

Information resources for families

# Tube feeding

Once your child's tube is in place, you can use the step by step guide below to give your child their feeds.

## Types of feeding tube

- **Plastic tubes** – these are for short-term use and should be changed weekly.
- **Silastic tubes** – these are for long-term use and need to be replaced every two months.
- **Percutaneous Endoscopic Gastrostomy (PEG)** – this is a feeding tube that is inserted through the stomach wall directly into the stomach. It is used when a child needs tube feeding for a long time, or if a tube through the nose is not possible.



Percutaneous Endoscopic Gastrostomy (PEG)



Silastic Nasogastric Tube

There is also a tube feeding DVD available at [www.pics.org.au](http://www.pics.org.au)

## Using a feeding tube

### Step 1: Wash hands with warm water and soap

### Step 2: Prepare the formula

- Your dietitian will prescribe a formula for your child. This will provide part or all of the energy, protein, vitamins and minerals your child requires for their age and growth.

- Powdered formula must be prepared according to the directions on the tin or following the dietitian's instructions. Liquid formula or 'ready-to-feed' formula does not require any preparation.
- Store unopened formula in a cool, dry place.
- Once made, powdered formula should be refrigerated in plastic containers and used within 24 hours.
- Cans/bottles of 'ready-to-feed' formula must be refrigerated in plastic containers and can be kept for 24 hours after opening.
- Formula should be at room temperature before feeding.



Left to right: Made-up powdered formula, 'Ready-to-feed' formula and infant formula

### Step 3: If your child has a nasogastric tube, check its position before giving a feed

Before giving a feed, the position of the tube needs to be checked. This is very important.

- Use a small catheter tip syringe to draw 3–5ml of stomach contents. Dip a pH strip into this fluid.
- When the pH is 5.0 or less, this confirms that the nasogastric tube is in the correct position and that the tube is safe to use for feeding.

**pH ≤ 5.0 = FEED**

- If the pH is greater than 5.0 you will need to check with your medical team or do another test before using the tube, as it is possible that the tube is not in the correct position and is unsafe to use.

**pH > 5.0 = DO NOT FEED**

- If you are unable to collect any stomach contents in the syringe, DO NOT FEED. Check the tube position with your home care nurse, the Children's Cancer Centre or your local GP.

#### Step 4: Positioning your child for feeding

- Always have your child sitting, or lying with their head elevated forwards at a 30° angle or more.
- Your child's body should be stretched out and relaxed.

#### Step 5: Setting up the pump

- Please use the pump instructions handout given to you when you had your education about using the pump.
- Feeding is different for each child. The instructions you will be given are based on the total volume your child needs, the rate of delivery that your child can tolerate, and your lifestyle.
- Your child may be started on continuous feeds. These are delivered through a feeding pump. This method of feeding is used when there are problems with managing a large volume of feed at one time, or when overnight feeds are required.
- You may need to run the pump overnight or for 24 hours per day. Your dietitian will talk to you about how long to feed for and the rate of feed.
- Gravity (or drip) feeding sets may be used to deliver the formula to your child. Ask your dietitian or ward nurse how to set these up.
- Once the pump is set up, connect the end of the pump set into the largest port on your child's nasogastric tube and select RUN to start feeding.
- If the pump alarm sounds during a feed, refer to *The Pump Guide*.



Feeding pump

#### Step 6: Hanging time of feed

Feeds hung for long periods of time in a warm environment are at risk of becoming contaminated with bacteria. At home, it is best if formulas are hung for a maximum six to eight hours.

#### Step 7: Flushing

At the end of your child's feed, or after giving any medications, the nasogastric tube should be flushed with 10–50mls of water from a syringe. This will prevent blockage of the tube.



Drawing water into the syringe to flush the tube

#### Step 8: Using the tube for medications

- Always check with your doctor or pharmacist before putting any medications down the nasogastric tube.
- Use liquid medications where possible or crush tablets and mix them with water or feed.
- Flush tube after giving medications.



A syringe is needed to draw stomach contents for checking the tube position, flushing the tube after feeding, or giving medications via the tube.

#### Step 9: Cleaning of equipment

- All feeding equipment (giving sets, syringes and containers) must be washed in warm, soapy water between each use.
- In most instances, giving sets can be re-used for up to 24 hours provided they are washed thoroughly after each use
- After washing, equipment should be rinsed well and drip-dried thoroughly before storing in a clean, dry container with a lid, and placing in the refrigerator
- Do not soak equipment in Milton solution or other similar sterilising solutions as this causes the plastic to break down.
- If you are using baby bottles to give feeds, these should be cleaned in the usual way.

## Possible problems with tube feeding

### Vomiting

- This can be caused by your child's treatment.
- This can be caused by feeding too quickly.
- Try to sit your child up for feeds, raise their head or reduce the rate of feed delivery.
- Remain upright for 20–30 minutes after a tube feed.

### Blocked tubes

This can be caused by:

- poorly-crushed medications
- not flushing the tube after feeds
- the feed being too thick
- leaving formula to curdle in the tube
- pureed food being put down the tube.

Pureed food should not be put down the tube as this causes blockages.

To unblock the nasogastric tube, flush with 20–30mls of water. If this doesn't clear the blockage try flushing with 20–30mls of fizzy drink (e.g. diet cola, mineral water).

### Diarrhoea

Diarrhoea can be caused by:

- your child's treatment
- feeding too quickly
- antibiotics
- feed intolerance
- illness, such as gastroenteritis.

Try slowing down the rate of feed and then increase it gradually as tolerance improves. If diarrhoea continues, talk to your child's oncologist.

### Tube is dislodged or removed

Some parents have been taught to replace nasogastric tubes if they are removed. If you have not been taught to do this, contact your home care team (GP, district nurse) or your hospital.

You can wash and reinsert the same nasogastric tube for your child if the tube is not due for replacement. Even if the tip looks discoloured from the stomach contents, it is still safe to use it. It is easier to reinsert the tube if the original guide wire is kept or if the tube is frozen, as this makes it less flexible for reinsertion.

If you come to your emergency department to have your child's tube replaced, please ensure you bring your own tube as the emergency department will not provide one. Your hospital's cancer service or equipment centre will supply you with nasogastric tubes. You can choose to either bring a new tube from home or wash the current tube for re-use.

## Follow up

If your child is having tube feeds, you should be in regular contact with your dietitian so feeds can be adjusted appropriately for growth.

The phone number for the dietitian at your hospital is:

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Who to contact for ongoing supplies  
(Ask your hospital dietitian to fill this section)

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