

# TRUST POLICY FOR PAEDIATRIC ENTERAL FEEDING – Derby only

Reference Number	Version:		Status		Author:
POL-CL/3755/21	1		Final		Nicky Brett – Specialist Nurse
Version /	Version	Date	Author	Rea	ason
Amendment History	1	May 2021	Nicky Brett – Specialist Nurse	Ga Ga	ombining Naso- astric and astrostomy into a mplete policy
Intended Recipients	: Paediatri	c Nursing staff fro	om hospital and co	ommu	unity.
Training and Dissen update and pulling (	guidelines	together.		l in p	ractice. This is an
To be read in conju	nction with	n: NPSA alert 2007	7		
In consultation with	and Date:	Education tea	m. Dieticians ong	joing	
EIRA stage One	Con	pleted Yes			
stage Two	Con	npleted N/a			
Approving Body and	d Date App	oroved	Trust Delivery Group		
Date of Issue			May 2021		
Review Date and Frequency			May 2023		
Contact for Review			Nicky Brett – Specialist Nurse		
Executive Lead Signature			Executive Chief Nurse		

### Paediatric Enteral Feeding Policy – Derby only

### 1. Introduction

This policy has been created to facilitate the delivery of safe and effective care for paediatric patients who are to receive enteral feeding in the community setting (i.e. patients in their own homes, schools or respite care).

### **Definitions**

### **Enteral feeding**

Enteral nutrition is the provision of safe and effective nutritional support through the use of an enteral feeding device. It is generally required when a child is unable to meet their nutritional and/or hydration needs orally (GAIN, 2015).

### **Home Enteral Feeding (HEF)**

Patients receiving artificial nutrition support directly into their digestive system in primary care either in their own homes, school or respite care.

### Gastrostomy

A gastrostomy is a surgical opening through the skin of the abdomen to the stomach. A feeding device, such as a balloon gastrostomy button/ tube, PEG or nasogastric tube (NGT), is put into this opening so that feed can be delivered directly into the stomach bypassing the mouth and throat (GOSH, 2020).

### **Enteral feeding devices**

Nasogastric tube (NGT)- a narrow tube that is passed into the nose and down the oesophagus into the stomach (GAIN, 2015).

Gastrostomy button/ tube- A gastrostomy tube is a device which may resemble a catheter or a button (with a detachable extension). Both types of tube have a balloon on the tip which keeps them in the correct area and both are therefore suitable for long-term use (CIRSE, 2020).

PEG (percutaneous endoscopic gastrostomy)- gastrostomy tube is inserted percutaneously (through the skin) into the stomach via a small incision performed under local anaesthetic and positioned using an endoscope through the mouth (Karima et al, 2019).

CCN; Children's Community team (KITE Team)

### Registered nursing staff

- Will be aware of and comply with this guideline.
- Have a duty of care to ensure paediatric patients are receiving their enteral feeding as prescribed
- Must plan, implement and evaluate home enteral feeding care
- Will ensure that monitoring and documentation of home enteral feeding is undertaken according to the patients care plan and where action is required refer to specialist staff

### Paediatric HEF Dietician

- Will be aware of and comply with this guideline.
- Will assess and monitor patients in accordance with the NICE guidance
- Will document the findings of individualised patient assessments and make recommendations

- Will evaluate all prescribed feeding plans
- Will liaise with all relevant staff when there are changes to the regimen e.g. G.P.

### KITE specialist nurses

- Will be aware of and comply with this guideline.
- Will assess patients feeding tubes in accordance with the NICE guidelines
- Will troubleshoot any problems with feeding tubes in the community and will liaise with all relevant health care professionals

### 2. Main body of Policy

### **Equipment**

All paediatric patients who have had their feed initiated within Southern Derbyshire, will be discharged on the Homeward system if a home delivery service is required.

Homeward is the home delivery service used by both UHDB NHS Foundation Trust and local community hospitals. This contract is to provide the delivery and maintenance of home enteral feeding supplies.

Homeward will deliver (on a monthly basis):

- the feeding pump
- the feed container stand
- the giving sets
- the reservoir bags (if required)
- the feed

All Homeward pumps should be serviced on an annual basis.

### **Funding**

Within Southern Derbyshire the following arrangements for funding have been agreed:

- UHDB NHS Foundation Trust will fund the giving sets and feeding reservoirs (if required)
  of all paediatric patients who have enteral feeding initiated following referral to the Trust,
  and who reside in Southern Derbyshire.
- All patients are required to have a Derby Children's Hospital Paediatrician.
- The patient's GP is responsible for the provision of the feeds (via prescription FP10).
- GP surgeries are responsible for the provision and funding of items such as syringes. The CCN KITE team will organise this with local clinics.
- The CCN KITE team at Derby Children's Hospital are responsible for organising the provision and funding of gastrostomy devices, extension sets.

### **Equipment Failure**

- In the event of failure/malfunction of the pump the Homeward helpline should be contacted.
- The helpline is available on 0800 093 3672
   Mon-Fri; 8.00am 8.00pm, Sat 9.00am 1.00pm.

### Maintenance of enteral feeding equipment

Manufacturer's guidance should always be followed for each piece of equipment.

- Patient/carers should clean the feeding pump regularly following the manufacturer's recommendations.
- Giving sets should be changed every 24hrs unless instructed otherwise by the paediatric dietician.
- Syringes which are labelled 'single use only' should be disposed of after each use.
- Syringes which are **not** labelled 'single use only' should be used and cleaned as per the manufacturers' instructions.
- Extension tubes should be washed separately in warm soapy water, rinsed and stored in a clean, dry container.
- Unopened feeds should be stored off the floor in a cool, dry area. They should not be stacked against radiators, stored in cupboards that are warm or in outside storage rooms. Always ensure that stock is rotated with each delivery and check the expiry date.
- In schools and respite care, if more than one child/ young person requires enteral tube feeds, their prescription feed and equipment should be managed and stored separately and not interchanged.
- Please see further microbiological guidance for storing and administration of feeds (Appendix 1).

### Responsibility for equipment within the care setting.

- Within education and social care settings it is the responsibility of team leaders in charge
  to ensure that the equipment, feeds and medications supplied are fit for purpose and that
  there are systems in place to ensure this.
- Where equipment is shared between agencies, the checking of equipment on arrival and on departure should take place to ensure equipment is in working order. This will reduce the risk of being unable to perform a procedure. Replacements should be obtained if required.

NB. All use of medical equipment must be in line with local guidance within the Trusts Medical Device Policies and guidance given by manufacturers.

### **Training**

Note: Please use Home Enteral Feeding checklist and competency form – see Appendix 7

- Training for all aspects of care for patients receiving HEF is available from the Paediatric Dietician, Kite team and trained ward staff. It is tailored to meet the individual care needs of each patient.
- Pump training will be provided by the Homeward nurse. In certain circumstances, a nurse/dietician who has received pump trained will carry out pump training. Pump training can also be accessed online at <a href="http://www.nutriciaflocare.com/">http://www.nutriciaflocare.com/</a>. A certificate is produced at the end when it has been successfully completed.
- Training will be given to patients living in their own homes, prior to their discharge any relatives will also be trained as necessary. Families should contact the Kite Team to arrange this.
- Parents will be trained on how to administer medication via feeding tubes.

- Training for school nurses and staff/respite carers is available from the Children's Community Nursing Training Team CCN KITE and Training Team. Please Contact the CCN Kite team.
- All training is to be delivered by a registered nurse who is bound by the NMC Code of Conduct (2018).

### **Enteral Feeding considerations in community settings**

### Transporting children and young people whilst feeds are in progress

- The general guidance for this is <u>not</u> to transport a child/ young person whilst a feed is in progress. Wherever possible the person's position needs to remain constant to avoid risks of aspiration or vomiting.
- If a feed is in progress and the person needs to be moved to another area, the feed should be discontinued for as short a period as possible. On arrival the feed should be recommenced by the person in charge.
- In certain circumstances a feed <a href="may">may</a> require administering whilst the journey is in progress e.g. where the child/ young person is being transported for long periods of time. An individual risk assessment should be undertaken by the person in charge. The feed should only remain in progress if a trained staff member is available to supervise the person's transportation and feed administration throughout.
- Consent from the parent/carer or child/young person (as appropriate) should be obtained before transportation takes place.

### Individual risk assessment

- The behaviour of a child/ young person being fed can affect the feed toleration and risk of disconnection to equipment. The trained member of staff needs to take action to reduce these risks.
- Longer giving sets can assist with keeping the syringe away from the person during the feed (if using the gravity bolus technique). This will allow a safer feeding position for themselves and the child/ young person being fed.
- If during the feed the child/ young person becomes agitated or overly excited, the staff member/carer should consider the risks and discontinue the feed until he /she becomes more settled if appropriate.

### Overnight feeds and continuous feeds throughout the day

- When feeds are administered over a longer period of time through a pump (e.g. overnight) the feed volume should be recorded at regular intervals to ensure that there is no equipment failure and the correct volume of feed is being administered at the correct feed rate.
- Frequencies of checks required are to be appropriate to the individual's needs and setting.
- It is recommended that the person setting up the feed checks the pump thoroughly once the feed is set up and prior to leaving the child/young person.
- Feed checks should be recorded by staff in the patient's documentation.
- If the feed is disconnected during the administration time the tube should be flushed to avoid tube blockage.

• Ideally overnight feeding is not indicated unless other alternatives have been explored. Please discuss with the child's Paediatrician or dietitian.

### **General Assessment whilst administering feeds**

- Whilst a feed is being administered, it is important to regularly assess the person for any adverse signs as detailed in care plans.
- If the patient experiences breathing difficulties, vomits or becomes agitated, the feed should be stopped immediately.
- Always consult a registered nurse/doctor if this is unusual for the child/young person or child is unwell.

### **Patient safety**

- In all settings, feeding/medication regimes should be carefully written and undertaken in negotiation with the MDT involved in the delivery of care for the child/ young person. This should be updated annually or earlier when changes of care are implemented.
- Audit of enteral feeding in areas is essential to compliance with recommendations, to ensure safety and quality care.
- Audits should be conducted by the individual setting as agreed by area line manager.

### **Incident reporting**

- Any incident involving enteral feeding needs to be reported through the appropriate channels in place within the work area.
- Incidents involving enteral feeding may be as a result of a variety of factors which include:
  - Medical device incompatibility
  - Any risks to the patient/staff related to enteral feeding
  - Human error
  - Staff knowledge/competence
  - Medication administration errors may also be a possibility

### **Administration of Medication via enteral tubes**

### Points to remember when administering medication via an enteral feeding tube.

- Ensure that all medications to be given via an enteral feeding tube are prescribed to be given via this route.
- Ensure the medication is prescribed for the child/ young person and that all medication safety checks are performed before administration.
- Ensure all medication (as far as possible) is given in liquid form.
- Medications must be given separately, and the extension line flushed, with water, between each medication.
- No medication, unless instructed by a health care professional, should be added to the feed.

Enteral feeding tubes may be used for the administration of medication, frequently on an unlicensed basis. Information and choice on suitable drug preparations can be obtained from the local pharmacy.

### **Monitoring of the Patient**

Parent/carers should monitor the following aspects of enteral feeding, to aid the Children's community team (KITE) team/paediatric dietician to assess and review patients effectively and ensure they are meeting their individual goals. (See Appendix 2).

If you have any concerns regarding Home Enteral Feeding then please liaise with the Paediatric Dietician/ CCN (KITE) team and /or GP as appropriate.

### 3. References (including any links to NICE Guidance etc.)

Cardiovascular and interventional Radiological Society of Europe (2020) *Gastrostomy: What is a gastrostomy?* Available at: <a href="https://www.cirse.org/patients/ir-procedures/gastrostomy/#:~:text=Gastrostomy%20is%20a%20procedure%20in,are%20unable%20to%20swallow%20safely.">https://www.cirse.org/patients/ir-procedures/gastrostomy/#:~:text=Gastrostomy%20is%20a%20procedure%20in,are%20unable%20to%20swallow%20safely.</a>

Department of Health (2006) Essential steps to safe, clean care: Enteral feeding.

(GAIN) Guidelines and Audit Implementation Network (2015) *Guidelines for caring for an infant, child, or young person who requires enteral feeding.* Available at: https://rgia.org.uk/RQIA/files/4f/4f08bb34-7955-49ea-adf1-9de807d3da66.pdf

GOSH (2020) *Gastrostomy Care*. Available at: <a href="https://www.gosh.nhs.uk/medical-information/procedures-and-treatments/living-gastrostomy-feeding-device">https://www.gosh.nhs.uk/medical-information/procedures-and-treatments/living-gastrostomy-feeding-device</a>

Karima, F., et al (2019) Percutaneous endoscopic gastrostomy (PEG): a practical approach for long term management. *BMJ* 2019;364:k5311

NHS Improvements (2016) Patient Safety Alert: Nasogastric tube misplacement: continuing risk of death and severe harm. Available at:

https://improvement.nhs.uk/documents/194/Patient Safety Alert Stage 2 - NG\_tube\_resource\_set.pdf

NHS Improvements (2007) Patient Safety Alert: Promoting safer measurement and administration of liquid medicines via oral and other enteral routes. Available at: <a href="https://www.sps.nhs.uk/wp-content/uploads/2018/02/2007-NRLS-0408-Liquid-medicines-PSA-2007-03-28-v1.pdf">https://www.sps.nhs.uk/wp-content/uploads/2018/02/2007-NRLS-0408-Liquid-medicines-PSA-2007-03-28-v1.pdf</a>

NMC (2018) The Code: Professional standards of practice and behaviour for nurses, midwives and nursing associates. London: NMC.

### 4. Appendices

Appendix 1- Microbiological guidelines for enteral feeding

**Appendix 2-** Monitoring the patient

Appendix 3- Gastrostomy trouble shooting

Appendix 4- Stoma site infections

**Appendix 5-** What to do if a gastrostomy is displaced or comes out?

**Appendix 6-** Feed Related Complications

**Appendix 7-** Nasogastric feeding training checklist for parents/ carers

Appendix 8 - Procedure for administration of a gravity bolus feed using a NGT

Appendix 9 - Procedure for administration of a continuous feed using an NGT

Appendix 10 - Parent competency sign off sheet for nasogastric tube passing

Appendix 11- Gastrostomy training checklist for parents/ carers

Appendix 12 Procedure for replacement of a gastrostomy tube

**Appendix 13-** Measurement of gastrostomy stoma to insert correct gastrostomy button size

Appendix 14- Procedure for changing water in balloon gastrostomy buttons

**Appendix 15 -**Procedure for replacement of a balloon gastrostomy button

**Appendix 16-** Procedure for administration of a continuous feed using a gastrostomy button/ tube or PEG

**Appendix 17-** Procedure for administration of a gravity bolus feed using a gastrostomy button/ tube or PEG

**Appendix 18-** Changing water in the balloon

Appendix 19 – Planned Care

### Appendix 1- Microbiological guidelines for enteral feeding

Tube feeds are susceptible to contamination by numerous microbes including those transmitted by air, and by contact with hands and objects. Once contaminated, feeds kept at room temperature act as a growth medium enabling microbes to multiply rapidly.

Some microbes (e.g. E Coli, Salmonella and Staph aureus) can cause food poisoning resulting in a variety of unpleasant symptoms including nausea, vomiting, diarrhoea and abdominal pain.

The feeds used should be ready prepared and sterile until opened. It is therefore essential that once opened, the feeds are handled in such a way as to minimise the risk of contamination.

Administering a feed is regarded as a clean procedure. Before administering a feed wash your hands thoroughly and wear appropriate PPE.

- All equipment should be kept sealed in sterile packaging until used. Handling should be kept
  to a minimum. Once the screw cap has been removed, the silver seal must not be touched
  by hand. In the event of contamination the seal must be wiped with an alcohol impregnated
  swab.
- Use by or best before dates should be checked before opening any package and the product discarded if it is out of date.
- Feed reservoirs and giving sets should be labelled with the date and time of opening and feed be discarded after 24 hours.
- It is good practice to encourage carers to make up each bolus of powdered feed immediately before tube feeding at home.
- For ready-made feed/feed which is made up from powder decanted into a different reservoir, seek advice regarding hanging time from the dietician.
- Opened containers of feed may be stored in a refrigerator in between feeds for up to 24 hours or as instructed by the manufacturer on the labelling, so long as they are in their original container and are covered. Allow the feed to reach room temperature before use. Any feed that is unused after 24 hours must be discarded.
- Unopened feed should be stored in a cool, dry place, away from direct sunlight and radiators; it should not be stored in out buildings.
- It is recommended that enteral feeding tubes should be flushed using freshly drawn tap
  water. For those who are immuno-compromised or babies under the age of 1, cool boiled
  water or sterile water from a freshly opened container should be used (Department of
  Health, 2006). Ensure the area on which you are preparing the feed is cleaned appropriately
  before use.

## **Appendix 2-** Monitoring the patient

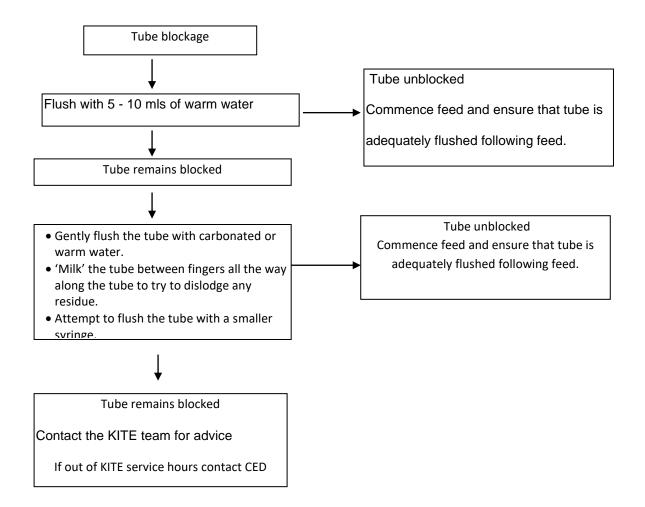
Parameter	Frequency	Rationale
Fluid balance	Daily	<ul> <li>To prevent under/over hydration</li> <li>To compare prescribed regimen with volume delivered</li> </ul>
Oral intake & swallowing ability	Daily if requested	To assess whether feeding regimen needs to be adjusted and assess safety of swallow
Weight	As requested by dietician	<ul><li>To assess adequacy of enteral feed/oral intake</li><li>Feed may need increasing/ decreasing</li></ul>
Bowels	Daily	To monitor bowel function and tolerance to feed
Biochemistry	When requested	e.g. U&Es to assess hydration status
Tolerance to feed	Daily	e.g. nausea/vomiting
Medication	Daily	To be aware of side effects of some drugs e.g. phenytoin interacts with enteral feeds and a feed break should be given 2 hours before and after administration of phenytoin
Gastrostomy site	Daily	<ul> <li>To observe for signs of infection/over granulation</li> <li>To ensure gastrostomy button fits securely</li> <li>To ensure external fixator is positioned correctly</li> </ul>
Condition of feeding tube	Daily	To observe for leaks/cracks in tube

### **Appendix 3-** Gastrostomy trouble shooting

### a) Gastrostomy tube blockage

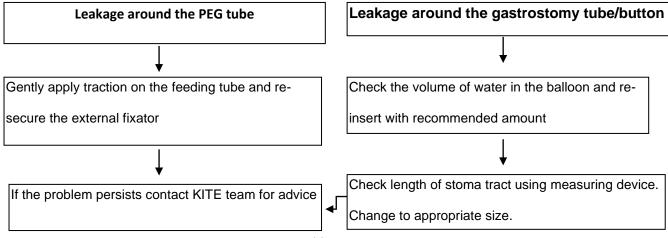
To prevent blockage occurring it is important to flush all tubes, with water on a daily basis if in use or not.

If however the tube becomes blocked the following measures can be taken:



### b) Leakage around gastrostomy devices

Leakage can occur the stoma tract has become enlarged or if the external fixator on a PEG device has not been fixed against the outer abdominal wall.



### **Appendix 4 - Stoma Site Infections**

### Localised redness

- PEG Check external fixation plate secure
- Button Check volume of water in the balloon. Increase water in the balloon in 1ml increments to obtain a tighter seal, according to manufacturer's guidance
- Consider Cavillon to protect the skin
- Observe and clean site twice daily with water.

### Localised redness with exudate from gastrostomy site

- Send swab to microbiology
- Clean twice daily with water
- Check swab result treat with antibiotics if indicated
- Consider topical treatment.

### Systemic Infection and/or Local Severe Cellulitis

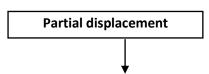
- Send swab to microbiology
- Review by Paediatrician
- Clean twice daily with water
- Treat with oral/intravenous antibiotics if indicated. First choice Flucloxacillin but review previous microbiology.

### **Granulation Tissue around Gastrostomy Site**

- Check gastrostomy device fits securely
- If no inflammation or exudate present, consider using Hyrdrocortisone 1% cream.
- If no inflammation or exudate present, consider Maxitrol eye ointment
- If inflammation and exudate present, consider using Timodine cream.
- If excessive over granulation tissue present, consider using silver nitrate. If no improvement, discuss with surgeon.

### **Appendix 5-** What to do if a gastrostomy is displaced or comes out?

### A) Balloon gastrostomy



If the balloon has burst and the tube is partially displaced from the tract:

- Carefully and gently advance the tube into the tract and secure the gastrostomy with some adhesive tape.
- Do not use until replaced with a new gastrostomy tube and the position checked. Contact the KITE team for a replacement tube.
- If you have been trained to insert balloon gastrostomies insert new tube as procedure

Total displacement

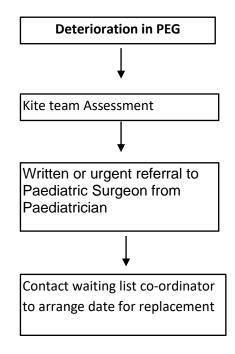
If the balloon gastrostomy has fallen out and you are not trained to replace gastrostomies please contact the KITE team between 8am and 6pm, outside of these hours bring the child to CED.

The balloon gastrostomy should be replaced in 1- 2 hours to prevent the stoma closing.

If unable to advance the tube:

- Do not force it into the tract.
- Secure the tube with adhesive tape
- Contact the KITE team between 8am and 6pm, outside of these hours bring child to CED

### B) PEG





If in a hospital setting inform the nurse in charge and contact medical and surgical teams for urgent review and plan.

If in the community setting take the child/ young person to the nearest ED or CED

# **Appendix 6-** Feed Related Complications

Problem	Cause	Prevention
Nausea, vomiting,     abdominal     distension	Rapid rate of feed infusion	<ul> <li>Initiate feeding at a lower rate and increase as patient tolerates.</li> </ul>
	Gastric stasis	Assess gastric residual volume: consider anti-emetics or pro-kinetics
	• Constipation	Investigate & treat cause of constipation (see advice for constipation)
	Side effects of medication	Review medications
	Contamination of feed	Ensure clean technique adopted when preparing and changing the feed
	Gut infection	Ensure adequate fluid intake and seek medical advice
2. Diarrhoea	Antibiotic associated diarrhoea	Benefits of antibiotics to be considered and discussed with the Consultant Microbiologist/Doctor
	Hyperosmolar feed	Ask dietician to consider changing to isotonic feed
	Feed too cold	Ensure that the feed is at room temperature prior to administration. DO NOT HEAT A TUBE FEED.
	<ul> <li>Side effect of drugs therapy e.g. pro- kinetics; drugs containing sorbitol; overuse of laxatives</li> </ul>	Review the drug therapy
	Infective cause	<ul> <li>Send stool sample for cultures and treat appropriately. Consider anti-diarrhoeal agent if no infection</li> </ul>
	Rapid infusion of feed	<ul> <li>Give boluses more slowly; ask dietician to review feed rate</li> <li>Ask dietician to consider changing to isotonic feed</li> </ul>
	Overflow diarrhoea	Treat constipation
	Too much/too little fibre in feed	Ask dietician to review fibre content of feed
	<ul> <li>Pre-existing bowel disorders e.g. Crohn's Disease</li> </ul>	
3. Constipation	Side effects of medication/over-use	Review medications

Problem	Cause	Prevention
	of anti-diarrhoeal agents	
	Inadequate fluid intake	Ensure feed & fluid is being administered as per regimen. Give extra fluid if required or discuss with dietician.
	Patient inactivity	Encourage physical activity if possible
	Too much/too little dietary fibre	Ask dietician to review fibre content of feed
	Changes in gut motility, medical condition	Consider use of laxatives/enemas
4. Weight loss	Calorific content of feed insufficient	Ask dietician to review
	Patient not receiving recommended feed volume	Ensure correct feeding regimen is being followed. Ask dietician to review if necessary
	Malabsorption	Ask dietician to review feeding regimen
5. Weight gain	Inactivity	Ask dietician to review feeding regimen
	Calorific content of feed too high	Ask dietician to review feeding regimen
	Patient has commenced oral intake	Ask dietician to review feeding regimen
	Oedema (if rapid weight gain)	Refer to medical review
6. Aspiration/ reflux	<ul> <li>Incorrect positioning of the patient during feeding and within an hour of discontinuing the feed</li> </ul>	<ul> <li>Ensure that patients are positioned at a 30°to 40° angle Consider the use of proton pump inhibitors</li> </ul>
	Delayed gastric emptying/small stomach capacity resulting in large gastric residuals	Consider the use of pro-kinetic agents to promote gastric motility
	Decreased conscious level;     depressed cough or gag reflex;     aspiration of oral intake of excessive saliva production	Review oral intake; consider placing NBM & referral to Speech & Language     Therapist; try hyoscine patches to reduce saliva production
7. Concentrated urine	Inadequate fluid volume administered	Ensure recommended fluid volume is administered. Request dietician to review recommended fluid volume if necessary
	Oedema/Renal Failure	Refer for medical review

# **Appendix 7**- Nasogastric Feeding – training checklist for parents/carers

# Page 1 of 2

Patient's Sticker	Parent/Carer's Name:

Please sign and date when discussed	Date/ Time	Print Name/ Signature
Understanding of why tube feeding is necessary		
Reason could include  Insufficient nutritional intake/weight loss /faltering growth.  Unable to tolerate oral diet – aspiration, poor co-ordination of swallow.  Requires high calorie feed – i.e. cardiac abnormality.  Children refuse/unable to take oral medication  Principles of clean handling procedure  Correct hand hygiene		
<ul> <li>Wash hands before giving feed.</li> <li>Demonstrate cleaning of feed preparation area using detergent and clean cloth.</li> <li>Correct 'no' touch technique.</li> </ul>		
<ul> <li>Teach parents importance of correct tube position in stomach and potential dangers.</li> <li>Demonstrates tube is in the stomach, by testing stomach aspirate using PH paper.</li> <li>Document PH and NEX. The measurement of the tube at the nose should also be recorded. This is the NEX length; NEX = Nose, Ear, Xiphisternum</li> <li>The Ph should be 1-5.5. DO NOT USE the tube if it is above 5.5. Ask for help.</li> <li>Awareness of how milk and medication can affect the PH of the stomach contents</li> <li>Demonstrates ability to feed via NG tube using gravity.</li> <li>Awareness of best position for feeding – in chair 45° or semi-prone in bed.</li> <li>The feed should take 15-20 minutes to administer to avoid vomiting and "dumping syndrome".</li> <li>After feed or medications flush with water to avoid blockage.</li> <li>Awareness of changing the disposable equipment every 24 hours.</li> <li>Safely administer medication</li> <li>NEVER PASS an NG tube unless you have been taught supervised and passed by a registered nurse.</li> <li>DO NOT ALLOW others to use this tube unless they have had the required training.</li> <li>4. Troubleshooting – Know the correct procedure in the event of:</li> </ul>		
<ul> <li>Nasogastric Tube blockage.</li> <li>Unable to get aspirate to check position.</li> <li>Equipment malfunction.</li> </ul>		

<ul> <li>Gastro intestinal disturbances</li> <li>Inadvertent tube removal</li> <li>Changes in weight.</li> </ul>	
<ul> <li>Feeding Regimen</li> <li>Understands the feeding regimen.</li> <li>Contact the dietician with any queries</li> <li>Regarding the feed or pump.</li> </ul>	

# Nasogastric Feeding – training checklist for parents/carers Cont'd Page 2 of 2

Patient's Sticker	Parent/Carer's Name:

Please sign and date when discussed	Date/ Time	Print Name/ Signature
<ul> <li>6. Feed and Equipment</li> <li>Demonstrates correct checking of feed, date of expiry and importance of correct storage</li> <li>Syringes are single patient use only and can be washed and air dried in patient's home and community setting.</li> <li>KITE team will organise supplies that must be collected.</li> <li>Make sure families are aware of how to order feeds, and monitor stock levels to prevent wastage.</li> </ul>		
<ul> <li>7. Operation of the Pump</li> <li>Carers/patient aware of the pump features.</li> <li>Demonstrates correct connection of the feeding set to the pump.</li> <li>Advise of the need for regular checks when the pump is connected to a NGT.</li> <li>Inserting giving set into pump.</li> <li>Set rate and volume.</li> <li>Explain and show awareness of different pump alarms.</li> <li>Advise parents about on line support: www.nutriciaflocare.com</li> </ul>		

# Nasogastric Feeding - Competency Sheet

To be completed for all carers administering enteral feeds via Nasogastric tube at home

SUPERVISED PRACTICE			Performed		Observed
		1	2	3	(Date, Signature, Print Name
hecking position of t	tube using PH paper.				
solus feed (gravity m	ethod)				
Bolus feed (via pump	)				
Overnight feed					
administering medica	ation via				
upe/gastrostomy 					
I certify the	at I am happy to carr ining if I have any co Signature				
I certify the further tra	ining if I have any co			ure or my co	ompetency.
further tra  Parent/carer  I certify the	Signature  Date	above has succ	g this proced	lure or my co	ompetency.

### **Appendix 8**- Procedure for administration of a gravity bolus feed using a NGT

### <u>Aim</u>

To safely administer a bolus feed to a child using a gastrostomy device.

### **Equipment**

- Feeding regimen (dietician feed plan)
- Enteral feed (milk) prescribed by dietician
- 60ml enteral syringe x2 (20ml syringe can be used for aspirating if x2 60ml syringes not available)
- pH strips (CE marked for human use)
- Freshly drawn tap water (sterile water if patient immuno-compromised or child under 1 year) NICE 2003.

### NB-

NHS Improvement Patient safety alert March 2007- All syringes and giving sets for enteral feeding are purple and specifically designed for enteral feeding only

NHS Improvement Patient safety alert July 2016- Nasogastric tube misplacement: continuing risk of death and severe harm

Action	Rationale
Explain the procedure to child, parents/carers.	To minimise anxiety and educate child, parents/carers
Position the child sitting at a 45° angle or in a position comfortable to the child	To reduce the risk of reflux/vomiting during the feed
Wash hands and wear appropriate PPE	To reduce risk of microbial contamination
Open the cap on NGT and attach the 60ml or 20 ml syringe to the tube and gently use the plunger to drawn back stomach contents (minimum 0.5-1ml required)	To access the tube
Put the aspirate onto the pH strip, covering all squares with the fluid, check the pH against the container. The pH needs to be 1-5.5 for the NGT to be used.	To check the stomach aspirate pH to ensure correct and safe position of the NGT.
NOTE- if the pH is 5/5.5 a second competent person needs to double check the tube placement pH.	To ensure correct tube placement and patient safety.
Remove plunger from the syringe and attach to gastrostomy tube.	To enable the gravity bolus technique to be used
Flush with water (as feeding regimen states), using gravity bolus technique	To ensure tubing is not blocked and is safe to use/ working appropriately
Pour the required amount of feed into the syringe and follow the feed to run in slowly. The feed should take approx. 20-30 minutes.	Rushing feed can cause nausea/vomiting/ reflux/ dumping syndrome
If the feed is running too slowly, lift the syringe higher.	The higher the syringe the greater the force of gravity,

	so the feed will run through quicker.
If the feed is running too quickly, lower the syringe (not lower than the stomach).	The lower the syringe the less the force of gravity, so the feed will run through slower.
If more than one syringe full is required at a time, use clamp to ensure syringe kept full of milk	To prevent air from entering the stomach
When the feed has finished, flush with water (as regimen states), disconnect syringe from tube and replace end cap.	To prevent blockage of gastrostomy
If the syringe is single use only it should be disposed of after each gravity bolus feed. (NPSA 2007).	To adhere to waste disposal and infection control procedures.
Record the whole procedure on the child/ young person's feed/ nutrition chart or in the medical/ nursing notes.	To maintain accurate record of feed intake in the child/ young person's notes.

### Appendix 9- Procedure for administration of a continuous feed using an NGT

### Aim

To safely administer a continuous feed via an NGT.

### **Equipment**

- Feeding regimen (dietician feed plan)
- Enteral feed (milk) prescribed by dietician.
- Flocare bag (if required due to milk not being ready made)
- Florcare pump giving set
- Flocare pump and stand
- 60ml enteral syringe x2 (20ml syringe can be used for aspirating if x2 60ml syringes not available)
- pH strips (CE marked for human use)
- Freshly drawn tap water (sterile water if patient immuno-compromised or child under 1 year) NICE 2003.

### NB-

NHS Improvement Patient safety alert March 2007- All syringes and giving sets for enteral feeding are purple and specifically designed for enteral feeding only

NHS Improvement Patient safety alert July 2016- Nasogastric tube misplacement: continuing risk of death and severe harm

Action	Rationale
Explain the procedure to the child, parents / carer.	To minimise anxiety and educate child, parents / carers
Position the child sitting at a 45° angle or in a position found to be comfortable to the child.	To reduce risk of reflux / vomiting and ensure the child's comfort during the feed
Wash hands and wear appropriate PPE	To reduce the risk of cross infection
Open the cap on NGT and attach the 60ml or 20 ml syringe to the tube and gently use the plunger to drawn back stomach contents (minimum 0.5-1ml required)	To access the tube
Put the aspirate onto the pH strip, covering all squares with the fluid, check the pH against the container. The pH needs to be 1-5.5 for the NGT to be used.	To check the stomach aspirate pH to ensure correct and safe position of the NGT.
NOTE- if the pH is 5/5.5 a second competent person needs to double check the tube placement pH.	To ensure correct tube placement and patient safety.
Flush with water (as feeding regimen states), using gravity bolus technique	To ensure tubing is not blocked and is safe to use/ working appropriately
Connect the feed container to the giving set.	So the milk can run through the giving set correctly
Insert the soft part of the giving set into the pump –	This connects the giving set to the pump to enable the

carefully and close the lid.	feed to be administrated.
Turn on the pump using the ON/OFF button and prime the giving set by using the "FILL SET" button on the pump.	To remove air from the line
Programme the pump 'DOSE=VOL' and 'ml/hour' as per the	To ensure the correct feed is given safely to the child/
feeding regime. Connect the giving set to the gastrostomy tube.	young person
Start the feed by pressing 'START/STOP' (open the clamp on the giving set, if there is one), observing the flow for a few minutes.	To ensure flow is maintained correctly and no issues.
When the feed has been administered, disconnect the feed	To prevent blockage of the tube
giving set from the gastrostomy device and give the post feed water flush (as directed on the feeding regime).	
Replace the cap back on the gastrostomy device	To close the device tubing
If the milk and giving set are to be used again, label with the date	To adhere to manufacturer's correct and safe storage
and time opened and the child/ young person's name and store in the fridge.	guidance
	To adhere to the correct waste disposal procedures.
If the feed and giving set are now finished with discard in the appropriate waste bin.	
Record feed volume on fluid balance chart or on the child/ young person's feeding/ nutrition chart.	To maintain accurate record of feed intake

# PASSING A NASOGASTRIC TUBE COMPETENCY

DATE OF SUPERVISED	PARENT/CARER//STAFF BEING ASSESSED	NURSE ASSESSING		
PRACTICE		Once completed please remove and file in KITE notes		
1.	Print name:	Print name:		
1.	Signature:	Signature:		
2.	Print name:	Print name:		
2.	Signature:	Signature:		
3.	Print name:	Print name:		
J.	Signature:	Signature:		
I certify that I have passed 3 nasogastric tubes under supervision correctly. I am confident to undertake this procedure unsupervised.				
I will seek further training if I have any concerns regarding this procedure or my competency to carry this out.				
Signed( Parent/Care	er/Staff): Print name:	Date:		
Signed (Nurse)	Print name:	Date:		

# **Appendix 11-** Gastrostomy training checklist for parents/ carers

### Page 1 of 3

Parent/Carer's Name:

Please sign and date when discussed	Date/	Print Name
	Time	&Signature
Understanding of why tube feeding is necessary     Reasons could include:		
<ul> <li>Insufficient nutritional intake / weight loss / faltering growth.</li> <li>Unable to tolerate oral diet – aspiration co-ordination of swallow. Aspiration.</li> <li>Requires high calorie feed – i.e. cardiac abnormality.</li> </ul>		
<ul> <li>Principles of clean handling procedure</li> <li>Correct hand hygiene - wash hands before giving feed.</li> <li>Demonstrate cleaning of feed preparation area using detergent and clean cloth.</li> <li>Correct 'none' touch technique.</li> </ul>		
<ul> <li>Gastrostomy</li> <li>Advise parents that if any of the following occur in the first few days following discharge they should stop feeding and bring their child to Children's A and E:         <ul> <li>Their child is in severe pain immediately after a feed or medicine is given through the gastrostomy.</li> <li>There is any bleeding from the gastrostomy.</li> <li>The feed or stomach contents are leaking from the gastrostomy.</li> </ul> </li> <li>Note the position of the gastrostomy device:         <ul> <li>PEG - Note the measurement on the tube nearest the skin, and document this (cm)</li> </ul> </li> </ul>		
<b>Button</b> - should be lying flush with the skin. Document the size of shaft (eg FR and length a time of discharge and document	t	
<ul> <li>Carer/patient has an understanding of the importance and is able to demonstrate the daily skin care. Once healed to be cleaned daily with hot soapy water.</li> <li>The BUTTON and PEG should be rotated daily and PEG inserted weekly (1cm) to avoid buried bumper syndrome.</li> <li>Contact the Kite Team if the site becomes red, sore or develops a discharge or any other problems,</li> <li>Discuss over granulation and how to recognise it.</li> </ul>		

Pa	tient's Sticker:	Parent/Carer's Name:		
				Print Name
			Date/	&
Ple	ease sign and date when discussed		_	œ
	· ·		Time	Signature
				0.8
4.	Principles of Feed administration			
	• Awareness of best position for feeding – in chair 45° or sen	ni-prone in bed.		
	• Demonstrates ability to feed via the gastrostomy tube usin	g gravity.		
	• The feed should take 15-20 minutes to administer to avoid	vomiting and "dumping		
	syndrome".			
	<ul> <li>After feed or medication flush with water</li> </ul>			
	<ul> <li>Awareness of changing the disposable equipment every 24</li> </ul>	hours.		
5.	Feeding Regimen			
	• Understands the feeding regimen and how to contact the o	dietician with any queries regarding		
	the feed or pump.			
6.	Operation of the Pump			
	Carers/patient aware of the pump features.			
	Demonstrates correct connection of the feeding set to the	numn		
	<ul> <li>Inserting giving set into pump and setting rate and volume.</li> </ul>	· · ·		
	<ul> <li>Explain and show awareness of different pump alarms.</li> </ul>			
	<ul> <li>Advise parents about on line support: <a href="https://www.nutriciaflocare">www.nutriciaflocare</a></li> </ul>	2 com		
7.	Feed and Equipment			
	Demonstrates correct checking of feed, date of expiry and	importance of correct storage		
	• Syringes are single patient use only and can be washed and	-		
	community setting. Syringes not labelled 'single use only' s	-		
	manufacturer's instructions.			
	• Make sure families are aware of how to order feeds, and m	nonitor stock levels to prevent		
	wastage.			
8.	,			
	Be aware of signs of infection:			
	- Redness			
	- Swelling			
	- Pain/soreness			
	<ul><li>Unpleasant smell</li><li>Discharge from site</li></ul>			
	<ul><li>Discharge from site</li><li>Child is unwell/high temperature</li></ul>			
	<ul> <li>Your child's gastrostomy will take a few weeks to heal; how</li> </ul>	vever if you are concerned about		
	any of the above symptoms, please contact the KITE team (			
	any or the above symptoms, pieuse contact the Kill team	010007		

# Gastrostomy Feeding - Competency Sheet

To be completed for all carers administering enteral feeds via Nasogastric tube at home

SUPERVISED PRACTICE			Performed	Observed	
		1	2	3	(Date, Signature, Print Nan
thecking position of t	tube using PH paper.				
Bolus feed (gravity mo	ethod)				
Bolus feed (via pump)	)				
Overnight feed					
Administering medica	ation via				
ube/gastrostomy					
· ·	at I am happy to carr ining if I have any co Signature	-			
further tra	ining if I have any co	-		ure or my co	ompetency.
further tra  Parent/carer  I certify that	Signature  Date	above has suc	ng this proced	lure or my co	ompetency.
further tra  Parent/carer  I certify that	Signature  Date  at the person named	above has suc	ng this proced	lure or my co	ompetency.  ne  cocedures identified, and has

### Appendix 12- Procedure for replacement of a gastrostomy tube

### <u>Aim</u>

To safely replace Gastrostomy Tube. The tube should be replaced as soon as possible, within 1-2 hours, otherwise the stoma will close.

### **Equipment**

Appropriate size of Gastrostomy Tube
Dressing Pack
10 ml Syringe x 2
10 ml Ampoule Sterile Water for injection
Water Soluble Lubricant
pH paper

Action		Rationale
1.	Explain the procedure to the child and parents / carer.	To minimise anxiety and educate child, parents / carer.
2.	Position the child comfortably on his/her back.	To ensure the child's comfort
3.	Provide appropriate distraction techniques.	To divert child's attention and minimise anxiety.
4.	Wash and dry hands. Open dressing pack, Gastrostomy tube, syringes, water soluble lubricant and ampoule of sterile water	To reduce the risk of cross infection. To prepare equipment necessary for procedure
5.	Remove existing Gastrostomy tube if necessary. Attach 10 ml syringe to balloon port and remove fluid, gently withdraw tube.	To allow insertion of replacement Gastrostomy tube.
6.	Put on gloves and draw up the required amount of sterile water for insertion into the balloon. (Follow manufacturer's instructions).	
7.	Slide the secur-lok ring to the top of the tube.	To allow insertion of the Gastrostomy tube
8.	Test the balloon by inflating it with sterile water, it should be round and it should not leak.	To detect any imperfections prior to insertion.
9.	Deflate the balloon	To enable insertion of Gastrostomy tube.
10.	Lubricate the tip of the tube with water soluble lubricant and gently insert into the stomach approximately 1½ inches. (N.B. Do not use products which contain oil or petroleum jelly as these will corrode the silicone).	Ease insertion of Gastrostomy tube
11.	Inflate the balloon with the required amount of sterile water. (Follow Manufacturer's instructions) Gently pull the balloon up against the Gastric Mucosa.	To prevent dislodgement of tube and ensure a snug fit.
12.	Slide the secur-lock down into place. The ring should float just above the skin. DO NOT USE A CLAMP ON THE TUBE.	To prevent migration of Gastrostomy tube
13.	Check the position of the Gastrostomy tube using pH paper	To ensure Gastrostomy tube positioned in the stomach
14.	Discard equipment, remove gloves, wash and dry hands.	To reduce risk of cross infection

### Appendix 13- Measurement of gastrostomy stoma to insert correct gastrostomy button size

### <u>Aim</u>

To select the correct size balloon gastrostomy button to ensure the patients comfort and safety.

### **Equipment**

- •Stoma Measuring Device
- Appropriate Size Gastrostomy tube / button
- Dressing Pack
- Non-sterile Gloves
- •10 ml syringes x 2
- •10 ml ampoule of sterile water for injection x 1
- Sachet of normasol lubricant

Action		Rationale	
1.	Explain the procedure to the child and educate parents / carer.	To minimise anxiety and child, parents / carers	
2.	Position the child comfortably on their back	To ensure child's comfort	
3.	Provide appropriate distraction techniques	To divert child's attention and minimise anxiety	
4.	Wash hands and wear appropriate PPE	To reduce the risk of cross infection.	
5.	Remove existing gastrostomy tube/button if necessary. Attach 10 ml syringe to the balloon port and remove fluid, then gently withdraw tube / button.	To allow measurement of Stoma	
6.	Wash and dry hands, put on a clean pair of non-sterile gloves	To reduce the risk of cross infection	
7.	Lubricate the tip of the measuring device with water soluble lubricant	To ease insertion of Stoma measuring device	
8.	Gently insert the measuring device through the Stoma into the stomach.  DO NOT USE FORCE.		
9.	Inflate the balloon with 2.5 or 5 ml of water (depending on device)	To prevent dislodgement of device during measurement	
10.	Pull the device outward until the balloon is against the inside of the stomach wall	To ensure snug, comfortable	
11.	Slide the plastic disc down to the skin and read the number above the plastic disc	To ensure correct measurement of Stoma length obtained	
12.	Repeat steps 10 and 11 with the patient sat upright		
13.	An average of the two measurements is the correct length for the patient		
14.	Deflate the balloon and remove the device	To allow insertion of replacement gastrostomy button / tube	

15.	Refer to procedure for insertion of gastrostomy tube/button	
16.	Record Stoma size in patients notes	

### Appendix 14- Procedure for changing water in balloon gastrostomy buttons

### <u>Aim</u>

To maintain the balloon integrity the balloon water should be changed weekly.

### **Equipment Required**

- •2 x 5ml syringes.
- Water Maximum balloon volume is 10mls, 5mls for most sizes and 2.5mls for MINI buttons. Refer to manufacturers guidance for the correct volume required.

Action		Rationale	
1.	Wash hands, wear appropriate PPE and prepare equipment/child for the procedure.	Minimise risk of microbial contamination	
	equipment, emailed and processing.	Minimise anxiety and educate child parents/carer	
2.	Attach one of the syringes to the inflation valve and withdraw the water from the balloon whilst holding	To remove the old water from the balloon	
	the device in place.	Hold the device in place so it does not come out	
	·	once balloon deflated	
3.	Re - inflate the balloon with correct amount of	To re secure the balloon gastrostomy in place	
	sterile water		
4.	Gently pull the button back until resistance is felt to		
	check button secure.		
5.	Document the procedure in the child/ young	To ensure child/ young person's care plan is up to	
	person's medical/ nursing notes.	date and care is documented as per requirement	

### NOTE- IF NO WATER IS OBTAINED FROM THE BALLOON

- 1. Ensure you have a good seal on the syringe and valve.
- 2. Insert 5mls or 2.5mls (depending on device) of water into the balloon and try to draw it back out, if there is still no water the balloon has probably burst and needs replacing.

If you require any further information please contact the Kite Team.

### Appendix 15 - Procedure for replacement of a balloon gastrostomy button

### <u>AIM</u>

To safely replace a balloon gastrostomy button. The button should be replaced as soon as possible, within 1-2 hours, otherwise the stoma site will close.

### **EQUIPMENT**

- Appropriate size balloon gastrostomy button
- Dressing pack
- 5ml luer slip syringe x 2
- 10ml Ampoule sterile water or cooled boiled water x 1
- Water soluble lubricant
- pH strips

	Action	Rationale
1.	Explain the procedure to the child and parents/carer.	To minimise anxiety and educate child, parents/carer.
2.	Position the child comfortably on his/her back	To ensure the child's comfort
3.	Provide appropriate distraction techniques.	To divert child's attention and minimise anxiety
4.	Wash and dry hands and wear appropriate PPE. Open dressing pack, gastrostomy button, syringes, water soluble lubricant and ampoule of sterile water.	To prepare equipment for sterile procedure
5.	Put on gloves and draw up the required amount of sterile water for insertion into the balloon (5mls unless directed otherwise).	
6.	Test the balloon, on the new gastrostomy, by inflating it with sterile water, it should be round and it should not leak.	To detect any imperfections prior to insertion.
7.	Deflate the balloon	To enable insertion of the balloon gastrostomy button
8.	Remove existing gastrostomy button if necessary. Attach 5ml syringe to balloon port and remove fluid, gently withdraw button	To allow displacement of the balloon gastrostomy button
9.	Gently guide the new tube into the stoma. Insert the tube all the way until the gastrostomy button is flat against the skin.	To insert the new balloon gastrostomy into the stoma site
10.	Hold the button in place and inflate the balloon with 5mls of sterile water. Gently pull button up to check secure fit. Never fill the balloon with more than 10mls of sterile water.	To secure the new gastrostomy in place  To prevent dislodgement of gastrostomy button.
11.	Check position of gastrostomy button by aspirating stomach contents out of the stomach via the extension and syringe.	To ensure the balloon gastrostomy button is positioned in the stomach

	Test the aspirate on pH paper (CE marked for human use)	
:	12. Discard equipment, remove gloves, wash and dry hands	To reduce the risk of cross infection
-	<ol> <li>Document procedure and all other relevant information in the child/ young person's medical/ nursing notes.</li> </ol>	To maintain correct and accurate documentation of care provided and keep the child's care plan up to date.

# Appendix 16- Procedure for administration of a continuous feed using a gastrostomy button/ tube or PEG

### Aim

To safely administer a continuous feed via a gastrostomy tube.

### **Equipment**

- Feeding regimen (dietician feed plan)
- Enteral feed (milk) prescribed by dietician.
- Flocare bag (if required due to milk not being ready made)
- Florcare pump giving set
- Flocare pump and stand
- 60 ml enteral syringe
- Freshly drawn tap water (sterile water if patient immuno-compromised or child under 1 year) NICE 2003.

# NPSA Alert March 2007- All syringes and giving sets for enteral feeding are purple and specifically designed for enteral feeding only

	Action	Rationale
1.	Explain the procedure to the child, parents / carer.	To minimise anxiety and educate child, parents / carers
2.	Position the child sitting at a 45° angle or in a position found to be comfortable to the child.	To reduce risk of reflux / vomiting and ensure the child's comfort during the feed
3.	Wash hands and wear appropriate PPE	To reduce the risk of cross infection
4.	Open the cap of the gastrostomy device.	To access the tube
	Give the pre feed water flush (as directed on the feeding regime).	To ensure tubing is not blocked and is safe to use/ working appropriately
	NOTE- If using a balloon gastrostomy button, prime the extension set with water, before connecting to button and flushing.	To prevent air from entering the stomach and causing symptoms of excess wind, stomach cramps, flatulence, nausea, vomiting or refux
5.	Connect the feed container to the giving set.	So the milk can run through the giving set correctly
car	Insert the soft part of the giving set into the pump – efully and close the lid.	This connects the giving set to the pump to enable the feed to be administrated.
6.	Turn on the pump using the ON/OFF button and prime the giving set by using the "FILL SET" button on the pump.	To remove air from the line

7.	Programme the pump 'DOSE=VOL' and 'ml/hour' as per the	To ensure the correct feed is given safely to the child/
	feeding regime.	young person
8.	Connect the giving set to the gastrostomy tube.	
9.	Start the feed by pressing 'START/STOP' (open the clamp	To ensure flow is maintained correctly and no issues.
	on the giving set, if there is one), observing the flow for a	
	few minutes.	
10.	When the feed has been administered, disconnect the feed	To prevent blockage of the tube
	giving set from the gastrostomy device and give the post	
	feed water flush (as directed on the feeding regime).	
11.	Replace the cap back on the gastrostomy device	To close the device tubing
12.	If the milk and giving set are to be used again, label with	To adhere to manufacturer's correct and safe storage
	the date and time opened and the child/ young person's	guidance
	name and store in the fridge.	
		To adhere to the correct waste disposal procedures.
If the	e feed and giving set are now finished with discard in the	
appr	opriate waste bin.	
13.	Record feed volume on fluid balance chart or on the child/	To maintain accurate record of feed intake
	young person's feeding/ nutrition chart.	

# Appendix 17- Procedure for administration of a gravity bolus feed using a gastrostomy button/ tube or PEG

### <u>Aim</u>

To safely administer a bolus feed to a child using a gastrostomy device.

### **Equipment**

- Feeding regimen (dietician feed plan)
- Enteral feed (milk) prescribed by dietician
- 60ml enteral syringe.
- Freshly drawn tap water (sterile water if patient immuno compromised or child under 1 year) NICE 2003.

# NPSA Alert March 2007- All syringes and giving sets for enteral feeding are purple and specifically designed for enteral feeding only

Action	Rationale
Explain the procedure to child, parents/carers.	To minimise anxiety and educate child, parents/carers
Position the child sitting at a 45° angle or in a position comfortable to the child	To reduce the risk of reflux/vomiting during the feed
Wash hands and wear appropriate PPE	To reduce risk of microbial contamination
Open the cap on gastrostomy.	To access the tube
Remove plunger from the syringe and attach to gastrostomy tube.  Flush with water (as feeding regimen states), using gravity bolus technique.	To enable the gravity bolus technique to be used  To ensure tubing is not blocked and is safe to use/ working appropriately
NOTE- If using a balloon gastrostomy button, prime the extension set with water, before connecting to button and flushing.	To prevent air from entering the stomach and causing symptoms of excess wind, stomach cramps, flatulence, nausea, vomiting or refux
Pour the required amount of feed into the syringe and follow the feed to run in slowly. The feed should take approx. 20-30 minutes.	Rushing feed can cause nausea/vomiting/ reflux/ dumping syndrome
If the feed is running too slowly, lift the syringe higher.	The higher the syringe the greater the force of gravity, so the feed will run through quicker.
If the feed is running too quickly, lower the syringe (not lower than the stomach).	The lower the syringe the less the force of gravity, so the feed will run through slower.

If more than one syringe full is required at a time, use clamp to ensure syringe kept full of milk	To prevent air from entering the stomach
When the feed has finished, flush with water (as regimen states), disconnect extension set and replace end cap.	To prevent blockage of gastrostomy
If the syringe is single use only it should be disposed of after each gravity bolus feed. (NPSA 2007).	To adhere to waste disposal and infection control procedures.
Record feed volume on fluid balance chart or on the child/ young person's feeding/ nutrition chart.	To maintain accurate record of feed intake in the child/ young person's notes.

### Appendix 18

Date of supervised practice	Parent/carer/staff being assessed	Nurse assessing
1.	Print name:	Print name:
	Signature:	Signature:
2.	Print name:	Print name:
	Signature:	Signature:

Competency 1 - Changing the water in the balloon

### Competency 2 - Changing a button – low profile Gastrostomy device

Date of supervised practice	Parent/carer being assessed	Nurse assessing
1. (On mannequin)	Print name:	Print name:
	Signature:	Signature:
2.	Print name:	Print name:
	Signature:	Signature:

I certify that I have completed the supervised care tasks detailed above and I am confident to undertake these procedures unsupervised. I will seek further training if I have any concerns regarding this procedure or my competency.

Signed( Parent/Carer/Staff):	Print name:	Date:	Date:	
Signed (Nurse)	Print name:	Date:		
Once completed a	large game and file in VITE and	<b>.</b>		

Once completed please remove and file in KITE notes

# Appendix 19- Planned Care

SPECIALIST CARE Plan for Child Undergoing Insertion of a Gastrostomy low profile (button) Do						
	GUIDANCE					
Ensure a Gastrosto	Ensure a Gastrostomy measuring device and a selection of button devices and an extension set accompanies the child to theatre.					
	Liaise with Community Children's team and dieticians to ensure co	ontinued care.				
	Ensure the parent/carer with the information bookle	t.				
ı	Ensure all medication given is in liquid form and the child has TTO's	in this form also.				
	Bolus feeds should be given over 20 – 30 minutes.					
	Water should be cool boiled. Do not use ointments near o	device				
Ensure parents/care	ers are educated and confident in how to care for button and give fe from HEF policy and they have an appropriate home held i		ostomy checklist			
Potential		Date / Initials				
Problem Identified	Planned Care	Commenced	Discontinued			
Post- Operative	Observe the button site regularly for any bleeding, severe pain or					
Care	leakage of gastric contents. Report to surgeon / medical staff					
	On return from theatre record the volume of water used to					
	inflate the balloonmls					
	Check the position of the device by aspirating stomach contents					
	using the extension set and test using pH strips.					
	Check the operation notes for any specific instructions on when					
	the gastrostomy can be used post-operatively. Unless notes state					
	differently, use as follows;					
	4 hours post-op flush the device using the extension set with 50 mls of water.   observe for pain or leakage.					
	6 hours post-op commence feeds as prescribed by the dietician if					
	the water is tolerated and there are no complications. Flush with					
	water after feeds.					
	Observe how feeds are tolerated noting aspirates, vomiting, and					
	diarrhoea.					
	Position child in semi-upright position to feed.					
	Provide parent/carer with Gastrostomy tube or spare button.					
	Advise to come to ring Community nurse or CED if child has					
	severe pain, bleeding , leakage					
	1	Ĭ				

SPECIALIST CARE	SPECIALIST CARE Insertion of Per-Endoscopic Gastrostomy ( PEG )				
	GUIDANCE				
Ensure	Ensure the PEG device accompanies the child to theatre, together with any special instructions				
Liaise with the Children's Community team nurse and paediatric dietician.					
Ensure all medication to be given is in liquid form including TTO's and any medications the child needs.					
Check the Child's o	operation n	otes for any specific instructions on when the gastrostomy Otherwise follow instruction as in planned care.	can be used post -	operatively.	
Give gastrostomy bo	Give gastrostomy booklet and emergency information for when the child goes home (usually Community nurse will provide.  Home held record.				
	Ensure	that carers are confident in the use of the PEG prior to dis	charge.		
		Feeds should take 20-30 minutes in semi-upright position	•		
Planned Care		Date / I	e / Initials		
Problem Identified			Commenced	Discontinued	
Post- Operative care	Observe gastric cor	astrostomy site regularly for bleeding, pain / leakage of attents.			
		e number on the gastrostomy tube at skin levelcms. d the length of gastrostomy tube in care plan and home d.			
	Check the	position of the PEG by aspirating stomach contents and			