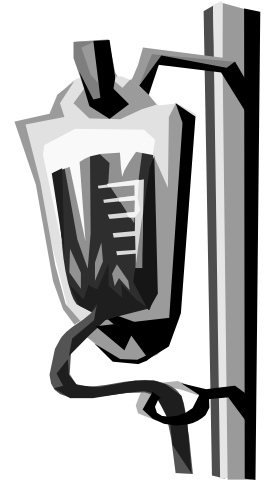
- Fill syringe with the set amount of warm water and gently push it through the feeding tube (this is a flush)
- Measure the set amount of formula into a measuring cup (or you can use the measuring scale on the syringe instead)
- Remove plunger from syringe
- Rinse syringe with water
- Clamp/kink your tube to prevent spillage, and attach syringe funnel to feeding tube
- Pour formula into syringe
- Unclamp the feeding tube and hold the syringe higher than where the feeding tube goes in
- Let the formula run in slowly by gravity. If you have a thin tube you may need to use the syringe plunger to gently push the formula through your tube.
- Try not to let the syringe get empty before refilling it, as air will enter the stomach
- You should take at least 15 minutes to give a feed
- To prevent spillage, remember to clamp/kink your tube before you remove the syringe funnel

When finished

- Flush the tube with the prescribed amount of water
- Disconnect syringe and recap feeding tube

Ask your health carer to show you how to give your formula using a syringe





How do I give continuous feeding with a pump?

Step 1 Assemble all equipment

- IV pole or suitable way of hanging the feed container
- Formula
- Feed container and giving set
- Tap water

Step 2 Wash hands well with soap and water

Step 3 Give feed (refer to your tube feeding plan)

- Fill syringe with the set amount of warm water and gently push it through the feeding tube (this is a flush)
 - Measure the set amount of formula into the feed container
 - Attach the feeding container to the giving set tube
 - Hang feed container on pole, or use a hook at least 50cm above your head.
 - Get the air out of the giving set (Health carer, please write how to do this)
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-

- Open the flow regulator clamp on the giving set
- Attach the tip of the giving set tube to your feeding tube
- Turn on pump and set rate
- Give the prescribed water flush, every four hours. Use a syringe in the side tap of your feeding tube.
- If using a ready-to-hang feed, do not hang feed for longer than 24 hours
- If tipping tins of formula into a feed container, pour 4 hours worth of formula at a time and clean feed container every 4 hours
- Wash, dry and store equipment as directed

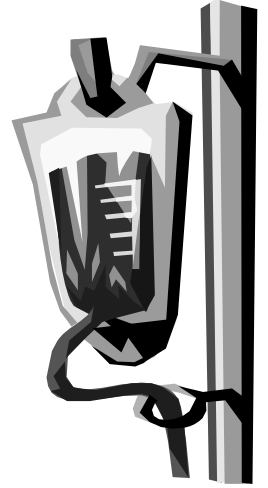
Ask your health carer to show you how to use your feeding pump



How do I give intermittent feeds using a pump?

Step 1 Assemble all equipment

- IV pole or suitable way of hanging the feed container
- Formula
- Feed container and giving set
- Tap water



Step 2 Wash hands well with soap and water

Step 3 Give feed (refer to your tube feeding plan)

- Fill syringe with the set amount of warm water and gently push it through the feeding tube (this is a flush)
- Measure the set amount of formula into the feed container
- Hang feed container on pole, or use a hook at least 50cm above your head
- Get the air out of the giving set (Health carer, please write how to do this)

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-
-
- Open the flow regulator clamp on the giving set
 - Let the formula run to the end of the giving set tube to clear the air out
 - Attach the tip of the giving set tube, to your feeding tube
 - Turn on pump and set rate
 - Give the prescribed water flush, every four hours. Use a syringe in the side tap of your feeding tube.
 - Once feed is finished, turn the pump off and disconnect tubing
 - Wash, dry and store equipment as directed

Ask your health carer to show you how to use your feeding pump



How do I flush my gastrostomy tube?

Even if you are not currently using your Gastrostomy tube for feeding it is important to keep the tube patent, so that it can be used if & when it's required.

To do this, it is important to flush the tube twice a day with approximately 60mls of water.

The following is a set of instructions to help you with this task

1. Wash hands
2. Ensure the syringe is clean & functioning
3. Check the bumper distance on your tube to ensure that it is in the correct place
4. Use the plunger to draw water up into the syringe
5. Kink the feeding tube to prevent spillage of stomach contents
6. Open cap of gastrostomy tube & insert syringe
7. Deliver the water flush by gently pushing on the plunger of the syringe
8. When finished, kink the tube & twist the syringe to remove
9. Close cap on the gastrostomy tube, ensuring it is secured
10. To prevent accidental movement of the tube, ensure that it is secured to your stomach with tape



How do I care for my equipment?

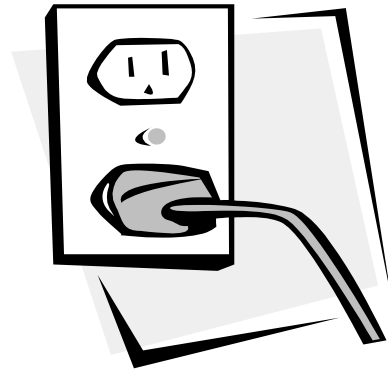
- Wash all equipment in warm, soapy water. Allow warm, soapy water to run through the pump sets and gravity sets.
- Rinse thoroughly with clean water
- Dry well, then store in a covered container. In the warmer weather store all clean equipment in the refrigerator.
- Feeding tubes and containers should be replaced regularly
- Feeding sets should be replaced every 24 hours or as needed. Do not use the same set for more than 3 days. Your health carer will tell you how often to replace your feeding set.
- For water flushes use 1 syringe a month. If you are using a syringe to give bolus feeds or to give medicine, use 2 syringes per week.



How do I use my feeding pump?

Using the feeding pump

- Always keep the pump connected to the power supply, the battery backup only lasts for about 10 minutes.
- If it is not being used, keep it switched on, in the power point
- The feeding pump should not beep unless something is wrong.



If your feeding pump is beeping, turn your pump off and check for the following:

- The feed has run out
- The tube is kinked
- Feed blocked in the tube. Flush tube with water
- Body position - straighten up
- Low battery
- Air in tube - disconnect and run feed through tube into sink, until air bubble goes out

To help prevent beeping

- The chamber on the feeding set should not get too full. If more than 1/3 full, you will need to discard that set, and start again. Remember that when you fill the chamber, it can be helpful to lift the chamber upside down, and slowly fill it up that way.
- As the feed drips into the chamber it needs to be falling in the middle, not down the sides of the chamber
- Try to sit up as much as possible

If you still have a problem after checking all of the above, contact the supplier of your feeding pump.



How do I take care of the feeding pump?

- Your dietitian or health carer can help you with the hire of a feeding pump. They can tell you where to get one in your local area, and what it will cost. This will vary depending on where you live.
- You need to look after the pump
- Wipe it down with a soft damp cloth regularly to keep it clean
- Keep it out of the rain and weather
- Do not have it on in the shower or bath



Servicing the feeding pump

- Contact your feeding pump provider or dietitian if your pump is not working properly. Your pump will require regular services. Check with your pump provider how frequently your pump needs to be serviced.
- Use the following lists to help keep track of when the pump was last serviced

Name of pump: _____

Number on pump: _____

Where to bring pump for services: _____

Phone: _____

Date pump serviced	Date pump serviced



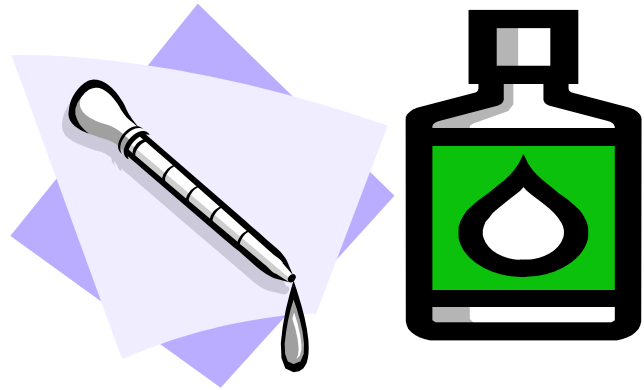
How do I give medicine through my feeding tube?

IMPORTANT: Always check with your pharmacist or health carer before taking medicines. Check the following:

1. Does the medicine come as a liquid?
 2. Can the medicine be crushed?
 3. Should the medicine be given on an empty or full stomach?
- Medicine should be in a liquid form if possible
 - If your pharmacist has advised that your medications can be crushed, they should be mixed with water to make a soup-like mixture
 - Do not mix medicine with the feeding formula
 - Do not mix medicines together. Each one should be given separately. Flush your feeding tube before and after each medicine.
 - Some medicine should not be given while the feeds are running as they can react with the feed. Your pharmacist will give you instructions on this if needed

When adding medicine:

- Assemble supplies before you start
 - Medicines
 - Tap water
 - Syringe
- Stop feeding
- Flush feeding tube with 40mL * water in the side port
- Connect syringe to medicine side port on tube, or to end of tube if medicine port is not available, and gently push medication in
- Flush again with 40mL * water to remove all traces of medicine and to prevent tube clogging (*or amount recommended by your health carer).
- Give each medicine separately. If giving more than 1 medication talk to your health care professional about flushes between medicines



How do I look after my mouth while on tube feeding?

- Although you may not be eating in the normal way, it is important to keep your mouth clean.
- Brush your teeth at least twice daily with toothpaste and a soft brush.
- Use a bought mouthwash or home-made salt solution (1 teaspoon salt added to 1 litre of water) as needed to freshen your mouth and breath.

If you have a dry mouth due to your treatment, use a salt solution mouthwash as bought mouthwashes containing alcohol can make the mouth dryer. Ask your nurse more about your mouth care.

- If allowed, ice chips or sugarless gum can be used to prevent a dry mouth.
- Use a lip cream to prevent dry lips. Don't lick your lips, as this will make them even dryer.
- Try to breathe through your nose.
- Report any bleeding or mouth problems to your doctor or community nurse.



What can be some tube- feeding problems?

Diarrhoea

Diarrhoea means frequent loose bowel movements that are not normal.

Possible causes of diarrhoea are:

- Medicines, for example antibiotics and laxatives.
- Feeding the formula too fast or when it is too cold.
- Contamination of the formula by not careful hygiene (handwashing, hanging feeds too long, flushes not totally cleaning tubing).

To prevent diarrhoea:

- Try to relax before and during the feed.
- Do not feed cold formula. Take the formula out of the fridge 30 minutes before feeding.
- Use warm, not cold water for the water flush.
- Make sure all your equipment is clean.
- Wash your hands well before handling the formula, equipment, and your feed tube.
- If pouring formula into a bag or bottle, only hang 4 hours worth at a time. After this time, the bag or bottle needs rinsing, before filling up with more formula.
- Always cover unused formula, refrigerate and throw out after 24 hours.



When you have diarrhoea remember to:

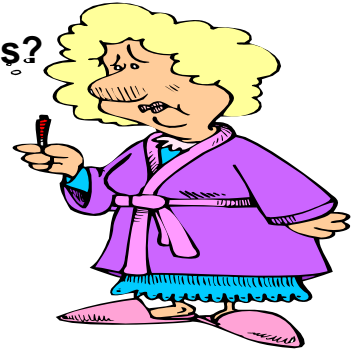
- Have an extra 2-4 cups of water (or sports drink) to replace lost fluid.
- If diarrhoea lasts for more than 24 hours contact your doctor.
- If you are on pump feeds discuss slowing the rate down, with the dietitian.
- If you are on bolus feeds, give yourself smaller feeds more often. Try giving each bolus feed at a slower rate eg. allow at least 20 minutes.
- Talk to your dietitian.



What can be some tube-feeding problems?

Upset stomach

This includes nausea, vomiting, bloating, heartburn or stomach pain.



To prevent stomach upset

- Do not feed cold formula. Take the formula out of the fridge 30 minutes before feeding.
- Do not rush the feeding. Use the right amount, at the right speed.
- Do not lay flat during or just after feeding. Sit or lie at an angle of 30 degrees during and after feeds eg. 30-60 minutes after feeding.
- Do not exercise, or bend over after feeding.
- Wear loose waisted clothing.

If you have a stomach upset

- Try smaller feeds more often (it's okay to skip a feed occasionally if feeling unwell).
- If you have a PEG tube, you might find that air is getting trapped in your stomach, causing discomfort. Letting the air out of your stomach can help. This is called venting*. To do this:
 - Attach a 60mL catheter tip syringe, without the plunger, to the feeding port.
 - Lower the syringe below the stomach.
 - Allow contents and air (froth and bubbles) to fill the syringe.
 - Drain contents back into the stomach by raising the syringe above the stomach.

***Inform your doctor or dietitian if you want to do your own venting.**

- If you have a low profile PEG you may have a 'venting' tube which can be pushed into the PEG to let the air escape.
- If nausea continues contact your health carer

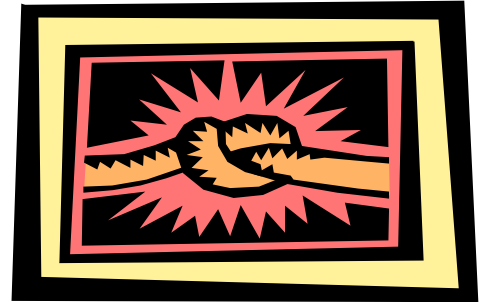


What can be some tube-feeding problems?

Blocked tube

To prevent a blocked tube

- Always crush medications well before giving through the feeding tube.
- Always flush the feeding tube with 40mL water before, between and after giving medications.
- Always flush the tube with at least 40mL water every 4 hours or 8 hours if overnight.
- Always begin and finish each feeding session with a water flush. This keeps the tube clean and stops feed building up inside the tube.



If your tube becomes blocked

Try the following steps:

- Check that the feeding tube is not kinked.
- Gently massage the tube with the fingers from the insertion site out. You can keep doing this for a while.
- Try to flush the tube with warm water. Use a 30 or 50ml syringe when flushing.
- Push the water gently, and then with increasing pressure for 10-15 seconds.
- Pull back a few times for a few minutes.
- If unsuccessful, wait for 30 minutes, then repeat the push and pull steps.
- If tube still remains blocked, please contact your health care professional.



What can be some tube-feeding problems?

Constipation

Constipation means bowel movements that are hard, or difficult to pass.

Possible causes of constipation are:

- Not enough fluids.
- Not enough fibre in the formula.
- Not enough exercise.
- Some medicines.

If you are constipated:

- Ask your dietitian about having more water in your feeding plan.
- If allowed, do more physical activity.
- Ask your dietitian about formulas with fibre.
- Ask your doctor to review your medicines and possibly prescribe a liquid laxative.



What can be some tube-feeding problems?

Tube coming out

- DO NOT use your Nasogastric or PEG feeding tube if it has come out of the tube site (unless you have been told otherwise by your health-carer).
- Call your doctor or go to the Emergency Department of the nearest hospital.
- If your PEG tube comes completely out it will need to be replaced as soon as possible because the tract begins to close within 1-2 hours.

Contact your Doctor if:

- You have a chest infection, or need to cough a lot when you are having feeds. This might mean the feed is going down the wrong way.
- There is inflammation, swelling, pain, redness, oozing or leakage around your tube site.
- You have diarrhoea for more than 1 day.
- You have vomiting.
- You have a fever.
- Your feeding tube comes partially or completely out.
- The following symptoms don't go away:
 - Nausea
 - Stomach bloating
 - Constipation



You should always discuss your tube feeding with your dietitian and health carer.

Do not rely solely on the information provided in this booklet.

Where can I get more information?

Books: 'Gastrostomies: All you need to know', Royal Children's Hospital Melbourne. Volders, E et al 1997
"Handbook of Drug Administration via Enteral Feeding Tubes" White & Bradman, 1st edn. Pharmaceutical Press; 2007

Websites:

- PINNT, self help group for patients with nutrition support www.pinnt.co.uk
- 'Living with a gastrostomy'- Institute of Child Health UK www.gosh.nhs.uk/factsheets/families/F000380/index.html
- Gastrostomy Information Support Society <http://www.giss.org.au>

