NHS
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Parent Feeding Tube Teaching Leaflet (Neonatal Services)

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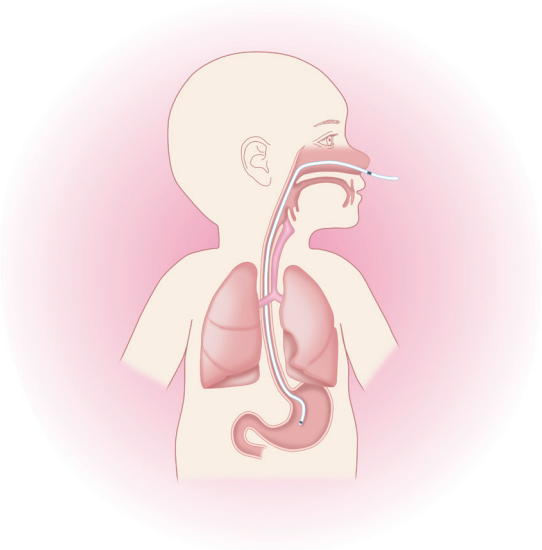
My baby has a Nasogastric/Orogatric feeding tube

A Nasogastric (Ng) or Orogastric (Og) tube is often placed into premature babies to assist with feeding.

Depending on their gestation your baby may not be able to co-ordinate a suck and swallow. Premature babies often slowly build up to full oral feeds and in the interim they are topped up via the Ng/Og tube.

Some babies may have a condition or syndrome that means the baby is unable to take feeds orally so a Ng/Og tube is vital for them, and this may be needed long-term.

Ng/Og tubes are inserted through the nose or mouth into your baby's stomach.



The tube is then taped to the baby's cheek or chin with two layers of soft adhesive tape: one onto the skin which protects your baby's skin, the other over the top of the tube.

Are there any risks associated with having a nasogastric tube?

There is a small risk that on placement the tube can be passed into the lungs. The position of the tube is always confirmed after placement.

The tube can move if the baby vomits, coughs, has suction or pulls at the tube. It can come out completely or just move internally so you cannot see that it has moved. The tube could move from the stomach into the oesophagus or into the lungs.

If the Ng/Og has moved from the stomach and milk / medicine / water is inserted into the tube then this could cause the baby to become very unwell as it would be very difficult for them to breathe.

Other risks during insertion are rare but include trauma to the nose or oesophagus or a pneumothorax (collapsed lung).

However, whilst this all sounds very frightening there is a simple test that confirms the position of the tube.

As it is impossible to see where the baby's tube is positioned inside the body, we use pH sticks to confirm the position.

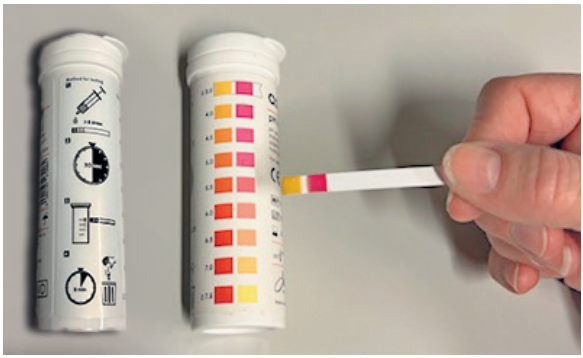
The position should be checked every time the tube is used this involves taking a little bit of fluid out of the Ng/Og tube and testing the position of the tube using the pH stick. This will be discussed in much more detail below.

Hygiene

Before preparing your baby's feed and before touching your baby's Ng/Og tube and equipment for feeding it is important that you have washed your hands. This is to prevent the spread of infection to your baby.

How do I use a pH testing stick?

You will need a clean surface, enteral syringe (purple) and pH sticks.



- Wash your hands
- Attach a sterile enteral syringe to the end of the nasogastric tube
- Pull back on the syringe plunger to suck a small amount of fluid (aspirate) from the Ng tube
- Remove one test strip and cover all test fields (two coloured squares) with the aspirate
- You will see the coloured pads on the pH sticks change colour
- Wait 30 seconds until the colour no longer changes
- Remove any excess liquid
- Compare the test fields to the colour scale and read off the corresponding pH value

So what does the pH test mean?

A pH of 0–5.5 means that the Ng/Og is in your baby's stomach so it would be safe to use the tube.

A pH of six to eight means that the tube could have moved from the stomach or be in the lungs – **do not use the tube**

Can anything affect the pH?

If you dip a pH stick into breast or formula milk you will usually get a pH of between 6.0 and 7 which means if your baby has recently had a feed it may affect the pH that you aspirate from the Ng/Og tube. However, it would not be safe to feed on this pH level and we would recommend you try to test again. You may need to wait up to 20 minutes before re-testing and then obtain help.

Never put milk / medicine / water down the NG/Og tube unless you are certain the tube is in the stomach.

Some medicines that your baby may be prescribed can also affect the Ph test result. Medicines for reflux can change the amount of acid in the stomach thus making pH testing more difficult. If this is the case with your baby then this should be discussed with the nutrition nurse specialist.

What if you can't get any aspirate?

There could be a number of reasons you can't get any aspirate out of your baby's tube. If this happens:

- Alter the baby's position right-side, left-side, then sit your baby up
- If your baby is able to take anything orally offer him/her a feed
- Try aspirating again in 20 minutes

If you are unable to aspirate do not use the tube and get help.

How long can I use the equipment for?

All equipment used in hospital for tube feeding is single use only and should be thrown into the orange bag/bins.

If you are tube feeding at home everything except the syringe is single use only. The syringe should be used for 24 hours and stored in a cold-water steriliser in between uses.

The sterilising fluid and syringe should be changed every 24 hours.

All equipment should be thrown into your normal domestic waste bin.

How do I give the feed?

After confirming your baby's pH:

- Use a gravity feed set – single use only
- Join the two parts together screwing them on firmly
- Close the clamp
- Pour the required volume of feed into the syringe
- Prime the line (run feed through the line to prevent air going into your baby)
- Connect the gravity feed set to your baby's Ng/Og tube
- Open the clamp to the top
- The feed will now start to run

How fast should I give the feed?

The baby's tube feed should mimic an oral feed.

A whole feed should last about 20 minutes, however if your baby is still on very small volumes at each feed it will not take 20 minutes. You should ensure it is given nice and slowly and that the baby isn't showing any signs of discomfort. Often if feeds are given too fast the baby may show signs of discomfort or it could cause vomiting or make desaturations (drop in blood oxygen levels) worse. Vomiting and desaturations can of course have other causes and very premature infants can suffer with desaturations. If this is happening during a feed, please tell your nurse.

Flushing the tube with water

Whilst your baby is on the Neonatal Unit the Ng/Og tube will not be flushed. This is because some of the babies are very tiny and some are on fluid restrictions.

Flushing the tube should only be carried out once your baby leaves the Neonatal Unit.

Flushing the tube with cooled boiled water prevents tube blockages. Blockages can be caused by coagulation of protein/feed, medications and tube kinking.

The tube should be flushed with two ml of cooled boiled water which should be freshly made every 24 hours. Boil your kettle with freshly drawn tap water then allow it to cool and place in a sterile baby bottle. It can be stored at room temperature or in a fridge – if you decide to store it in a fridge, please ensure the water you are giving is brought up to room temperature prior to flushing the tube.

What do I do If the baby vomits during the feed?

- Stop the feed immediately by closing the clamp
- Attend to your baby's needs and make sure that they are ok
- If the Ng tube comes out of the baby's mouth with the vomit do not panic. Remove the tape from the face and gently and slowly pull the tube from your baby's nose/mouth
- If your baby is ok to restart the feed always check the position (pH) of the tube prior to recommencing the feed as the tube may have moved from the stomach

Observe your baby at all times during their feed as:

- Your baby could pull the tube out
- Your baby could start vomiting
- Your baby could have difficulty breathing
- Your baby could change colour - blue, grey
- Your baby could show signs of discomfort if for example the feed being given is too fast

When can I tube feed my baby?

Once you have had the Level 2 Ng/Og training from the Nutrition Nurse or Nurse Trainer you can start tube feeding your baby.

At first, a nurse or trainer will be on hand to help you. The Nutrition Nurse / Nurse Trainer will leave the teaching record sheets at the cot side. This will be for a minimum of three times on separate days by a nurse from the Neonatal Unit.

Once you are competent, (s)he will sign the competent column and then you will be able to tube feed independently.

Will I be able to take my baby home early if I learn to tube feed?

When your baby is ready for discharge if they require short-term Ng feeding, there is an option of being discharged home early with the Ng tube under the care of the NCOT (Neonatal Community Outreach Team.)

If your baby has a condition where it is felt your baby will require long-term Ng feeding, then you will be under the care of your local community children's nurses.

The tube would need to be in your baby's nose and not their mouth for home care.

Your baby would need to be medically stable before they are considered for hospital discharge. Please discuss this with the medical team if you have any concerns or questions.

On the day of discharge

The Nutrition Nurse/discharge nurse will meet with you on the day of discharge and will supply you with a special feed booklet which contains written information regarding the tube feeding and contact telephone numbers that you may need.

You will have time to ask any questions you may have about the tube feeding.

The Nutrition Nurse/discharging nurse will also supply you with 10 days of equipment that is required for tube feeding.

Where will I get further equipment from?

If it is felt that your baby will be tube feeding for more than a few days, you will be registered with a home feeding company.

(Nutricia Homeward for patients in Birmingham and Solihull or Abbot Homecare for patients in Staffordshire)
The feeding company deliver equipment to your home free of charge to you on a monthly basis. They deliver everything that you will require. They can also deliver the milk if it is a prescribed feed.

This will continue until your baby's tube is removed.

What if I have a problem when at home?

When you are discharged, the Nutrition Nurse/discharging nurse will supply you with a list of contact numbers that you may need depending on what sort of problem you have.

Your main contact will be your community nurse team which will either be the NCOT or the Community Children's Nurse's. Depending on what time the problem occurs they will be able to visit you at home. The hours of service vary but you will be informed of this on discharge.

If you have any problems outside of their working hours, you should come to the hospital. This will be either be the Children's Assessment Unit (CAU) at Good Hope Hospital or the Paediatric Assessment Unit (PAU)/Ward 14 at Heartlands Hospital. On discharge you will be given a booklet containing all of the contact numbers you may require.

How did we do?

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Neonatal Unit

Heartlands Hospital and Good Hope Hospital

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