

Affix Patient Sticker



## Naso-Gastric Feeding - Teaching Pack Parents/Carers

## Introduction

This teaching pack is for parents/carers who may not have completed a formal programme of nurse training. It is designed for parents/carers who will be required to care for an infant/child with a naso-gastric tube.

## Aims and objectives

### Aim

The parent/carer should be able to safely feed the infant/child via a nasogastric tube

### Objective

On completion of this pack the parent/carer will be able to:

1. Explain what a naso gastric tube is
2. Know why the tube is necessary
3. Understand the basic physiology
4. Demonstrate that the tube is in the correct position for feeding
5. Safely administer the feed
6. Identify potential problems and how to deal with them

## What is naso-gastric feeding?

A naso-gastric tube is made out of flexible plastic. It is passed through the nose and into the stomach. It is a means for providing food to the infant/child.



Google Images – Baby Gaga (2019)

## Why does my child need a tube?

This will be discussed with you by your child's Consultant. However some of the main reasons are:

- To provide a method of feeding or administering medications when the child is unable to suck, swallow or take food orally.
- To provide a route that allows adequate calorie or fluid intake.
- To prevent fatigue when bottle feeding

Tube feeding can be done for children of any age. Some children will depend on tube feeding only for a short time, some children need it longer. Some children require NG feeding, as although able to eat and drink normally, they are unable to take sufficient calories or amount without supplementary feeding. Other children will be completely nil by mouth. Your nurse will be able to advise you if your child can have anything by mouth. This may change as your child's condition improves.

You may have seen different ways of tube feeding babies if you have been on the Neonatal Unit (NICU) such as plunge feeding. As your baby will now be having larger volumes we advocate gravity feeding as a safer and more comfortable method of NG feeding.

The type of tube, how often it needs to be changed, type and amount of formula, and length of feeding time will be decided by the doctor and dietitian, depending on your child's needs.

### **Advantages of nasogastric feeding**

- Provides a safe method of feeding
- Can be removed if not needed
- No anaesthetic is needed for insertion

### **Disadvantages of nasogastric feeding**

- The tube is noticeable as it is secured to the face
- Insertion can sometimes cause distress. However this soon resolves when the tube is in place
- Is dangerous if inserted into the wind pipe and not the food pipe
- Can increase secretions in the nostrils, especially when it is first passed or the child has a cold.

### **Training**

Before you go home a nurse on the ward (or if already at home the Children's Community Nurse) will show you how to correctly and safely feed your child via the nasogastric tube. You will then perform the feeding under supervision until the nursing staff feel you are competent to feed your child safely.

Only the person who has been trained by nursing staff can administer feeds. The ward/community team usually train both parents/carers but if you would like another carer to receive training please inform the nursing staff and they will facilitate this.

## Feeding

### Checking the position of the tube

It is very important that the tube is checked before every feed, administration of medication and/or bouts of vomiting.

The tube is checked to make sure that it is in the stomach and not in the lungs. It is very dangerous to administer anything down a nasogastric tube that has not been confirmed that it is in the stomach.

Equipment needed:

- 60ml syringes
- pH indicator testing strips
- Extension set (if using)
- Milk feed
- Cooled boiled water

### Process of position checking

1. Gather all equipment in a clean area
2. Wash and dry hands thoroughly to prevent cross infection
3. Check the tube position has not obviously changed. Look for the following:
  - Check the number on the nasogastric tube next to the nose. Make sure it is the same length as before
  - Check for any loose tape
4. Attach the syringe to the tube by removing the cap on the nasogastric tube and attach the syringe by screwing it on
5. Draw back the syringe plunger to obtain (aspirate) some fluid
6. Remove syringe and recap the nasogastric tube
7. Place a few drops on the pH strip
8. Match the colour change on the strip to the colour chart (usually on the bottle but depends what brand of testing strips used)
9. A pH of 5.5 and below indicates that the tube is correctly positioned and feeding or administration of medication can take place.

**Do not give any feeds or medicines if you are unsure of the tube position**

### What to do if you cannot obtain any fluid?

- a. Turn the baby onto their left side and try the above steps again.
- b. If still no fluid obtained, inject 1-2mls of air into the stomach using the syringe, as the tube may be sitting against the stomach wall, and try again.
- c. If your baby or child is allowed, and able to, offer them some fluid orally, then repeat the above steps.

If you still cannot get any fluid contact the Children's Community Team (between 8am and 8pm) or the Children's Ward (8pm - 8am)

### What to do if the pH readings are above 5.5?

This may mean that the tube has moved out of the stomach. **You must not feed.** Contact the Children's Community Nurses or the Children's Ward.

### Feeding your child

Once you have confirmed the position of the tube you can continue to feed your child.

1. Make sure your child is in a comfortable position either sat up (if able) or elevated. If they are lay flat they are at more risk of vomiting.
2. Remove the plunger from a 60ml syringe. If using an extension set attach the extension set to the syringe. Pour the milk into the syringe and carefully fill the extension set with milk. This is to avoid putting too much air into the stomach. Attach the extension set to the nasogastric tube.
3. If no extension set is being used, attach the syringe to the nasogastric tube and pour the milk into the syringe.
4. Allow the feed to slowly enter the stomach. You can change the flow (how quickly the feed goes into the stomach) by altering the height of the syringe however this should take the same length of time as an oral feed would do (this is called gravity feeding. This maybe different to how the staff fed your baby if your baby was an inpatient on NICU)
5. A feed should take 15-30 minutes.
6. When the feed is finished add 5-10mls of cooled boiled water into the syringe and allow the syringe to clear.
7. Remove syringe or extension set (if using) from the end of the nasogastric tube and replace the cap on the end of the nasogastric tube.
8. Wash equipment in warm soapy water and either allow to dry or sterilise if your baby is an age where sterilising is required. Home enteral syringes can be used for



up to 14 days. If the syringe feels stiff then replace with a new one. If using extension sets these are single use only and need to be disposed of after use.

### **Administering medicines via the Nasogastric tube**

Ideally all medications should be in liquid form. However sometimes this is not possible therefore tablets must be well crushed and mixed with water. Care must be taken not to block the tube when administering medication. You may be advised to administer a larger water flush if administering crushed tablets although you will be informed of this by your nurse/Doctor.

1. Gather all medications ready to give your child.
2. Wash hands
3. Check tube position and pH as above
4. Connect syringe containing the medicine to the end of the nasogastric tube and slowly push in medicine.
5. If several medications are being given, flush the tube with cooled boiled water – usually 3-5mls - between medications
6. Flush with 5-10mls of cooled boiled water after all medications have been administered

### **Frequently asked questions**

#### **How do I look after my child's mouth?**

You should continue to clean your child's mouth and brush his/her teeth, especially if your child is nil by mouth.

#### **Can my baby/child have a dummy?**

Yes, unless your doctor or speech and language therapist have told you otherwise. We encourage the use of dummies when feeding your baby as it can promote the suck/swallow reflex.

#### **Can my child have a bath/shower or go swimming?**

As long as the cap on the end of the nasogastric tube is secure, your child will be able to bath and shower safely.

If taking your child swimming, ensure the tape used to secure the nasogastric tube is waterproof.

#### **Can we go on holiday?**

Yes, however you may need to be a little more organised to ensure you have enough equipment for your trip away. Make sure you ask your doctor for a letter stating you are carrying medical supplies as this may help at airport security. Make sure you have adequate travel insurance if going abroad.

If you have any other questions your Consultant, Ward Nurse, Dietician or Community Nurse will be able to answer them.

### **Contact Numbers**

Children's Community Nurse 0161 922 5251 (open 8am-8pm)

Children's Ward 0161 922 5252/5458 (open 24hours)

### Nasogastric Feeding: checklist of teaching received

This check list will be used with families who are going home with a nasogastric tube to ensure they feel happy, safe and confident in using the tube at home.

Please sign and date when each procedure is achieved.

One copy to be kept with child's notes, a copy to community nurses and original to be kept by the parents.

	Discuss Procedure		Demonstrate Procedure		Performed with Supervision		Performed Alone		Parents/carers Safe to Practice	
	Carer	Nurse	Carer	Nurse	Carer	Nurse	Carer	Nurse	Carer	Nurse
Prepare equipment										
Explain Procedure										
Wash Hands										
Preparation of Child										
Check Position of Tube										
Administer Feed										
Flushing tube to complete feed										
Administer medications (if applicable)										
Aware of How to Deal with Possible Problems										
Cleaning of Equipment										
Disposal of Waste										
How to Seek Help or Advice										



**Confident to Practice**

Parent/Carer signs to state they have received all the above training and they are safe and competent to give nasogastric tubes to the child .....

“I have read the enclosed booklet on the principles of nasogastric feeding. I have received practical teaching on the checking the placement of the nasogastric tube and administration of feeds and medications. I now consider myself safe and confident to administer nasogastric feeding to the above named child. I am aware of all the associate risk if I do not follow the correct procedure and I will seek advice from the above contact numbers if required.”

Name.....

Relationship to Child .....

Sign .....

Date .....

**Assessor**

Name .....

Sign .....

Date .....

**References:**

Children's Community Nursing Team – Teaching pack for nasogastric feeding. Tameside Hospital

Hillingdon Hospitals NHS Foundation Trust (2014) Patient Information for using a nasogastric tube. NHS, UK

Hulse W (2016) Nasogastric Tube Management Children, Infants and Neonates – Clinical Guidance. TGH

NHS improvement (2016) Resource Set – Initial placement checks for nasogastric and orogastric tubes. NHS, UK

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