

# Nasogastric tube (NGT) feeding guide

The ward team looking after your baby or child has decided it is necessary that he/she needs a nasogastric tube (NGT) in order to be fed. This leaflet explains what an NGT is and will explain to you how to insert one and how to look after it. The doctor / nurse will do this initially but if you are comfortable doing it, they will teach you how to do this at home for as long as your child needs it. You will be given a starter pack of tubes, syringes, dressings and tape and then you will be able to get further supplies from the community nursing team.

If you have any questions or concerns about any of this information, please ask the doctor or nurse caring for your child.

## What is a nasogastric tube?

Nasogastric tube (NGT) feeding is the method by which a baby or child can be given a liquid food, usually milk, via a small tube that passes through the nose, down the back of the throat, down the oesophagus (the gullet) and into the stomach. It is used when a baby is unable to take enough feed directly from the breast or bottle – and in some instances is a long term support. The “Silk” (*CORFLO Fine Bore*) feeding tube is the most common tube used for babies / children who require tube feeding at home over a long period of time. It is disposable, but lasts for 6 weeks and can be re-inserted up to 5 times during that 6 week period. The tube should be washed in warm soapy water and flushed with non-soapy water using a 50ml syringe, then sterilised, between uses.

The tube contains a guide wire – a very thin flexible wire – which stiffens the tube. We recommend removing this before inserting the tube as it can make it difficult to draw up stomach contents to test and it may be difficult to remove it when the tube is in position. Then the wire can be removed and the wire port closed. The wire should be stored safely in a plastic bag.

**Never put the guide wire down the tube while the tube is still in the baby.**

The tube can become discoloured over time, but this is normal.

## How is the NGT inserted?

Only pass an NGT on your baby if you have been assessed and deemed competent by the neonatal/ paediatric nurse or community children’s nurse, and if you are comfortable doing it.

**You do not have to learn how to pass tubes if you don’t want to!**

## Step by step guide to inserting a NGT

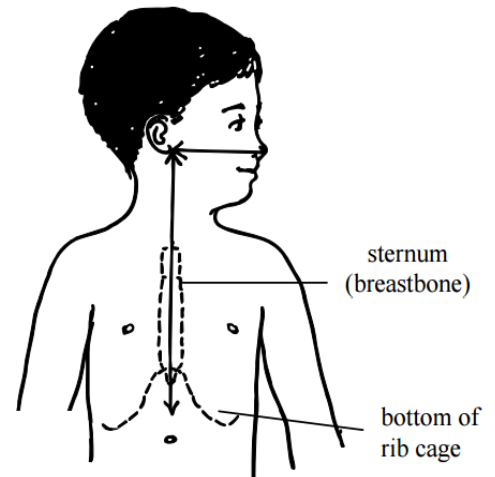
You will need:

- Sterile nasogastric tube.
- 20ml purple enteral syringe for aspiration.
- pH indicator strips – remember: it is important to keep pH strips clean and dry by storing in a sealed container.

- *Comfeel* dressing.
- Securing tape, such as *Hypofix* or *Mefix*.

### 1. Wash your hands!

2. Measure the tube from the tip of your child's nose to their ear then down towards the sternum (breastbone) and make a note of the length of tube necessary by looking at the centimetre markings on the tube. See *right*.
3. Cut a piece of tape and *Comfeel* large enough to secure the tube without covering the eye or mouth.
4. It might be useful to wrap or swaddle the baby at this point to prevent him/her wriggling.
5. Hold the tube about 3-4 cm from the tip for good control and pass the tube into the nostril, aiming back into the nasal cavity. Slowly feed the tube down through the pharynx, down the oesophagus and into the stomach. The tube will have entered the stomach when the number on the tube you recorded when measuring the tube appears at the nostril. If feasible let the child suck on a dummy or drink as it will help the tube to pass.
6. Using the purple enteral syringe draw back some of the stomach fluid (using the access port on the side, **not** where the guide wire goes). Put a few drops onto a pH strip. This shows how acid the fluid is. Stomach fluid should be 5 or less. However, if your baby is on medicines to lower his stomach acid (antacids), e.g. *Ranitidine* or *Gaviscon*, the pH is more likely to be between 4 and 6. If the pH is 5.5 or above it is possible the tube is not in the stomach.
7. When you are happy with the tube position, secure the tube to the dressing on the side of your child's face with the tape.



**You are now ready to use the tube.**

### What are the risk factors?

There is a **very small risk** that the tube may be passed into the windpipe – if this happens feed could go into the lungs. The nurses will have shown you how to check that the tube is safely positioned and this leaflet should act as a boost to your memory. **The vital point is that if you are not sure the tube is in the stomach you should contact the community nurse – and do not feed until a safe position has been certified.**

### Looking after the NGT

Always wash your hands thoroughly before preparing a feed, inserting or removing the tube, giving a feed or giving medication. After each feed, wash the syringes thoroughly in hot soapy water, rinse them well under a running tap, leave to dry and then sterilise them. If you cannot clean a syringe thoroughly, throw it away and use a new one for the next feed. Inserting a tube is not a sterile procedure but should be done as cleanly as possible to prevent infection. Babies under 1 year will need a new sterile syringe every feed.

If your baby or child is not taking any fluid or food by mouth, then they will be producing very little saliva. Saliva helps keep the lips and tongue moist. You must ensure that the mouth is cleaned regularly and the lips moistened if they appear dry.

To encourage your baby to suck, it is a good idea to gently stroke around his or her mouth. Also offering a dummy, especially during a tube feed, may encourage the suck response. However, stop if your baby becomes distressed by this as he/she may pick up a negative association with his/her mouth being touched. This could further discourage your baby from sucking.

## Keeping the NGT in place

There are different ways to secure the tube to your baby's face. It is recommended to apply a dressing called *Comfeel* to the cheek next to the nostril with the tube in. A tape such as *Hypofix* or *Mefix* can then attach the tube to the *Comfeel*, rather than directly onto the skin. If your baby's skin is becoming red, sore or spotty ask for advice.

## Step by step guide to giving a feed, medications or flushing the tube

You will need:

- Clean 50ml syringe
- pH strip and 10 ml syringe for testing tube position if it hasn't just been checked.
- The feed!

### 1. Wash your hands!

2. Before you start, make up the feed if necessary and ensure you have the correct volume. Warm milk slightly if it has been in the fridge.
3. If the tube is already in, check the tube is in the same position as when it was passed. Is it the same length? Is the tape loose? Is the tube kinked?
4. Reposition the tube if necessary.
5. Kink the end of the tube to prevent reflux and take the bung out of the access port on the side.
6. Insert the syringe, un-kink tube and draw back the plunger to get some fluid from the stomach.
7. Place a few drops onto the pH strip and check the acid level.
8. If you are happy with the tube position, disconnect the syringe then affix the 50 ml syringe having removed the plunger. Pour the feed into the barrel of the syringe and, holding it up above the level of the stomach, allow the feed to flow into the stomach by gravity. The feed should be as slow as a breast or bottle feed. As the last of the feed begins to drain from the syringe, flush the feed down with 5ml of cooled boiled water to clean the tube and make sure all the feed has entered the stomach.



Photo courtesy of [www.bliss.org.uk](http://www.bliss.org.uk)

## Testing the tube and troubleshooting

- Test the tube before using it **every time**.
- Use a purple enteral syringe to aspirate. Draw up 3ml of air before inserting and drawing back on the tube.
- **If there is liquid (stomach fluid) drawn up put a drop on the indicator paper and continue to feed if the pH is less than 5.5.**
- Feeds should be slow and should not be syringed down with the plunger – let gravity do the work. It should take about 30 minutes for a full feed.
- **If there is no liquid from the stomach aspirated then:**
  1. Check for signs that the tube may be displaced.
  2. Lay child on his/her left side and, using the syringe, inject 1-2ml of air quickly to try to blow the tube away from the stomach lining. Try drawing the plunger back again.
  3. If there is still no fluid, wait 20 minutes and retry. If still no aspirate gently push/pull the tube 1- 2cm and retry.
  4. If there is still no aspirate, try giving a drink (if this is safe) and aspirating this back. If this is not possible, remove the tube and replace it with a new one.
  5. If you still cannot aspirate stomach fluid with the new tube, you need to contact your community nurse / ward at once.
- **If there is aspirate but pH is 5.5 or above then:**
  1. Do not feed. Try again in 15 minutes. If the pH is still too high:
  2. Draw tube back 1-2cm and retry. If it is still too high:  
If this is the first time this tube has been used then contact the community nurse.  
If tube has been in use previously you should check the tube length is the same as when it was safely used before. Also make sure it is still well taped in position. If these two things are okay it is probably safe but seek guidance before administering feed/medication.
  3. **NEVER** use water to flush the tube before confirming the position.

**If you are unsure if the tube is properly in place, then do not feed. You must contact the community nurse or ward nurses out of hours.**

## Further information

<https://www.bliss.org.uk/parents/about-your-baby/feeding/tube-feeding>

## Contacting us

**Kempton Day Bed Unit:** 0118 322 7512 / 8754 (Mon-Fri 7am-7pm)

**Lion/Dolphin Wards:** 0118 322 7519 / 8075 (outside of these hours)

To find out more about our Trust visit [www.royalberkshire.nhs.uk](http://www.royalberkshire.nhs.uk)

**Please ask if you need this information in another language or format.**

RBFT Paediatric Unit, November 2022. Next review due: November 2024

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