Oxford University Hospitals NHS Foundation Trust

### Caring for your Nasogastric (NG) Tube

A guide for patients and carers



#### Introduction

This booklet provides basic information on how to care for your Nasogastric (NG) tube and also details of your feeding plan.

Your Dietitian, Ward Nurse, Nutrition Nurse Specialist or Feed Company Nurse will be able to help you if you have further queries or concerns.

#### What is a NG Tube?

A nasogastric or NG tube is a flexible plastic tube that allows delivery of nutritionally complete feed directly into the stomach. It is passed via the nose into the stomach.



# How do I check the position of my tube?

It is important to check that the tube position has not changed **before putting anything down your tube**. You will be shown how to check the tube position by using a syringe to draw fluid from your stomach and test this on pH paper. This is called "aspirating" and the procedure for doing this is on the next page.

#### How do I measure the pH of gastric aspirate?

The pH reading should be 5.0 or less and this tells us that the tube is likely to be in your stomach. You should not put anything through the tube if you have a pH reading of higher than this unless discussed with the Dietitian, Nutrition Nurse Specialist or the clinical team overseeing your care.

Other checks that should be carried out every time your tube is used or at least daily:

- Check that the length of external tube remains identical to that recorded when your tube was placed.
- Check that the external fixation tapes/plasters have not loosened or moved.
- Consider any symptoms you have that might cause the tube to move or suggest that your tube has moved, such as: vomiting, retching, coughing spasms or breathing difficulties.

## Why is it important to check the position of the NG tube?

It is important to check the position of the tube before putting anything down your tube or after coughing or vomiting. This is to ensure that the feed, water or medication goes directly into the stomach and not into the lungs.

### How do I measure the pH of gastric aspirate?

Wait at least one hour after feeding or giving medications before testing the gastric aspirate.

- 1. Wash your hands before and after handling the nasogastric tube.
- 2. Check the expiry date of the pH indicator strips and that they are the correct ones supplied for measuring human gastric aspirate.
- 3. Check that the external tube length and visible tube cm markings at the nostril have remained unchanged.
- 4. Remove the connection cap from the end of the nasogastric tube and attach a 60ml enteral syringe.
- 5. Use the syringe to carefully aspirate gastric fluid from the stomach by gently pulling back on the plunger. You only need a small amount of fluid (0.5 to 1.0ml) for the pH check.
- 6. Reattach the connection cap on the nasogastric tube.
- 7. Always use a new syringe to aspirate gastric fluid to get an accurate pH reading, as any water in the syringe may give you a higher pH reading.
- 8. Check the pH of the gastric aspirate by dropping the gastric aspirate fluid from the syringe onto a pH indicator strip. Use the colour code to get the result. The packaging of the pH strips will advise you how long you have to wait to get the results.
- 9. The pH reading must be 5.0 or less and this tell us that the feeding tube is likely to be inside you're your stomach.
- 10. If you obtain a result above 5.0 **do not** administer anything down the nasogastric tube. Please contact the Nutrition Nurse Specialists or the hospital department you have been advised to contact, to discuss what next.

#### Unable to obtain gastric aspirate?

If you are unable to get a gastric aspirate:

- Lie on your left side, wait for 15 to 30 minutes and try again to aspirate.
- Try to promote stimulation of gastric secretion production using mouth care (e.g. brushing teeth, using mouthwash or applying lipsalve). Wait a minimum of 5 minutes, then try again to aspirate.
- If it is still not possible to obtain any fluid, contact the Nutrition Nurse Specialist or the clinical team overseeing your care.

#### Nasogastric tube fixation

You should also keep the end of the NG clean and you will be advised on the best way of doing this.

The fixation tape should be changed at least weekly but may require changing more regularly if it becomes dirty or loose.

When changing the fixation tape, clean the skin thoroughly and try to alter the position of the tape so that the skin avoids becoming sore or damaged from continued pressure.

Be careful when replacing the fixation tape to your tube as it may become accidentally dislodged.

If the skin or the nostril area becomes sore or red contact the Feed Company Nurse, Nutrition Support Specialist Nurse or the hospital department you have been advised to contact for advice.

Avoid the use of thick creams or powders underneath the tape, as they can affect the tape's stickiness and ability to keep your tube securely in place.

#### **Feeding position**

Do not lie flat during feeding or for about half an hour after you have finished your feed as this could make you feel nauseous.

The ideal position of your upper body during feeding is between 45-90° angle which can reduce the risk from vomiting, regurgitation or aspiration of feeds.

If you are using your feeding tube whilst in bed or overnight, it is very important to prop yourself up with pillows to at least a 45° angle.



#### **Flushing your NG Tube**

To flush your tube attach a 60ml enteral syringe with 30-60mls of sterile or cooled, boiled water and gently push this through the tube. It is important to flush the tube regularly to prevent it from blocking.

The NG tube **MUST** be flushed:

- before and after each feed
- before and after each medication
- at least once a day if you are not using the tube for medication or feed

Remember **not** to put anything down the tube other than **feed**, **water or liquid medication**.

### Syringes

Syringes are used to flush the tube with water, give medications or feed (bolus feeding).

At home the syringes can be reused and should be washed in warm soapy water using washing up liquid and left to air dry. Please refer to syringe manufacturer washing instructions.

The syringes used for connecting to nasogastric tubes and all other feeding tubes now have an international standard for connection called ENFit. They have a screw type connection that will only connect to a feeding tube.



#### **Giving sets**

A giving set links the bottle of feed, via a pump, to the feeding tube. Giving sets must be changed every 24 hours and the used set discarded.

Used syringes and giving sets are considered as "clean clinical waste" and can be disposed of with general household waste. Please check with your local council whether they will accept them for recycling.

#### What is my feeding plan?

Your Dietitian has prescribed the volume of feed and water that meets your needs and a suitable method for you to administer this. This is called your feeding plan.

Try to keep to the recommendations and if you are experiencing any problems with the feed plan or are losing weight please discuss with your Dietitian.

#### Feed

You should be given at least a 2 weeks supply of feed when you are discharged from hospital. Ongoing supplies will be arranged for you by your hospital or community Dietitian.

Feed should be stored at room temperature and it does not need to be refrigerated.

If you have an opened bottle of feed and wish to have a break and feed later in the day, store the feed at room temperature and keep it away from heat sources and direct sunlight. There is no need to refrigerate feed once opened. Leave the giving set attached to the feed and place the dust cap on.

Any unused open feed bottles should be discarded 24 hours after opening. Empty feed bottles can be disposed of with household recycling.

#### Will I be able to eat and drink?

This will depend on your medical condition. Discuss this with your Dietitian, Speech and Language Therapist or Doctor.

### Oral hygiene/mouth care

Dental plaque can still build up quickly in your mouth even if all your nutrition is given through the feeding tube. It is important to clean your teeth daily and at least twice a day to protect you from gum infections and dental decay.

Non-foaming toothpastes are available and artificial saliva or mouth wash may help if your mouth is dry. Check with your nurse or doctor about these products if you need them.

### What should I do if my tube is blocked?

First check that the tube is not kinked or that there is no external reason why the tube appears to be blocked.

If the NG tube is blocked, the following may be helpful:

- Gently squeeze the external visible tube up and down its length.
- Attach an empty enteral 20mL syringe to the end of the tube and gently push and pull on the plunger of the syringe, creating a gentle pumping action.
- If in **any doubt** about the position of the tube **do not** attempt to flush anything down the tube.
- Do not poke anything down inside the tube to unblock it as this may damage and puncture the tube.
- If the tube remains blocked, contact the Feed Company Nurse, the Nutrition Nurse Specialist or department you have been advised to contact, as a replacement tube may be required.

## What should I do if my nasogastric tube falls out or becomes dislodged?

Sometimes violent coughing or vomiting can increase the risk of dislodging the feeding tube.

If the NG tube falls out or you have any concerns that the tube is not in the correct position either contact the Nutrition Nurse Specialist or the department you have been advised to contact to discuss arrangements to have the feeding tube replaced.

If it is out of hours you may need to attend your local accident and emergency department. Usually you will be required to come back to hospital to have the tube replaced as this is not something undertaken in a community setting. How quickly a replacement tube will be organised will depend on your individual circumstances

#### Who can I contact for help?

If you have any pump related problems such as difficulty setting up the pump, please contact the Nutrition Company helpline or the Feed Company Nurse.

If you have any tube related problems like a dislodged feeding tube or blocked tube, please contact the Nutrition Nurse Specialist or the hospital department you have been advised to contact.

#### **Feeding Plan**

Patient Name:				
Start date:				
Feed name and total daily volume:				
Rate to set the feeding pump:				
Water:				
This feeding plan will provide:				
kcal				
g protein				
mL of fluid				

#### Notes:

- Flush tube with a 30mL to 60mL water before and after feeding and between bottles.
- Flush tube with water before and after EACH medication administered via the tube.
- Remain at an angle of 45° during feeding and for at least 30 minutes post feeding.
- Change giving sets and feed containers EVERY 24 HOURS.

#### Your NG Tube

This should be completed prior to your discharge home

Date NG tube inserted:

How placed? e.g. Bedside, Endscopically, Radiologically?

Type of tube inserted

Brand of tube used

Site place (left or right nostril)

NEX Measurement (Cm) (NEX - Nose, Ear, Xiphisternum is the measurement from the nose, to the earlobe and then to the lowest part of the sternum)

Measurement at nostril (cm)

Securement device

Problems or difficulties when tube placed?

Date tube is due to be changed

### Nasogastric tube checks record

Date	Time	pH result	Position check (cm) marking	Comments

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#### Useful contact numbers

Hospital Dietitians:

Hospital Department:

Community Dietitians:

Nutrition Nurse Specialists (8am-4pm):

Tel: 01865 740378

Bleep: 4132 via the Oxford University Hospitals switchboard on 0300 304 7777

Feed Delivery Company and Pump Helpline:

Abbott Nutrition 0800 0183 799

District Nurse:

Feed Company Nurse Contact card:

PINNT Support Group – Patients on Intravenous and Nasogastric Nutrition Therapy www.pinnt.com

#### Notes

Please use this page to write down any useful notes that will help you manage your tube feed.

#### **Further information**

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

Author: This leaflet has been produced by Registered Dietitians in conjunction with Nutrition Support Nurse Specialists.

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