Tube Feeding at Home

Nutrition Department
This booklet has been developed by the Nutrition and Gastroenterology Department’s at Alfred Health, Melbourne.

Inside you will find information on tube feeding at home

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1. YOUR TUBE & FEEDING REGIME

TUBE DETAILS
Date of initial tube insertion:
Date of last tube change:
Current tube type & brand:
French:
External Marker/Shaft length (cm):
Other:

FEEDING REGIME
Name of Formula:
Method of Feeding:
Rate of Formula: ________ml per hour for ________ hours
OR
Bolus ________ml x ________ per day
Feeding Times:
Water Flushes:
Other:

2. IMPORTANT CONTACT PHONE NUMBERS

Dietitian
Name & Phone:

Doctor
Name & Phone:

Other
Name & Phone:

After hours, on-call Dietitian (For urgent matters only)
Monday to Friday: 5pm to 8pm, Weekends & Public Holidays: 8am to 8pm
Phone: (03) 9076 2000 (Alfred switchboard) & ask to page the on-call Dietitian
What is tube feeding?

- Tube feeding is the delivery of a specialised liquid formula directly into the gastrointestinal tract via a feeding tube.
- A feeding tube is required for people who are unable to eat, or are unable to eat enough to meet their nutritional needs.
- Specialised nutritional formulas contain the same nutrients (protein, fat, carbohydrates, vitamins and minerals) found in a healthy diet.
- Tube feeding is also called enteral nutrition.

Who receives tube feeding?

Tube feeding is a treatment option for people who are unable to meet their nutritional needs due to various medical conditions, including:

- Neurological disorders e.g. stroke, multiple sclerosis, motor neurone disease, head injury, cerebral palsy
- Cancer of the gastrointestinal tract e.g. Tongue, oesophagus, stomach
- Surgical resection of gastrointestinal tract e.g. Stomach removal, small bowel resection, gastrointestinal bypass operations
- Inflammatory bowel disease (IBD)
- Gastrointestinal disorders e.g. Gastroparesis
- Respiratory diseases e.g. Cystic fibrosis
4. THE FEEDING TUBE

The appropriate feeding tube will be selected for you and take into account the expected length of time tube feeding will be needed and the medical condition.

NASOGASTRIC TUBE (NGT)
- A thin flexible tube made from a soft plastic material.
- Inserted through the nose into the stomach.
- Commonly used in hospital for short term tube feeding.
- Occasionally some people may go home with a NGT for feeding.

NASOJEJUNAL TUBE (NJT)
- A thin flexible tube made from a soft plastic material.
- Inserted through the nose into the small bowel (jejunum) via the stomach.
- Commonly used in hospital for short term tube feeding.
- Used when unable to feed into the stomach due to certain medical conditions such as stomach surgery.

GASTROSTOMY TUBE
- The most common long term feeding tube for patients at home.
- A soft plastic flexible tube inserted directly into the stomach.
- Better for long term feeding as:
  - Less likely to be pulled out
  - More comfortable
  - More aesthetically appealing than the NGT
  - Does not restrict activities such as showering or swimming
GASTROSTOMY TUBE INSERTION METHODS

Gastrostomy feeding tubes are inserted by 2 main methods

1. Endoscopic insertion

A Gastrostomy feeding tube is referred to as a “PEG” when inserted endoscopically.

PEG means:

- **Percutaneous**: inserted through the skin
- **Endoscopic**: the method of using an instrument to assist tube placement
- **Gastrostomy**: the name given to the construction of a passage into the stomach. This passage is called a stoma.

The procedure to insert a PEG tube is relatively simple. The doctor will obtain consent prior to the procedure which will include outlining any potential risks.

Sedation or an anaesthetic will be given to put the patient into a light sleep. A small skin incision into the abdomen is made. The PEG tube is placed into the stomach with the aid of an endoscope passed via the mouth. The tube has an internal retaining bumper and an adjustable plastic disc (flange) on the skin surface which assists to hold the tube in position. Stitches are rarely needed.
2. Radiological insertion

A Gastrostomy feeding tube is referred to as a “RIG” when inserted via radiology (or x-ray).

RIG means:
- **Radiologically**: the method of using x-ray to assist tube placement
- **Inserted**
- **Gastrostomy**: the name given to the construction of a passage into the stomach. This passage is called a stoma.

The procedure to insert a RIG tube is relatively simple. The patient will receive very light sedation to make them drowsy but not asleep. A small nasogastric tube is inserted in order to inflate the stomach with air to assist location of the stomach via x-ray. A small skin incision into the abdomen is made and the RIG is placed into the stomach. The tube has an internal water balloon to hold it inside the stomach and an adjustable plastic disc (flange) on the skin surface which holds the tube in position. Stitches are needed initially, to assist tube placement, but will be removed soon after.
GASTROSTOMY TUBE TYPES

1. External Traction Gastrostomy Feeding Tube
   - Used for initial PEG insertion and occasionally for replacement via endoscopy.
   - The tube has an internal retaining bumper and an adjustable plastic disc (flange) on the skin surface which holds the tube in position.
   - This tube is replaced by applying pressure to the skin and pulling the internal retaining bumper through the stoma.
   - The external traction gastrostomy tube has an expected life of approximately 12 months.

2. Balloon Gastrostomy Feeding Tube
   - Used for initial RIG insertion and as a replacement for most gastrostomy feeding tubes.
   - The tube has an internal water balloon to hold it inside the stomach and an adjustable plastic disc (flange) on the skin surface which assist to hold the tube in position.
   - This tube is easy to replace by deflating the balloon.
   - The balloon replacement Gastrostomy tube has an expected life of approximately 6—12 months.
   - Your Gastroenterology Doctor, GP, Dietitian or Nurse will check the water in the balloon. On occasions, you may be trained to do this also.

3. Gastrostomy with Jejunal Extension (PEG-J)
   - A PEG tube (see previous) with a smaller tube passed through the inside which extends into the small bowel (jejunum).
   - A PEG-J allows formula to be delivered into the small bowel, bypassing the stomach.
   - A jejunal extension is required when unable to feed into the stomach due to certain medical conditions such as severe reflux.
4. Low Profile Gastrostomy Feeding Tube

- The low profile gastrostomy feeding tube sits flat to the external stomach.
- It can have either an internal retaining bumper or a water filled balloon to hold it in the stomach.
- An extension tube is attached to the low profile tube for delivery of formula, water and/or medications and can be removed when not in use.
- The expected life of this tube is approximately 6 months for a balloon tube and approximately 12 months for a non-balloon tube.
- The low profile tube is less visible under clothing.
- A PEG or RIG tube can usually be converted to a low profile tube (when appropriate) approximately 6 weeks after insertion.

![Diagram of Low Profile Gastrostomy Feeding Tube]

REPLACEMENT OF A GASTROSTOMY TUBE

- When a gastrostomy deteriorates it will need to be removed and replaced.
- Replacement is a simple procedure and does not usually require sedation.
- It is done at the ‘bedside’ usually in the outpatient setting.
- Most gastrostomy tubes are replaced with a balloon gastrostomy tube.
- The timing of the tube replacement and the type of tube will be arranged by the team looking after your feeding tube. Feeding tubes do not need to be replaced unless there is problem with it.

If your gastrostomy feeding tube falls out, refer to page 25
JEJUNOSTOMY FEEDING TUBE

- A jejunostomy (sometimes referred to as a ‘jej’) feeding tube is usually required for people who are unable to feed into the stomach due to surgery or certain medical conditions.
- A jejunostomy tube is inserted in the operating theatre under general anaesthetic.
- A small skin incision into the abdomen is made and the jejunostomy tube is placed directly into the small bowel (jejunum).
- It is stitched internally to the small bowel, and in some instances externally to the skin, to hold it in place.
- The jejunostomy tube has an expected life of 6 to 12 months.
- If required, a replacement tube will be reinserted in the operating theatre or radiology department. The replacement tube may be held in place by stitches, a balloon or an internal retaining bumper.

TRANS-GASTRIC JEJUNOSTOMY TUBE

- A trans-gastric jejunostomy tube is usually required for people who are unable to feed into the stomach when a jejunostomy cannot be inserted.
- It is placed into the small bowel (jejunum) via the stomach.
- It is inserted via endoscopy or radiology.
- Your Doctor or Dietitian will provide you more information about this if you have, or need, one of these tubes inserted.
5. THE FORMULA

Formula Selection & Feeding Plan

- The specialised formula is a liquid that contains all of the nutrients found in a healthy diet (protein, carbohydrate, fat, vitamins and minerals).
- Tube feeding formula is commercially prepared by pharmaceutical companies for medical purposes.
- It is not advisable to place vitamised foods or additional fluids (except water) down the tube as this may cause a blockage and/or damage to the tube.
- Your Dietitian will select the type and amount of formula needed to meet your nutritional requirements. They will consider your medical condition and your food and fluid intake if you are able to eat or drink.
- Your Dietitian, in conjunction with you, will also select the best method of delivering the formula.

It is important you do not change the amount or type of prescribed formula without discussing this with your Dietitian.
Review of the formula & feeding plan

- It is important to be regularly reviewed by your Doctor and Dietitian to ensure you are tolerating your tube feeding and that your tube is functioning well.
- Your Doctor and Dietitian are available to answer any questions about your tube feeding.
- Your Dietitian will arrange regular appointments to review your tube feeding plan and make adjustments to this plan as necessary.

It is important to weigh yourself once per week.
If your weight is decreasing, contact your Dietitian.

Formula storage & preparation

- Store unopened formula in a cool dry place.
- Opened formula must be refrigerated in a covered/sealed container and used within 24 hours.
- Formula that is poured into another container for feeding (i.e. decanted) must be used within 8 hours.
- Formula is often better tolerated if given at room temperature.
- Always wash your hands first.
- Use clean equipment.
- Check the use-by date of the formula.
- Shake formula well before opening as it can solidify.
6. FEEDING METHODS

The Dietitian and Doctor considers the following things when recommending the most appropriate method of formula delivery for you:

- Your medical condition
- Personal needs and lifestyle
- Type of feeding tube you have
- Type and volume of formula you require
- Your ability to use the equipment.

General points to remember when tube feeding:

- Always sit or lay upright at an angle of at least 30 degrees during tube feeding. Do not feed while lying flat unless otherwise directed.
- Formula that comes in a “ready to hang” bag can hang for no more than 24 hours.
- Formula that is decanted into a bag/container is not to hang for longer than 8 hours.
- Do not add anything else to the formula.

The feeding methods available are:
1. Continuous OR intermittent feeding using a pump
2. Continuous OR intermittent feeding using gravity drip
3. Bolus feeding
1. Continuous or intermittent feeding using a pump

- The continuous feeding method delivers a constant rate of formula for 24 hours a day.
- The intermittent feeding method is the delivery of formula for periods throughout the day or night.

**STEP 1: Wash hands thoroughly**
**STEP 2: Assemble equipment**
E.g. Formula, syringe, tap water, pump, giving set
**STEP 3: Flush the feeding tube with the prescribed amount of water using a syringe**

**STEP 4: Preparing the formula**
- If decanting formula into a bag or container, close the clamp (where applicable) and fill with the prescribed amount of formula. Do not put more than 8 hours worth of formula in the bag at any one time.
- If using ready to hang formula, close clamp (where applicable), spike formula container and screw set into formula bag. Hang the formula container on a drip stand/pole above the pump.

**STEP 5: Delivering the formula including setting up the pump**
Pump setup varies between different companies. See below for a general guide.
- Turn the pump on
- Load the giving set into the pump
- Prime the giving set
- Set the prescribed flow rate per hour
- Connect the giving set to the feeding tube
- Press run/start
- When the recommended amount of formula has run through, turn the pump off. Disconnect the giving set from the feeding tube and flush the feeding tube with the prescribed amount of water using a syringe
- Remember to recap your feeding tube
- Wash, dry and store any reusable equipment in a sealed container.
2. Continuous or intermittent feeding using gravity drip

STEP 1: Wash hands thoroughly

STEP 2: Assemble equipment
E.g. Formula, Syringe, tap water, gravity bag/container, giving set

STEP 3: Flush the feeding tube with prescribed amount of water using a syringe

STEP 4: Delivering the formula
- Close the roller clamp on the giving set
- Where required, attach the giving set to the formula pack, bag or container
- When decanting is required, fill the bag with the prescribed amount of formula. Do not put more than 8 hours worth of formula in the bag at any one time
- Hang the bag of formula on the pole, drip stand or hook greater than 50cm above your head
- Open the roller clamp to allow the formula to run to the end of the giving set, clearing it of air
- Close the clamp to stop the flow of formula while you attach the giving set to your feeding tube
- Open the roller clamp to allow the formula to flow through the tube by gravity. Use the roller clamp to adjust the drip rate
- When your recommended amount of formula has run through, close the roller clamp

Step 4 continues over page
STEP 4: Delivering the formula cont...

- Disconnect the giving set from the feeding tube and flush the tube with the prescribed amount of water using a syringe
- Remember to recap your feeding tube
- If you need to clean the gravity bag/container and giving set, fill the bag with water and allow this to run through
- Your gravity bag/container and giving set should be replaced every 24 hours
- Wash, dry and store all equipment in a sealed container

### Calculating Your Drip Rate

<table>
<thead>
<tr>
<th>Rate (ml / hr)</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drip Rate (Drops/min)</td>
<td>17</td>
<td>20</td>
<td>24</td>
<td>27</td>
<td>31</td>
<td>34</td>
</tr>
</tbody>
</table>
3. Bolus Feeding Method

- Bolus feeding is the delivery of set amounts of formula given at intervals across the day during using a syringe

STEP 1: Wash hands thoroughly.

STEP 2: Assemble equipment.
E.g. Formula, Syringe, tap water, measuring cup/jug

STEP 3: Flush the feeding tube with the prescribed amount of water using a syringe

STEP 4: Delivering the formula
a) Gravity syringe bolus
- Measure out the prescribed amount of formula
- Remove the plunger from syringe
- Place the tip of the syringe into the feeding tube
- Fill the syringe with formula and let it run in slowly by gravity. Note: The higher the syringe is held, the faster the formula will run
- Refill the syringe before it is empty. This will prevent air from entering your stomach
- When all the formula has run through, flush the tube with prescribed amount of water
- Disconnect syringe form the tube and recap your tube.
- Wash, dry and store all equipment in a sealed container
b) Push syringe bolus

- Measure out the prescribed amount of formula
- Draw up formula in the syringe
- Place the tip of the syringe into the feeding tube
- Slowly push the plunger to administer the formula
- Remove the syringe and recap the feeding tube
- Repeat the above 4 steps until the prescribed amount of formula is delivered
- When all the formula has been delivered, flush the tube with the prescribed amount of water.
- Disconnect syringe form the tube and recap your tube.
- Wash, dry and store all equipment in a sealed container

General notes for bolus feeding

- It should take at least 15 minutes to complete the delivery of the formula.
  If delivered too fast, it may cause reflux, nausea and/or aspiration.
- Your syringe should be replaced every 24 hours.

Oral Feeding

- If you are are allowed to eat &/or drink and making the transition from tube feeding to oral food and fluids, you need to be closely monitored.
- A period of reduced amounts of the formula via the feeding tube may be necessary to allow for increasing oral intake.
- Any reduction in the amount of formula and/or water MUST be prescribed by your Dietitian. Do not reduce this without consultation.
- Once tube feeding has ceased, it is important to leave the tube in place until your Doctor and Dietitian are satisfied that you can maintain adequate nutrition and hydration orally including keeping your weight stable. This may be months.
7. MEDICATION

Administration of Medication
You may need to put prescribed medications down the feeding tube due to swallowing difficulties.
Check with your Doctor of Pharmacist prior to the administration of any medications down the feeding tube to ensure they can be safely given this way.

General Notes

- Medications should be given using the bolus syringe method.
- When available, medications should always be given as a liquid, solution or suspension.
- Medications that require crushing must be done so thoroughly and dissolved before administration. Dissolve tablets or pills in 30ml warm water (unless otherwise advised).
- Do not mix medications. Give each one separately and flush with water between each medication.
- NEVER add medications directly to the nutrition formula.
- If the formula is running continuously, STOP the formula delivery before giving the medication.
- Always flush the feeding tube with a minimum of 30ml of water before and after giving the medication. This prevents the tube from blocking.
8. CARE DURING TUBE FEEDING

GASTROSTOMY FEEDING TUBE CARE

Care immediately post tube insertion (Day 0 to 2)

- Wash hands thoroughly before cleaning skin around tube.

- Day 1 after your tube is inserted, remove the dressing. No dressing is required ongoing. Only apply light gauze if there is any ooze.

- For the 2 days after your initial tube insertion, clean the skin around the tube 4 times per day with a cotton bud soaked in salty water and dry thoroughly.

- On Day 2, rotate the tube between thumb and forefinger 360 degrees daily. If you have a had a RIG inserted, DO NOT rotate the tube until the stitches have been removed.

- Paracetamol can be used as required for pain control. If this is not enough, contact your Doctor.
Daily tube & skin care

- Wash around tube with soap and water once to twice daily as part of usual hygiene, **dry skin thoroughly**.
- The gastrostomy tube should be rotated between thumb and forefinger 360 degrees daily and moved gently in and out.

- Check the position of the tube at skin level daily. Always note the centimetre marking closest to the skin to confirm the tube is in the proper position before feeding.
- Do not put anything down the tube other than the prescribed formula as recommended by the Dietitian.
- Dressing is not required. If discharge occurs apply light gauze or foam only.
- If required, secure tube to skin surface using hypoallergenic tape. Do not tape the tube close to the insertion site as this may cause pressure on the stoma tract.
- Observe tube site (stoma) for redness or leakage of gastric contents into the skin. Contact your Doctor or Dietitian for advice if the skin is red, painful and/or leakage is occurring.
- A barrier cream such as Vaseline petroleum jelly may be applied to skin if leakage around tube is occurring.
- Do not pinch or clamp tube.
- You can bathe or shower as usual.
JEJUNOSTOMY, TRANSGASTRIC JEJUNOSTOMY & PEG-J TUBE CARE

- Follow the ‘Gastrostomy feeding tube care’ steps above except DO NOT ROTATE the tube as it may be stitched in and/or you can risk dislodging the tube.

NASOGASTRIC TUBE CARE

- Before putting anything down the tube, check that it is in the correct position by confirming the position of the centimetre markings on the tube near the nose. If the centimetre marking is further away from the nose, therefore indicating it has moved, cease feeding and contact your Doctor and Dietitian. For example, if it is usually 53cm at the nose and now it is 48cm.

- DO NOT rotate a nasogastric tube.
Care of Tube Feeding Equipment

- Giving sets, bag sets & syringes should only be used for 24 hours.

- Feeding equipment that is being reused must be washed in warm, soapy water after each use. (i.e. within the 24 hours for syringes or longer for low profile gastrostomy extension sets). Equipment should then be rinsed thoroughly with water and drip-dried before storing in a clean, dry sealed container.

- If there are any problems with the equipment, contact your Dietitian.

Mouth Care

- Even if you are unable to eat solid food by mouth you should continue to practice good oral hygiene and visit your Dentist regularly.

- The following suggestions can help you maintain good oral hygiene:
  - Brush your teeth at least twice daily with toothpaste and soft toothbrush
  - Use a moisturising cream to prevent dry lips
  - Report any bleeding or mouth problems to your Doctor or Dentist
9. POSSIBLE PROBLEMS & SOLUTIONS

The following table lists the common problems that can occur with tube feeding and the recommended action. If the problems persist, contact your Doctor or Dietitian on the telephone numbers provided on the back of this booklet.

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSES</th>
<th>ACTION / PREVENTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLOCKED TUBE</td>
<td>Inadequate flushing of tube</td>
<td>Flush the tube with at least 30ml water before and after formula and medications and every 8 hours if the formula is running continuously</td>
</tr>
<tr>
<td></td>
<td>Formula left in tubing to curdle</td>
<td>Try flushing with a syringe full of warm water</td>
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<tr>
<td></td>
<td>Inappropriate food items put down tube (e.g. pureed food)</td>
<td>Try ‘milking’ the tube to dislodge the blockage</td>
</tr>
<tr>
<td></td>
<td>Giving medications</td>
<td><strong>Do not insert anything else to unblock the tube</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inadequate fluid</td>
<td>Crush medication finely and mix well with warm water</td>
</tr>
<tr>
<td></td>
<td>Not enough fibre in the formula</td>
<td>Multiple medications should be given one at a time</td>
</tr>
<tr>
<td></td>
<td>Lack of physical activity</td>
<td>Flush the tube with water before and after medications</td>
</tr>
<tr>
<td></td>
<td>Medication</td>
<td>If problems persists contact your Pharmacist, Doctor or Dietitian</td>
</tr>
<tr>
<td>CONSTIPATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inadequate fluid</td>
<td>Increase the amount of additional water through the tube each day in consultation with your Doctor or Dietitian</td>
</tr>
<tr>
<td></td>
<td>Not enough fibre in the formula</td>
<td>If possible and allowed, increase physical activity</td>
</tr>
<tr>
<td></td>
<td>Lack of physical activity</td>
<td>Consult your doctor to review medications and to prescribe a laxative or stool softener (liquid form)</td>
</tr>
<tr>
<td>PROBLEM</td>
<td>POSSIBLE CAUSES</td>
<td>ACTION / PREVENTION</td>
</tr>
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<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CONSTIPATION</td>
<td>Giving medications</td>
<td>Crush medication finely and mix well with warm water</td>
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<tr>
<td>continued.</td>
<td></td>
<td>Multiple medications should be given one at a time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flush the tube with water before and after medications</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If problems persists contact your Dietitian or Doctor</td>
</tr>
<tr>
<td>DIARRHOEA</td>
<td>Medications</td>
<td>Ask you doctor or pharmacist about any side effects</td>
</tr>
<tr>
<td></td>
<td>Incorrect delivery or type of formula</td>
<td>Formula should be delivered at room temperature</td>
</tr>
<tr>
<td></td>
<td>Bacterial contamination of formula</td>
<td>Contact your Dietitian to review your regime as it may need to be changed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wash hands well before handling the formula</td>
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<tr>
<td></td>
<td></td>
<td>Formula in a ‘ready to hang’ bag is not to hang for longer than 24 hours</td>
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<td></td>
<td></td>
<td>Decanted formula is not to hang for longer than 8 hours</td>
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<tr>
<td></td>
<td></td>
<td>Change giving set &amp; syringe every day</td>
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<tr>
<td></td>
<td></td>
<td>Wash the re-usable equipment after each use with warm, soapy water and rinse and dry thoroughly</td>
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<tr>
<td></td>
<td></td>
<td>Do not put; food, homemade formula or fluids other than prescribed formula or water down the tube</td>
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<tr>
<td></td>
<td></td>
<td>Do not mix anything into the formula</td>
</tr>
<tr>
<td>PROBLEM</td>
<td>CAUSE</td>
<td>ACTION / PREVENTION</td>
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<td>------------------------------</td>
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<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>DIARRHOEA continued.</td>
<td>Gastroenteritis</td>
<td>Add water flushes to replace fluids&lt;br&gt;&lt;br&gt;<strong>If diarrhoea persists, contact your Doctor and Dietitian</strong></td>
</tr>
<tr>
<td>IRRITATION, SKIN REDNESS AND/OR OOZING</td>
<td>Leaking of stomach contents&lt;br&gt;Inadequate drying and cleaning&lt;br&gt;Infection</td>
<td>Clean skin with soap and water and dry skin thoroughly&lt;br&gt;Ensure daily skin care&lt;br&gt;A light gauze or foam dressing can be used and needs to be changed when wet or soiled&lt;br&gt;See section on leakage around tube</td>
</tr>
<tr>
<td>LEAKAGE AROUND TUBE</td>
<td>Balloon deflated&lt;br&gt;External bolster too far way from skin&lt;br&gt;Tube has moved further into the stomach&lt;br&gt;Perished tube&lt;br&gt;Build up of stomach gas</td>
<td>Check the external marker (cm) on the tube and compare to the initial marker.&lt;br&gt;If the tube has moved contact your Doctor or Dietitian who will arrange to check the balloon volume and reinflate if necessary or replace tube if balloon has burst.&lt;br&gt;Ensure external bolster in correct position (0.5-1cm from skin)&lt;br&gt;Avoid excess tension on the tube&lt;br&gt;<strong>If problem persists contact your Doctor or Dietitian</strong></td>
</tr>
<tr>
<td>PROBLEM</td>
<td>CAUSE</td>
<td>ACTION / PREVENTION</td>
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<td>-------------------------------</td>
<td>--------------------------------------------</td>
<td>------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>NAUSEA AND VOMITING</td>
<td>Intolerance of formula volume</td>
<td>Ensure you are using the prescribed formula and rate</td>
</tr>
<tr>
<td></td>
<td>Feeding rate too fast</td>
<td>If bolus feeding try delivering the formula slower i.e. over a longer period of time</td>
</tr>
<tr>
<td></td>
<td>Incorrect body position during feeding</td>
<td>Sit upright at least at a 30 degree angle. <strong>Do not feed lying flat</strong></td>
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<tr>
<td></td>
<td>Strenuous exercise following feed</td>
<td>Wait 30-60 minutes after having formula before exercising</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>If problem persists contact your Doctor or Dietitian</strong></td>
</tr>
<tr>
<td>REFLUX</td>
<td>Altered stomach function</td>
<td>Deliver formula at a slower rate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sit upright at least a 30 degree angle for feeding. <strong>Do not feed lying flat</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>If problem persists contact your doctor and Dietitian</strong></td>
</tr>
<tr>
<td>TUBE DISLODGED OR FALLS OUT</td>
<td>Tube may have perished</td>
<td>Don’t panic</td>
</tr>
<tr>
<td></td>
<td>Pulling on tube</td>
<td><strong>Refer to page 26 for guidance</strong></td>
</tr>
<tr>
<td></td>
<td>Balloon deflated or burst</td>
<td></td>
</tr>
<tr>
<td>TUBE DETERIORATED OR DAMAGED</td>
<td>Not flushing correctly</td>
<td>Flush the tube with at least 30ml water before and after formula and medications and as prescribed by your Dietitian</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Attend hospital appointment with the Doctor &amp; Dietitian for regular review</td>
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</table>
What to do if a GASTROSTOMY OR JEJUNOSTOMY feeding tube has fallen out

This flow chart gives a step-by-step guide of what to do if a Gastrostomy or Jejunostomy feeding tube falls out OR you think it has almost fallen out. For example, you can usually see the 4cm marking at the skin and now you can see 2cm marking.

1. Re-insert the tube to keep the stoma or hole open
2. Insert the tube to the centimeter mark you can usually see at the skin level
3. Tape it to the skin to hold it in position

DO NOT PUT ANYTHING DOWN THE TUBE AS THERE IS A HIGH RISK OF GETTING A SEVERE INFECTION

Call your main contact person who manages the feeding tube as soon as possible to arrange an urgent tube review and/or replacement.

If you cannot get in touch with the appropriate person who manages the feeding tube and you have not reinserted the tube; go to the Emergency Department of your nearest hospital IMMEDIATELY to have the tube reviewed and/or replaced.

If you have re-inserted the tube AND you do not need to use it urgently; call your main contact person as soon as they are available (i.e. next business day) to arrange a tube review and/or a replacement.
10. THE ALFRED HEN PROGRAM

The Alfred’s Home Enteral Nutrition (HEN) Program has been established to provide you with high quality care while you require tube feeding in your home. The program aims to provide the best care for you by a specialised hospital nutrition support team, which includes Doctors and Dietitians.

The Victorian State Government financially supports the HEN program and subsidises the cost of the formula and tube feeding equipment for you at home.

Requirements of the HEN Program

In order to participate in The Alfred HEN program the hospital requires your agreement to:

1. Attend the hospital PEG/HEN Clinic for review by a doctor and a dietitian approximately 1 month post feeding tube replacement, then 3 monthly thereafter or as specified by the Consultant Gastroenterologist
2. Not already be registered with another HEN program in Victoria
3. Have all ongoing medical care of the your nutrition and feeding tube by The Alfred Gastroenterology and Nutrition team(s)
The Alfred PEG/HEN Clinic

- The Alfred Hospital has established a PEG clinic to provide specialised care for people who receive tube feeding at home.

- When you visit the PEG clinic, your doctor and Dietitian will review and monitor the function of the feeding tube and your feeding plan.

- If you are having any problems with tube feeding please contact your Dietitian who can provide advice and/or book you into the PEG clinic.

- The Alfred PEG / HEN clinic runs regularly on Thursday from 2pm and is located in the Specialist Consulting Clinics, Level 1, The Alfred Centre (Corner of Commercial & Punt Roads). Phone number: (03) 9076 5487.

YOUR ALFRED PEG/HEN CLINIC APPOINTMENT IS:

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Ordering Formula and Equipment

- The formula, bags, giving sets, syringes and feeding pumps are provided to you at no cost via The Alfred Nutrition Department.

- Your Dietitian will arrange one months supply of formula and equipment per order.

- You MUST contact the Dietitian at least 5 business days prior to needing more equipment and formula.

- The equipment and formula will be delivered to your home directly from the company.
## 11. GLOSSARY OF TERMS

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>Bolus Feeding</td>
<td>A large volume of formula given through the feeding tube in a short amount of time</td>
</tr>
<tr>
<td>Continuous Feeding</td>
<td>Formula is given through the feeding tube throughout the day/night</td>
</tr>
<tr>
<td>Endoscope</td>
<td>An instrument for the examination of the upper gastrointestinal tract</td>
</tr>
<tr>
<td>Formula</td>
<td>A liquid nutritional product that has similar nutrients to solid food and fluids</td>
</tr>
<tr>
<td>Gastrostomy Tube</td>
<td>A feeding tube inserted into the stomach</td>
</tr>
<tr>
<td>Giving Set</td>
<td>Tubing that attaches the formula container to the feeding tube usually via pump</td>
</tr>
<tr>
<td>Intermittent Feeding</td>
<td>Formula is given a number of times during the day</td>
</tr>
<tr>
<td>Jejunostomy Tube</td>
<td>A feeding tube inserted directly into the small bowel (jejunum)</td>
</tr>
<tr>
<td>Low Profile Gastrostomy Tube</td>
<td>A feeding that goes into the stomach however lies flat against the outside abdomen skin</td>
</tr>
<tr>
<td>Nasogastic Tube</td>
<td>A feeding tube that passes through the nose and into the stomach</td>
</tr>
<tr>
<td>Pump</td>
<td>A small machine that controls the amount of formula going into the feeding tube</td>
</tr>
<tr>
<td>Stoma</td>
<td>The opening in the stomach through which the feeding tube enters the body</td>
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</table>
"This material was produced by the Alfred Health Nutrition Department and is regularly reviewed. Please be aware that the hard copy you have been given may not be the latest version, and no liability is accepted for information