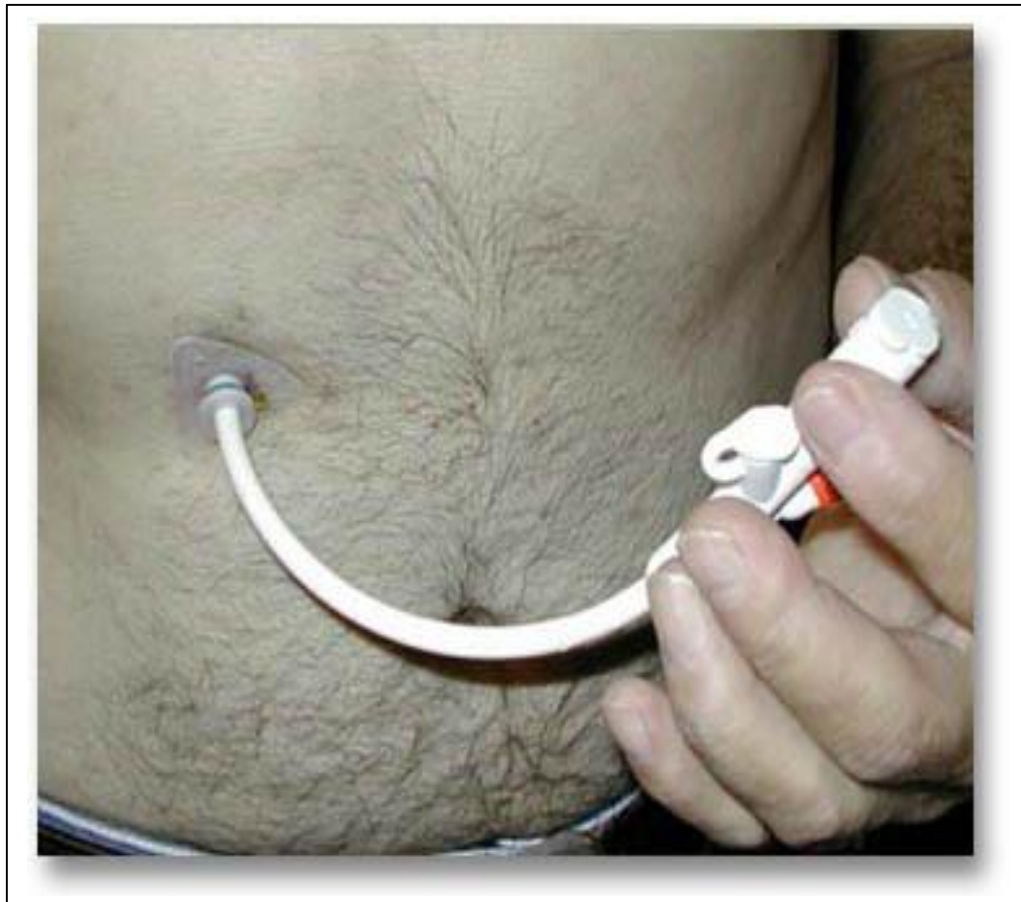


**Ohio Department of
Developmental Disabilities
ODODD**

***Training Manual for
CERTIFICATION 2***

**ADMINISTRATION OF FOOD AND PRESCRIBED
MEDICATION PER STABLE LABELED GASTROSTOMY
TUBE AND STABLE LABELED JEJUNOSTOMY TUBE**



OUTLINE OF CERTIFICATION 2 CURRICULUM

Content

	Page(s)
Unit 1 Requirements for Attaining / Maintaining Certification 2	
Purpose of training;	3
Course Objectives	4
Certification; Maintaining certification; What happens if you fail to renew your certificate	4 – 5
Unit 2 Structure and Function of the Gastrointestinal System	
Structure and Function of the Gastrointestinal System	6
Stomach and Intestines (diagram)	7
Unit 3 Rationale for Use of Feeding Tube and Ethical Issues	
Indications for Feeding Tube Placement; Related Ethical Issues	8
Problems Affecting the Ability to Take in Food or Liquids by Mouth	9
Unit IV Components of Feeding Tubes / Types of Feeding Tubes	
Components of Feeding Tubes / Types of Feeding Tubes	10
Types of Feeding Tubes: Jejunostomy Tubes	11
Gastrostomy Tubes; Four Kinds of G-Tubes; Percutaneous, Surgical, Replacement, Button	12-13
Unit V General Prep for Administering Food or Medication per Feeding Tube	
General Preparation for Administering Food or Medication per Feeding Tube or.....	14-15
Preparing the work area	Verification of tube placement
Positioning of the individual	Problems with verifying tube placement
Unit VI General Instructions for Formula Administration by Type of Feeding Tube	
General Instructions for formula administration by feeding tube	16
Methods for Administering Feeding Tube Formulas: Syringe Bolus Tube Feeding	17-18
Intermittent Gravity Tube Feeding	19-20
Pump Tube Feeding	21-22
Unit VII Medication Administration by Feeding Type: General Instructions	
Medication administration by feeding tube (general instructions)	23-24
Unit VIII Care of Insertion Site and Feeding Tube	
Care of Insertion Site and Feeding Tube	25
Flushing the Tube	26
Unit IX Potential Complications, Emergencies and Problems	
Potential complications of feeding tubes	27
Potential emergencies with feeding tubes	28
Feeding tube problems: Excess Leakage, Accidental Tube Removal, Clogs, Nausea	29-30
Unit X Self Administration Assessment: Introduction, Tool, and How to Use Tool	
Self Administration Assessment Introduction and Tool	31
Self- Admin Assessment for Adm Food / Meds per G / J Tube	32
Instructions for Use of Self-Administration Assessment	33
Unit XI Conclusion and References	
Conclusion; References	34-35
Unit XII Appendix	
Appendix	36
Health and Safety Alert: Feeding Tubes	37-38
Glossary of Terms	39-41
Continuous gravity tube feeding	42-43
PEG Tube Site Care and PEG Tube Feedings	44
Generic Guidelines for Administration of Feeding / Medications per G-Tube	45
Skills Checklist for tube Feedings	46-47
Documentation Guidelines and Other Instructions	48
Other Instructions	49
Picture of PEG Tube Inserted into Abdomen	50

Unit I: Requirements for Attaining / Maintaining Certification 2

MR/DD PERSONNEL: FEEDING AND ADMINISTRATION OF PRESCRIBED MEDICATION PER STABLE LABELED GASTROSTOMY TUBE AND STABLE LABELED JEJUNOSTOMY TUBE

As a result of the passage of SB 191, laws and rules governing delegated nursing in the State of Ohio have been significantly impacted. In response to these legislative changes, registered nurses who currently hold certification to train unlicensed Developmental Disabilities (DD) personnel to administer medication and perform health-related activities, are required to receive updated information regarding the changes to law and rule and the subsequent revisions to training curriculum for the unlicensed person.

In addition, the state approved training curriculum for DD personnel is expanded to include instruction to unlicensed DD personnel in the care and treatment of individuals with feeding tube, including the administration of food and prescribed medication per gastrostomy or jejunostomy feeding tube, when such administration is properly delegated to certified DD personnel by a licensed nurse.

The curriculum, which follows provides training, information, and recommendations for certified registered nurse trainers of unlicensed DD personnel in the care and treatment of the individual with a feeding tube, including administration of food and prescribe medication per gastrostomy or jejunostomy feeding tube.

Purpose of training

The purpose of this course is to provide DD personnel the educational basis to receive nursing delegation for feeding and medication administration per Stable Labeled Gastrostomy / Jejunostomy (G / J) tubes, including understanding the equipment and procedure for feeding and medication administration per (G / J) tube, the placement of G / J tubes, site care and maintenance of these tubes.



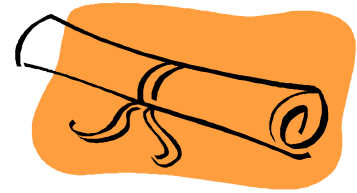
If there are multiple ports on the tube, EACH PORT must be clearly labeled. Labeling can be accomplished via:

- ◆ If present, using the label already on the port
- ◆ Placing a label on the port with a permanent marker
- ◆ Photographing the ports and labeling the parts, then placing with the MAR
- ◆ Attaching a label to the ports.

Any time G / J Tube is referenced in this curriculum, it refers to a stable and labeled Gastrostomy / Jejunostomy (G/J) Tube

Course Objectives:

1. Identify the various kinds of enteral feeding tubes and their components
2. Describe the internal and external placement of enteral feeding tubes
3. Demonstrate the techniques for administering formula and medication
4. Distinguish G / J tubes.
5. Describe how to respond to common complications and / or emergency situations.
6. Explain each point of the daily maintenance checklist for enteral feeding tubes
7. Understand that prior to the licensed nurse delegating to certified DD personnel feeding or medication administration per G / J tube the nurse must determine that:
 - ◆ the individual's condition is stable
 - ◆ the gastrostomy or jejunostomy tube is stable and labeled
 - ◆ DD personnel who will be receiving the delegation have had individual specific training for administering feeding or medication to the patient receiving these procedures from the delegated DD personnel.



Certification:

1. To obtain state certification DD Personnel must successfully complete this course (pass the course) by:
 - a. Attending the entire program, participate in discussion and activities and complete and submit an evaluation of this program to the instructor.
 - b. Passing the course with an 80% score or better on a closed book test. ◆
 - c. Performing a successful return demonstration in:
 - ◆ administration of prescribed medications per G/J Tube
 - ◆ administration of prescribed nutritional supplement per G/J Tube
 - ◆ care and maintenance of the G/J Tube and the insertion site
 - ◆ resolving common complications associated with use of G/J Tubes
- ◆ **Failure to pass the written test would require the DD personnel to retake the course in its entirety in order to retake the exam.**

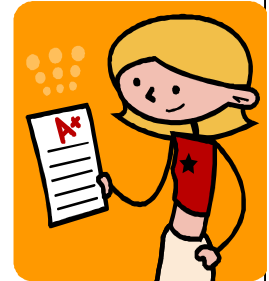
Maintaining certification:

At least 8 weeks before your anniversary date, check with your supervisor about the procedure you should follow to renew your certificate.

To renew your certificate, you **must have 1 hour** of approved continuing education on or before your renewal (anniversary) date.

You must demonstrate competent skills related to feeding and medication administration per G / J Tube.

Failure to maintain a current certification in the administration of oral and topical medications and health-related activities (Cert 1) automatically disqualifies you from administering food or medications per G/J tube.



What happens if you fail to renew your Certificate:

1.



Should you not maintain certification 2 due to lack of obtaining continuing education training, **certification 2 will be suspended** for up to 60 days. During this time, you must complete at least 1 hour of continuing education. You may not administer food or medication per G-J Tube while your certification 2 is suspended.

2. Should you allow your certification 2 suspension to go to day 61, your certification 2 is lapsed and you will be required to re-enroll in the four-hour certification 2 course to regain your certification to administer medications and food per G / J Tube.

REMINDER: You must maintain certification 1 to qualify for performance of tasks required of personnel with certification 2 (Administration of food and medication by stable labeled G / J Tube).

Unit II

Structure and function of the gastrointestinal (GI) system

The gastrointestinal (GI) tract is a continuous path from the mouth to the anus where the digestion and absorption of food and medication occur. The normal GI tract is functionally divided into two parts: **the upper and lower tract**.

The Upper GI Tract is where digestion and absorption of most food (nutrients and medication) occurs.

- a. Food enters the mouth where it is chewed and partially broken down by saliva which contains enzymes that begin the digestive process.
- b. When swallowed, food then enters the esophagus where it is transported to the stomach. On swallowing the epiglottis closes over the opening to the trachea, protecting the airway from aspiration of swallowed liquids or solids.
- c. The area between the esophagus and stomach is the gastric-esophageal (GE) junction. The function of the junction is to act as a one-way valve into the stomach and prevent reflux (back flow) into the esophagus.
- d. The stomach is a curved pouch-like organ that is located under the diaphragm in the upper middle portion of the abdomen. Acids in the stomach kill off harmful bacteria and further breaks down the stomach contents. The lower end of the stomach is the pyloric portion. Enzymes in the stomach control the passage of food through the pyloric muscle that act as a one way valve into the small intestine.
- e. Averaging from 12 to 26 feet in length, the small intestine consists of the duodenum, jejunum and the ileum. As the partially digested food particles move through the small intestine, enzymes break the particles into nutrients and waste. Small finger-like projections, known as villi, contain blood vessels that absorb nutrients into the blood stream and move the waste products on through the digestive tract to the large intestine.

The lower GI tract consists of the large intestine and anus. The function of the large intestine is to consolidate undigested nutrients into fecal waste that is disposed of through the anus.

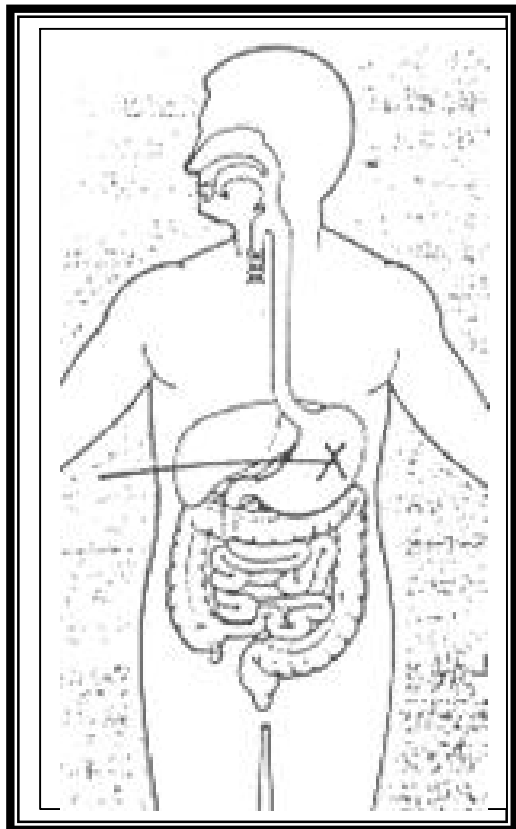
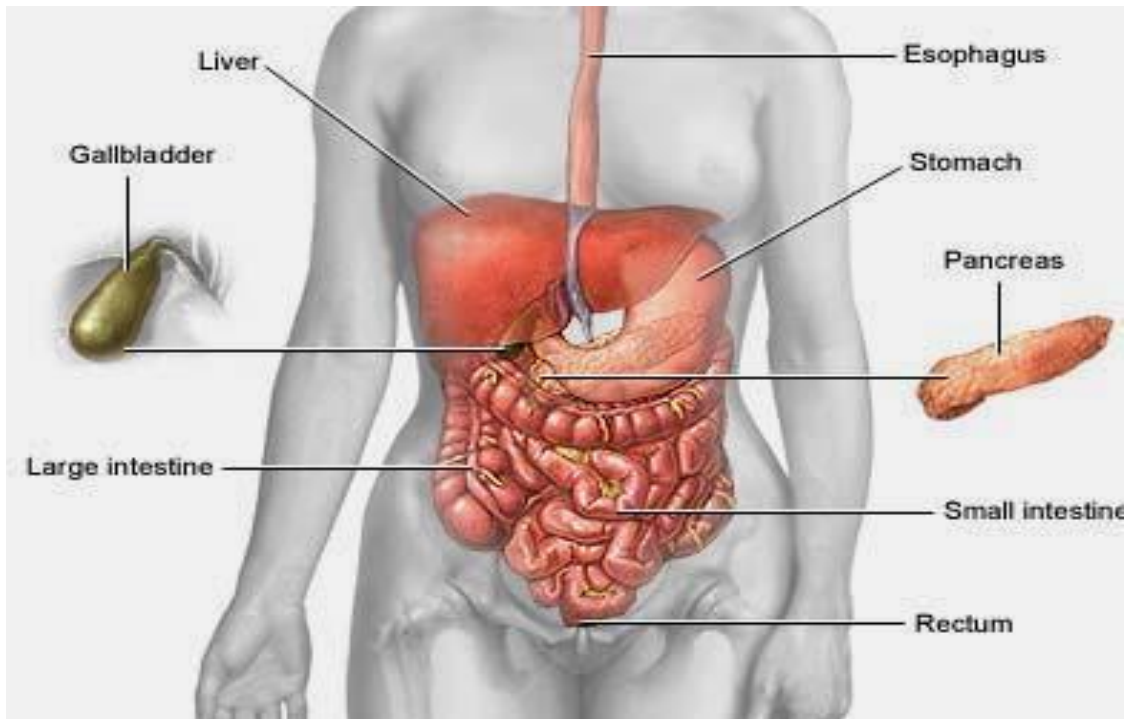
Problems in the GI system can occur at any point along the way.

There are a number of tests and studies that the physician can order to determine the site of the problem

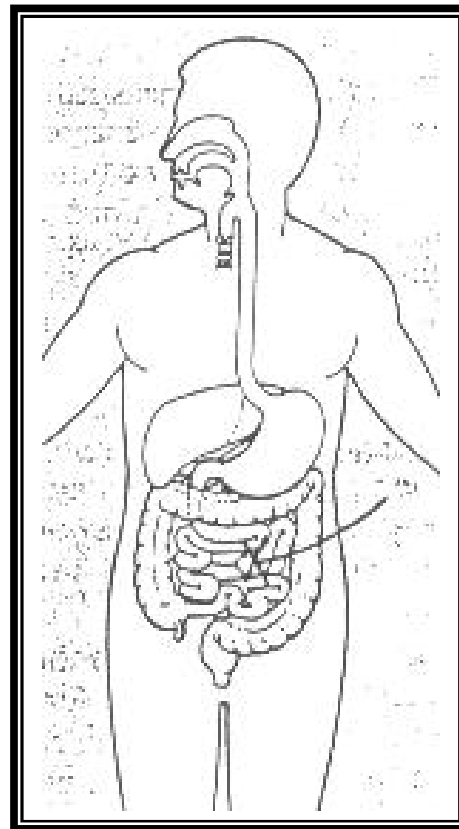
Examples of the most frequently ordered tests are:

- ◆ Gastric Emptying Studies
- ◆ Modified Barium Swallow Studies
- ◆ Upper and Lower GI Endoscopy and X-rays
- ◆ Bedside swallowing evaluations by a Speech Language Pathologist (SLP specialist)

Stomach and Intestines



The X indicates placement for a G-Tube

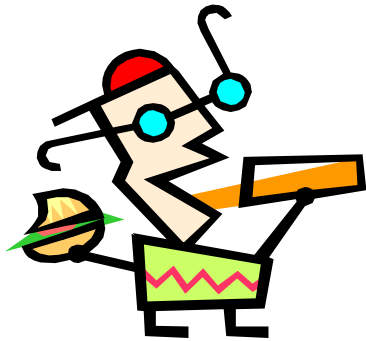


The X indicates placement for a J-Tube

Unit III

Rationale for Use of Feeding Tube and Ethical Issues

If unable to take in food or fluids by mouth, person may need a feeding tube to sustain life.



Indications for “feeding tube” (G/J Tube) placement

- ★ Insertion of a Gastrostomy or Jejunostomy tube occurs when the individual cannot take in adequate food (nutrition) or liquids by mouth to sustain normal growth and development and maintain health.
- ★ A feeding tube may provide for all of the person’s nutritional intake.
- ★ A feeding tube may also be used to provide nutrition supplements to individuals who are able to eat, but are unable to eat enough.

Tube placement can be temporary or permanent, based on individual need.

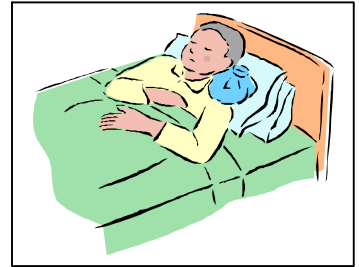
Related Ethical Issues

Tube placement must be the choice of an individual, who should be apprised of the benefits and risks of a feeding tube or no feeding tube.



Problems affecting the ability to take in food or liquids by mouth

Many problems may affect the ability to take in food or liquids by mouth. The cause(s) of these problems can be developmental, mechanical or neurological, anatomical or secondary to other health issues.



A. Impaired Swallowing: Swallowing is a complex act that involves the mouth, throat area, epiglottis and esophagus. Many nerves and muscles are involved in swallowing and while part of the swallowing mechanism is under conscious (voluntary) control, much of swallowing is involuntary.

1. Problems at any point in the swallowing cycle, from chewing food and moving it into the back of the mouth, to moving the food past the epiglottis and trachea (airway), into the esophagus and then into the stomach, can result in difficulty swallowing. Swallowing disorders may cause airway obstruction (choking), breathing problems, aspiration pneumonia, weight loss, dehydration, change in behavior or behavior problems, and sleep pattern changes.
2. Nerve and muscle problems may lead to impaired swallowing.
3. Impaired swallowing caused by obstruction of the esophagus will be manifested by feeling of food or liquids “sticking” in the neck or upper-mid chest area, or by swallowing followed in a very short time by vomiting (repeated episodes should raise concern for esophageal obstruction).
4. Examples of problems that may affect swallowing include
 - Stroke
 - Cerebral palsy
 - Dementia (e.g., Alzheimer’s Disease in an individual with Down’s Syndrome)
 - Medication side effects and muscular dystrophy

B. Other conditions which may cause difficulty in taking enough food by mouth to maintain adequate nutrition:

1. Pain
2. Lack of sense of hunger
3. Gastrointestinal problems
4. Impaired absorption of nutrients from the small bowel
5. Difficulty chewing and/or swallowing
6. Decreased sense of taste or change in taste
7. Increased metabolic needs



Unit IV

Components of Feeding Tubes / Types of Feeding Tubes

1. Universal Feeding Adapter:

- Feeding adapters connect a feeding tube to a feeding administration set. On some tubes the feeding adapter may be a separate component.
- If a feeding adapter becomes damaged or lost, it should be replaced.
- Never connect a feeding administration set directly into a tube.
- You must use a feeding adapter between the feeding tube and the feeding administration set.

2. Balloon Inflation Port:

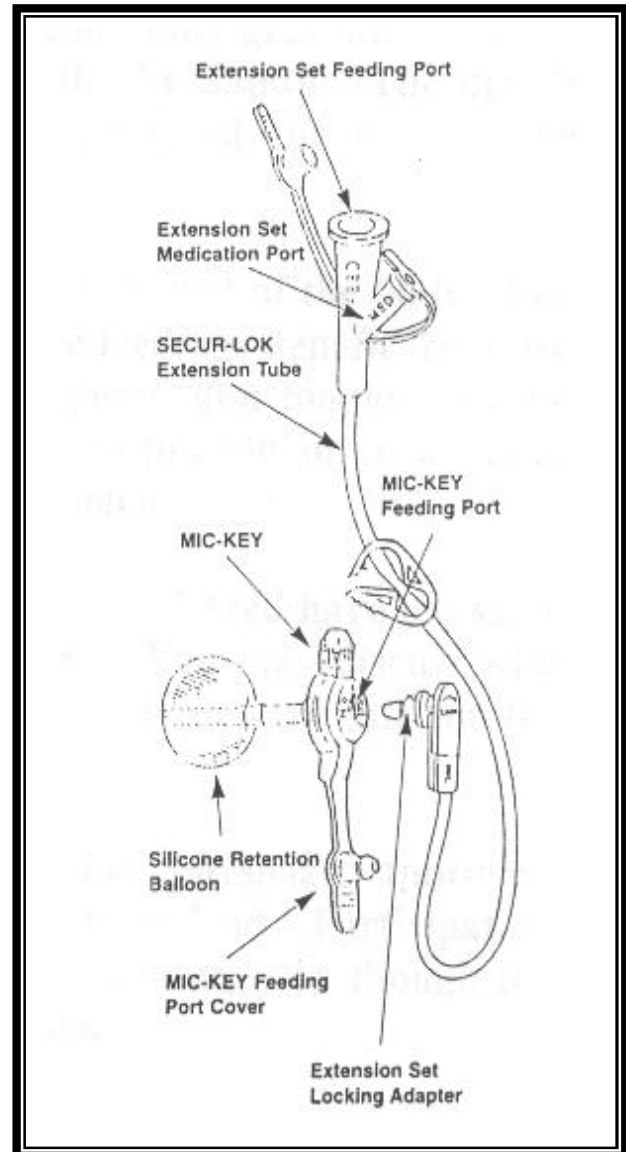
- Some replacement tubes have a balloon inflation port that rises up from the top of the tube near the feeding adapter. It is used to inflate the balloon at the internal tip which secures the tube internally (keeps the tube in the stomach).
- The balloon is inflated with water from a syringe. Health care professionals inserting balloon tubes should always test them for leaks by inflating them with water prior to insertion.

3. Double Lumen Adapter:

- Some feeding tubes have a double lumen adapter with two ports.
- This type of adapter allows gastric access without disconnecting the feeding administration set
- Formula may be administered via separate ports as directed by the delegating nurse.

4. Other Components:

- On the tube, there will often be printed identification of the French size, the manufacturer and centimeter graduation marks. Also, you may see radiopaque features such as stripes to make the tube visible during X-ray examination.
- The feeding tube will be secured on the outside by an external bolster (holder) or catheter retainer, which may be as simple as tape and gauze. The delegating licensed nurse will explain to you how the catheter is secured.
- Gastrostomy tubes are secured internally by bolsters. Internal bolsters are made in a wide variety of shape and sizes.



Types of Feeding Tubes: Jejunostomy Tubes

A Jejunostomy tube (J-Tube) may be present by itself, or may be part of a combination gastrostomy tube and jejunal tube (gastro-jejunal feeding tube).

- J-Tubes are placed into the small bowel (Jejunum) either through an opening (small hole) in the abdominal wall or through a specific port on a gastrostomy tube.
- J-tubes are used to place food (nutrients) and liquids directly in the small bowel (jejunum). Medications are rarely administered through a J-Tube due to clogging and problems with medication absorption from the gastrointestinal tract.
- Because the J-Tube infuses substances into the small bowel (further “down-stream” from the stomach and esophagus) some individuals experience less gastric (stomach) reflux of food and liquids as compared to a gastrostomy tube.
- Jejunostomy tubes are smaller in diameter than gastrostomy tubes and therefore maximum infusion rates and bolus feeding time will be greater in comparison, and J-Tubes more easily clog and are less easy to unclog.
- Jejunostomy tubes are used when feeding into the small bowel (jejunum) is necessary such as in patients who cannot obtain adequate nutrition through the stomach, have stomach obstruction or have intestinal motility problems or severe gastric reflux.

There are three kinds of jejunostomy tubes, (see boxes below) which are usually made from a special material so they are not damaged by digestive acids.

1. Percutaneous Endoscopic Jejunal (PEJ) feeding tubes, have a double lumen adapter for simultaneous jejunal feeding and gastric access.

- PEJ tubes are a gastrostomy tube and jejunostomy tube placed using endoscopic techniques (using a thin flexible tube that can be looked through or seen on a TV monitor).
- The gastrostomy tube is secured with internal and external bolsters. All PEJ tubes are removed by a physician either endoscopically or externally by applying traction.
- The gastrostomy tube is inserted through a very small opening so it is a less invasive method than other surgical techniques. There tends to be less scarring and a quicker recovery time.

2. Surgical Gastro-Jejunostomy Tube: Gastro-jejunostomy tubes may be placed surgically in the stomach and small bowel as single-unit tubes.

- This surgery is performed in a hospital operating room with the individual under anesthesia.
- The surgical gastro-jejunostomy tube has a port for direct feeding into the small bowel, and a separate port for access simultaneously to the stomach for suction and medication administration.

3. Replacement Jejunostomy Tube: If a jejunostomy tube is pulled out, the physician will replace the tube.

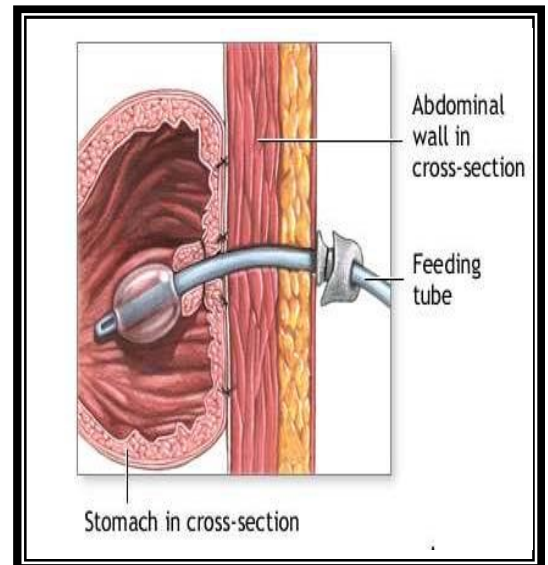


Types of Feeding Tubes: GASTROSTOMY TUBES

These tubes are commonly referred to as “G-Tubes” and are placed into the stomach through an opening (small hole) in the abdominal wall. The word “gastrostomy” comes from two Latin root words for “stomach” (gastro) and “new opening” (stomy).

- A G-Tube is used to vent the stomach for air or drainage and / or to provide an alternate way for feeding, hydration and medication administration.
- Food, liquids, and medications infuse directly into the stomach
- G-Tubes are commonly used in patients who need long - term feeding and hydration and are unable to take in adequate food or liquids by mouth.
- G-tubes may be used in conjunction with jejunostomy tubes; some special tubes will actually be two tubes in one with openings in the stomach and the small bowel (jejunum).

There are four kinds of gastrostomy tubes (♦ PEG Tube; ♦ Surgical gastrostomy Tube; ♦ Replacement Balloon Gastrostomy Tube; and ♦ Feeding Buttons). These tubes are usually made from a special material so they are not damaged by digestive acids. (See boxes 1-4 below)



1. Percutaneous Endoscopic Gastrostomy (PEG) Tube:

- PEG tubes are a gastrostomy tube placed using endoscopic techniques (using a thin flexible tube that can be looked through or seen on a TV monitor). These tubes are secured with internal and external bolsters.
- All PEG tubes are removed by a physician either endoscopically or externally by applying traction.
- The gastrostomy tube is inserted through a very small opening so it is a less invasive method than other surgical techniques and there tends to be less scarring and quicker recovery time.

2. Surgical Gastrostomy Tube:

- Gastrostomy tubes may be inserted by a surgical procedure performed in a hospital operating room with the individual under anesthesia.
- Surgical gastrostomy tubes are placed by surgical incision through the abdominal wall and then directly viewing and making an incision in the stomach. The gastrostomy tube is inserted directly into the stomach through the skin and abdominal wall overlying the stomach.
- The gastrostomy tube is held in place on the outside (bolster or catheter retainer) and on the inside (flange design bolster or a balloon inflated with water).

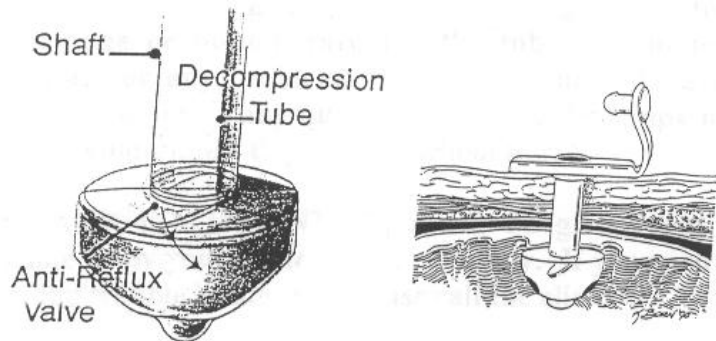
Types of Gastrostomy (G-Tubes) continued)

3. Replacement Balloon Gastrostomy Tube:

- Replacement balloon gastrostomy tubes are used after an initial gastrostomy tube has created a well-formed gastrostomy tract, usually after about one month.
- The tube is secured internally by a balloon inflated with water. A sliding disk stabilizes the tube outside the body. There is a separate port for inflating and deflating the balloon.
- If a gastrostomy tube is pulled out, the tube tract begins to close within two hours unless a new gastrostomy tube is inserted into the gastrostomy tract. Replacement tubes are inserted by the appropriate health care professional or trained caregiver.
- If the delegating licensed nurse determines it is appropriate, replacement of a gastrostomy tube is a potentially delegable nursing task.

4. Feeding Buttons:

- The gastrostomy feeding button is a “T” shaped plastic device held in place by a mushroom - shaped dome inside the stomach. The button remains in place at all times and is capped by an attached safety plug between feedings.



MIC-KEY BUTTON

- A feeding is administered by inserting a small tube through the button into the stomach. When the feeding is completed the tube is removed and the safety plug closed.
- Low profile devices (buttons) are a newer design inserted flush to the skin. These are more convenient and cosmetically pleasing for active consumers with well-formed gastrostomy tracts.
- Button G-tubes feature a special anti-reflux valve that prevents the leakage of gastric contents in the event that the device cap should come off.
- Different types of connecting tubes can be inserted into button devices to allow different formula and medication administration techniques to be used.
- Placement can be checked by aspirating stomach contents or checking distance of external bolster from the skin at the insertion site.

G-tubes, J-tubes and gastrostomy buttons are usually covered by clothing, so individuals should be able to participate in activities. Participation in strenuous physical activity should be determined on an individual basis with input by the physician to the interdisciplinary team.

Unit V

General Preparation for Administering Food or Medication per Feeding Tube

A. Preparing the work area:

1. Wash your hands and clean the work area to help prevent infection.
2. The surface used to prepare the tube feeding or medication should be clean and dry.
 - ◆ If the work surface is washable, clean it with soap and water and dry with a clean cloth or paper towel.
 - ◆ If the work surface is not washable, wipe it free of dust and spread a clean towel or paper towels over the surface.
 - ◆ Avoid using food preparation areas.
3. Choose a work area away from household traffic and pets.
4. Wash your hands thoroughly with soap and water for 15-20 seconds. Put on gloves.



B. Positioning of the individual:

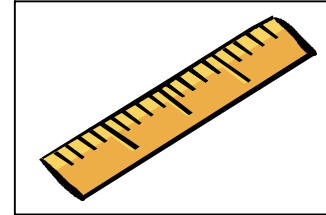
1. Position the individual sitting up or with the upper body (trunk) elevated greater than 45 degrees for verifying tube placement and for bolus and intermittent feeding.
2. Allow them to remain in this position during the feeding.
2. For continuous feeding, the individual either needs to be sitting upright, or with their upper body (trunk) elevated greater than 45 degrees.
3. Positioning is very important. Individuals receiving feedings and medication by feeding tube can aspirate (food or medicine gets into their lungs) if lying down or not upright enough during feeding or medication administration.
5. The delegating nurse will provide you with specific instructions regarding the proper positioning of an individual.



C. Verification of Tube Placement:

- There are **three ways** for DD personnel to **verify tube placement**.
- Each of these should be done with the individual sitting upright, or at least with trunk (upper body) elevated greater than 45 degrees.
- The delegating licensed nurse will provide you with individual specific instructions.

1. **Check for tube graduation marks if present.** If the tube is not marked, the delegating licensed nurse can make a mark with a dark, non-toxic pen at the point where the tube exits the body. If the length of the tube is less than or more than normal, notify the delegating licensed nurse or individual's physician. (Demonstrate)

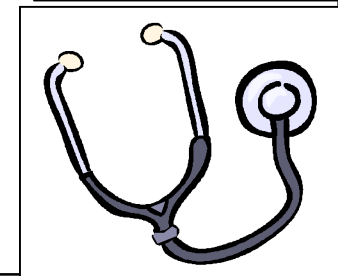


2. **Aspirate and monitor gastric residuals with a syringe.** The delegating nurse will provide specific instructions if you need to do this task.

- Attach 60 cc syringe to unclamped end of G-tube.
- Aspirate small amount of gastric contents through the tube. Observe for color of contents indicating proper placement (clear, tan, light green, or brown).
- To prevent possible electrolyte imbalance, return residual volume once color and amount are noted.



3. **Inject air into the unclamped tube** with a syringe and listening for air bubbles in the stomach with a stethoscope.



D. Problems with verifying tube placement

1. If you are unable to verify tube placement, or if you have questions or concerns about the tube placement, contact the delegating licensed nurse or individual's physician as soon as possible. Do not use the tube until instructed to do so by the delegating licensed nurse.
2. The individual's physician may order x-ray verification of tube placement, which is the most accurate way to check feeding tube placement.

Unit VI

General Instructions for formula administration by feeding tube

When administering formula through a feeding tube, always follow the delegating licensed nurse's instructions and your agency's standard policies.

- ♣ When administering enteral nutrition (direct infusion of liquid nutrition into the stomach or small intestine) **never administer formula through any tubes or access port other than the enteral feeding tube or port.** You must make certain to correctly identify the feeding port.
- ♣ **Remember:** Tube feeding that is continuous (gravity or pump) will need to be turned off and tube flushed with water prior to administering medication via the same feeding tube port. The delegating licensed nurse will provide you with instructions on how to do this.

To administer formula:

1. Follow general preparation guidelines including positioning of the individual and verification of tube placement.
2. The delegating licensed nurse will provide specific instruction for positioning of an individual and how to verify tube placement for an individual.
3. Follow the guidelines for the general preparation for administering food per feeding tube (pp. 13-14).

Note: do not use hot water, and do not heat water in microwave, on a stove or over fire. Check temperature of water by placing a few drops on the underside of your wrist-if it feels hot on your skin, it is too hot to use. Water and formula should be at room temperature prior to administration.



- C. There are four different methods of administering feeding-tube formulas;** the method of food administration will be prescribed by the physician and delegated by the delegating licensed nurse. The 3 most common methods are described on pp 15 - and include:

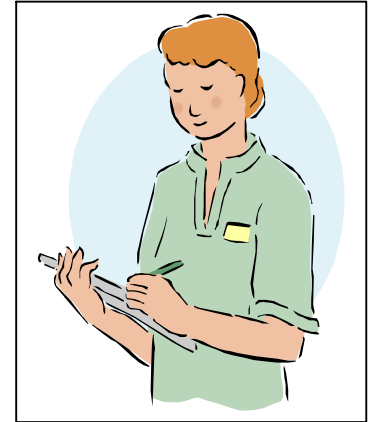
- Syringe bolus tube feeding (see pp 17-18)
- Intermittent gravity tube feeding (pp 19-20)
- Continuous gravity tube feeding (see appendix p. 39-40)
- Pump tube feeding (pp. 21-22)

Methods of administering feeding-tube formulas

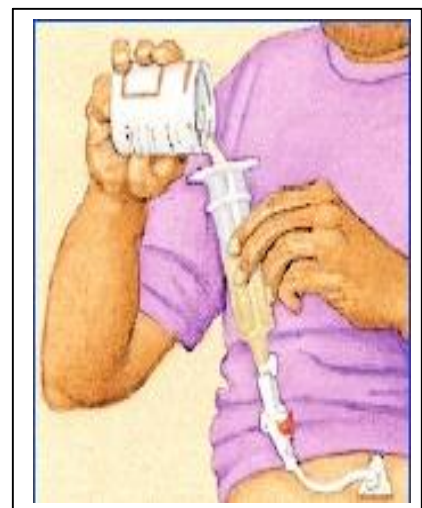
1. Syringe bolus tube feeding:

The delegating licensed nurse will provide the DD personnel with specific intermittent tube feeding instructions. These instructions should include:

- ◀ Formula
- ◀ Amount of each feeding
- ◀ Number of feedings each day
- ◀ Duration
- ◀ Times of the feedings
- ◀ Tube flushes (amount of water before and after feeding)

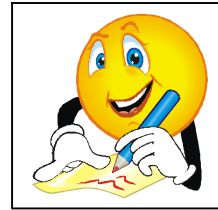


1. Follow general preparation guidelines.
2. Clean the work area, wash hands thoroughly and put on gloves
3. Assemble equipment you will need: formula, water, measuring cup, 50-60cc syringe that fits the tip of the feeding tube; allow formula to warm to room temperature over 20 to 40 minutes if it has been refrigerated.
4. Explain procedure to consumer. Provide privacy.
5. Position the individual as instructed by the delegating nurse.
6. **Verify tube placement** per delegating licensed nurse instructions (for example, by:
 - checking **for tube graduation mark position**
 - **injecting air into the tube** with the syringe and **listening for air bubbles in the stomach with a stethoscope**
 - by **aspirating** (pulling back on the syringe to check for stomach contents).
7. Remove the plunger from the barrel of the syringe, clamp the tube with fingers to prevent reflux of stomach contents into and possibly out of the tube.
8. Place the tip of the syringe in the end of the feeding tube.
9. Pour the prescribed amount of warm/tepid tap water into the syringe (usually 15-20cc).
10. After the water has gone through the tube, slowly pour the prescribed amount of formula into the syringe.
11. Allow the formula to flow into the tube by gravity; the higher **you hold the syringe, the faster the formula will flow.**



Syringe Bolus Tube Feeding (con'd)

12. Repeat until all the prescribed amount of formula has been given. You may need to clamp the tube with fingers as you refill the syringe to prevent reflux of stomach contents into and possibly out of the tube.
13. Pour the prescribed amount of water into the syringe to cleanse the feeding tube.
14. After the water has gone through the tube, clamp the tube and remove the syringe from the tube.
15. Remove gloves and wash hands thoroughly.
16. Wash the syringe with small amount of dishwashing soap and water, rinse thoroughly to remove soap film.
17. Wash hands again.
18. Document procedure by following your agency's policy and procedure for documentation or the delegating licensed nurse's instructions for documentation, which may include the following:
 - Verified placement per nursing delegation
 - Color and amount of fluid aspirated and replaced
 - Type of feeding and amount given
 - Consumer's response to the procedure



Aspiration of Stomach Contents to Validate Tube Placement Differs from Checking for Amount of Residual in Stomach at a Specified Time

When aspirating stomach contents to verify tube placement, only withdraw the amount needed to evaluate the nature of the aspirate (color, odor, does it look like stomach contents?) . Once you have verified the tube is in the stomach, return the small amount of aspirate to the stomach, flush the tube and proceed with medicating or feeding the client.

If prescribed, the stomach contents may be checked for **amount of residual content at a specified time after a feeding** to determine if the stomach is emptying properly and the client's body is using the food instilled.

In a healthy person, there should be less than 50 cc of residual left in the stomach several hours after eating.

The delegating licensed nurse will tell you the amount of the residual to report immediately (**a good rule of thumb is a residual of 50cc or greater should be reported directly to the nurse**).

If the residual amount is more than what the nurse has told you is acceptable, do not put any food or medication in the feeding tube and notify the delegating licensed nurse immediately.

Return residual to stomach if instructed to do so by the delegating nurse



2. Intermittent gravity tube feeding:

The delegating licensed nurse will provide the DD personnel with specific intermittent tube feeding instructions. These instructions should include:

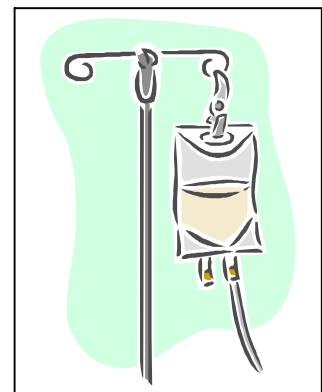
- ◀ Formula
- ◀ Amount of each feeding
- ◀ Number of feedings each day
- ◀ Duration
- ◀ Times of the feedings
- ◀ Tube flushes (amount of water before and after feeding)

1. Follow general preparation guidelines.
2. Clean the work area, wash hands thoroughly and put on gloves
3. Assemble equipment you will need: measuring cup, formula, water, gravity set tubing and feeding bag, 50-60cc syringe, hook or pole to hang feeding set
4. Allow formula to warm to room temperature over 20 -40 minutes if it has been refrigerated.
5. Gravity set will need to be assembled according to package instructions.
6. Explain procedure to consumer. Provide privacy.
7. Position the individual and:
 - ◆ Verify tube placement per delegating licensed nurse instructions - for example, by: **(a)** checking for tube graduation mark position, **(b)** injecting air into the tube with the syringe and listening for air bubbles in the stomach with a stethoscope; or **(c)** by aspirating (pulling back on the syringe to check for stomach contents).

◆ If you are asked to check for residual (the amount of food left in the stomach after a specified time) , the delegating licensed nurse will tell you the amount of the residual pulled into the syringe that is too much (a good rule of thumb is to report a residual of more than 50 cc).

◆ **If the residual amount is more than what the nurse has told you is acceptable, do not proceed with the medication administration and notify the delegating licensed nurse.**

8. Using the syringe, clear the tube of formula and check for tube patency by flushing the tube with the prescribed amount of warm / tepid tap water – NOT HOT WATER. Check temperature of water by placing a few drops on the underside of your wrist. if it feels hot on your skin, it is too hot to use.
9. Close the clamp on the tubing of the feeding bag.
10. Slowly pour the formula into the feeding bag.
11. Hang the feeding bag on a pole or hook about 1-2 feet higher than the individual's head.



Intermittent Gravity Tube Feeding)con'd)

12. Open the clamp and allow formula to fill the tubing removing all the air (before hooking the tubing up to the feeding tube).
13. Close the clamp.
14. Using the syringe, flush the feeding tube with the prescribed amount of warm/tepid tap water (the delegating licensed nurse will tell you how much water to use).
15. Connect the tubing of the feeding bag to the feeding tube using the feeding tube adapter.
16. Open the clamp and regulate the flow so the feeding drips in slowly; the delegating licensed nurse will tell you how many drops of formula in one minute to administer.
17. After entire amount is administered (when the feeding is finished), close the clamp on the tubing of the feeding bag.
18. Disconnect the feeding bag tubing from the feeding tube.
19. Using the syringe, flush the feeding tube with the prescribed amount of water (the delegating licensed nurse will tell you how much water to use).
20. Detach the syringe and re-clamp the feeding tube.
21. Remove gloves and wash hands thoroughly.
22. Wash the feeding bag with small amount of dishwashing soap and water, **rinse thoroughly to remove soap film**, and hang the bag to dry.
23. Document by following your agency's policies and procedures for documentation or the delegating licensed nurse's instructions for documenting which may include the following:
 - How placement of feeding tube was verified
 - Color and amount of fluid aspirated and replaced
 - Type of feeding and amount given
 - Consumer's response to the procedure



3. Pump Tube Feeding:

The delegating licensed nurse will provide the DD personnel with specific continuous tube feeding instructions, including specific information about using the pump.

These instructions should include:

- Formula
- Pump type
- Amount of formula (amount each hour)
- If feeding is continuous (around the clock)
- If feeding is cycled:
 - Time starting the feeding
 - Time stopping the feeding
- Tube flushes (how much water to use to flush the tube, and how often to flush the tube).



The steps for starting a continuous tube feeding are similar to those used for intermittent feedings

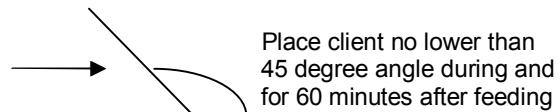
1. Follow general preparation guidelines.
2. Clean the work area, wash hands thoroughly and put on gloves
3. Assemble equipment you will need, i.e., measuring cup, formula, water, feeding bag, 50-60cc syringe, pump and tubing set for the pump.
4. Allow formula to warm to room temperature over 20 – 40 minutes if refrigerated.
5. Explain procedure to consumer while providing for privacy.
6. Position the individual and verify tube placement per delegating licensed nurse instructions - for example, by **[a]** checking for tube graduation mark position, **[b]** injecting air into the tube with the syringe and listening for air bubbles in the stomach with a stethoscope, or **[c]** by aspirating (pulling back on the syringe to check for residual fluid in the stomach).
7. Using the syringe, clear the tube of formula and check for tube patency by flushing the tube with the prescribed amount of warm/tepid tap water.
8. The delegating licensed nurse may have you check for gastric residuals at certain times during a continuous feeding.
9. Close the clamp on the tubing of the feeding bag.
10. Slowly pour into the feeding bag the amount of tube feeding formula the delegating nurse has instructed you to use (generally enough for 8-12 hours).
11. To keep the tube feeding from getting spoiled, always write the date and time on the tube feeding container when it is opened.
12. Only hang the amount of tube feeding formula as you were instructed to use by the delegating nurse.
13. Refrigerate any opened unused formula. Be sure to throw away any open unused formula in 48 hours.
14. Do not add fresh formula to formula left in the bag; throw away any old formula in the bag and **rinse the bag before adding new formula.**

(Pump Tube Feeding, con'd)

15. Change the tube feeding set (bag and tubing) per instructions of delegating licensed nurse (generally every 48 hours).
16. Hang the feeding bag on a pole or hook about 1-2 feet higher than the individual's head. Open the clamp and allow formula to fill the tubing removing all the air.
17. Close the clamp.
18. Connect the feeding bag tubing to the pump and adjust the pump settings.
19. Using the syringe, flush the feeding tube with 30-60cc of water (the delegating licensed nurse will tell you how much water to use).
20. Connect the tubing of the feeding bag to the feeding tube using the feeding tube adapter.
21. Open the clamp and start the pump.
22. Using the syringe, flush the feeding tube with 30-60cc of warm/tepid tap water every four to six hours through a flush port. If there is no flush port, stop the pump, disconnect the feeding bag and flush the feeding tube. **Remember to wash your hands before and after this procedure, and to wear gloves when performing this procedure.** The delegating licensed nurse will show you the flush port, tell you how much water to use to flush the feeding tube, and how often to flush the feeding tube.
23. When the feeding is finished, stop the infusion and flush the tube with 30-60cc of warm/tepid tap water (the delegating licensed nurse will tell you how much water to use).
- 24. Wash the feeding bag with small amount of dishwashing soap and water, rinse thoroughly to remove soap film, and hang the bag to dry.**
25. Document procedure by following your agency's policy and procedure for documentation or the delegating licensed nurse's instructions for documentation, which may include the following:
 - Interventions to insure placement;
 - Aspirate color and amount;
 - Type of feeding and amount given
 - Consumer's response to the procedure

Remember:

1. If the feeding is intermittent, leave the consumer in at least a 45-degree upright position for 30 - 60 minutes after feeding. If the feeding is continuous, the individual either needs to be sitting upright or with their upper body (trunk) elevated at least 45 degrees.
2. Before and after each bolus or intermittent feeding, or several times a day during continuous feeding, flush the tube and feeding adapter with 30 to 60 cc. Of warm water as directed by the delegating licensed nurse. Regular tube flushing will help prevent clogged tubes.
3. Be sure to kink the tubing before removing the cap or disconnecting a syringe to prevent backflow.
4. Provide mouth care if consumer takes nothing by mouth. The delegating licensed nurse will instruct the DD personnel as to what mouth care to give (e.g. rinse mouth with water, ice chips, tooth brushing, etc.)
5. The client can be fed in any location as long as the feeding is administered in a manner that protects the client's dignity and privacy.



Give mouth care after feeding especially if client takes nothing by mouth



Unit VII

Medication administration by feeding tube: (general instructions)

Note: The delegating licensed nurse will provide you with specific medication administration instructions for an individual you are administering food or medication to via stable labeled G / J Tube.

When administering medication through a feeding tube, always follow the delegating licensed nurse's instructions and your agency's standard policies.

1. **Remember medications are usually only administered through a G-Tube.**
2. Administration of medications through a J-Tube may cause problems with the tube clogging and with absorption of the medication from the gastrointestinal system. However, the individual's physician may order certain medications to be given through a J-Tube, and the delegating licensed nurse would then instruct you to administer these medications via J-Tube.

Remember: Tube feeding that is continuous (gravity or pump) will need to be turned off and the tube flushed with the prescribed amount of water prior to administering medication via the same feeding tube port. The delegating licensed nurse will provide you with instructions on how to do this.

To Administer Medications:

Follow general preparation guidelines including positioning of the individual and verification of tube placement. The delegating licensed nurse will provide specific instruction for positioning of an individual and how to verify tube placement for an individual.

1. Wash hands thoroughly and put on gloves.
2. Connect the syringe (60cc size) to the tube or appropriate tube port.
3. Verify tube placement per delegating licensed nurse instructions - for example by:
 - ◆ Checking for tube graduation mark position
 - OR
 - ◆ Injecting air into the tube with the syringe and listening for air bubbles in the stomach with a stethoscope
 - OR
 - ◆ By pulling back on the syringe plunger (aspirating) to check for stomach contents.

If checking for residual, the delegating nurse will tell you:

- ◆ The amount of the residual pulled into the syringe that is too much (a good rule of thumb is a residual of 50 cc or greater should be reported.)
- ◆ If the residual amount is more than what the nurse has told you is acceptable, do not proceed with the medication administration and notify the delegating licensed nurse.

4. Prepare medication per delegating licensed nurse instructions:

- Use the liquid form of any medication whenever possible (must be prescribed by health care professional and dispensed by the pharmacy). Prepare liquid medication by diluting the liquid medication with the prescribed amount of warm/tepid tap water
- Prepare medication in tablet form by crushing the tablet with a mortar and pestle or other pill crushing device to a fine powder and mix with prescribed amount of warm / tepid tap water.
- Prepare medication in capsule form by opening the capsule and mixing with the prescribed amount of warm/tepid water.
- The health care professional who has prescribed the medication must determine and notify the delegating licensed nurse if a tablet may be crushed or a capsule be opened to allow mixing with water and administering by G-or J Tube.



• **Hints: Medication will dissolve better in room temperature water and medication will be less likely to clog the g-tube or j-tube if completely dissolved in water.**

5. Flush tube with prescribed amount of warm / tepid water.
6. Administer medication as instructed by the delegating nurse (gravity or gentle push).
7. Flush the tube with warm/tepid tap water as instructed by the nurse and administer the next medication.
8. Medications must be administered separately (to avoid medication clumping and tube clogging), unless the physician or pharmacist has given written permission to mix medications together and give as a single dose (at the same time).
9. Flush the tube well following all medications to assure patency, and reclamp tube. The delegating nurse will tell you how much warm/tepid tap water to use to flush the tube.
10. Tube sizes vary and smaller tubes are more likely to clog, so flushing the tube with warm water is very important.
11. Follow prescribed medication times and special administration instructions (such as giving medication on an empty stomach, prior to eating, or with food).
12. Oral dosage forms that generally are not crushed unless crushing is prescribed by the prescribing health care professional include:
 - Enteric coated;
 - Extended and sustained release or
 - Sublingual
13. Never add medication to tube feeding formulas, not only for patient care issues, but because many medications are incompatible with formula. This can result in curd formation and clogged tubes.
14. Document medication administration according to instructions from the delegating licensed nurse and agency policy, including amount of water used for the procedure.

NOTE: Phenytoin (Dilantin) is a seizure medication used commonly among individuals with MR/DD. When administered by suspension into a feeding tube through which continuous enteral feedings are being given, Phenytoin is very poorly absorbed. Commonly used doses of Phenytoin (300 to 500 mg per day) may result in almost undetectable serum levels. Therefore, the consumer's doctor may order feedings held for one to two hours post medication administration.

Unit VIII

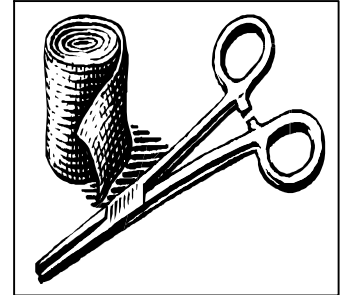
Care of Insertion Site and Feeding Tube:

Note: The delegating licensed nurse will instruct you in care of the insertion site and care of the feeding tube for an individual you are administering food or medication to via G / Jejunostomy Tube.

The delegating licensed nurse will instruct you in feeding tube dressing care and dressing changes, if applicable.

To ensure optimal usage, as well as safety and comfort for the consumer, feeding tubes must be cleaned and maintained properly on a **daily basis**.

Proper care of the tube insertion site is critical.



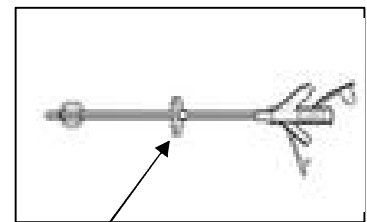
These general guidelines can be followed, but for more specific care and maintenance guidelines, refer to the instructions of the delegating licensed nurse, the physician's orders, your agency's policies or the manufacturer's instruction manual.

Guidelines for Care of Insertion Site and Feeding Tube

- Check the skin at the site for redness, irritation, or leakage of stomach fluid or contents.
- Notify the delegating licensed nurse or individual's physician if any of these are present.
- Be sure the G-tube is not becoming embedded and that you can rotate it within the stoma.
- **EACH DAY**, use gauze or a clean cloth, to clean the tube and skin at the insertion site with soap and water. Using a circular motion, move from the tube to the outer areas.

The Bolster:

- Rotate the bolster a quarter turn every day to relieve pressure on the skin and allow for aeration.
- An external bolster that is too tight can lead to skin breakdown and embedding of the internal bolster.
- Be careful not to pull on the tube or bolster.
- Be sure to clean thoroughly under the external bolster with water and a cotton swab **EACH DAY**.



External Bolster (sits above skin at insertion site)

PEG TUBE

Be aware of any labels or markings indicating an externally removable PEG tube and use caution in caring for it. Do not pull, or manipulate the PEG tube excessively as it can be dislodged easily.

Flushing the Tube

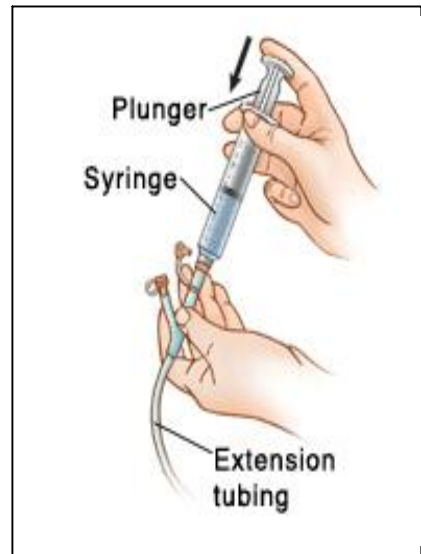
Flushing the tube is another daily tube care procedure. Tube flushing helps to prevent the tube from clogging and is done before and after every feeding, several times a day with continuous feeding, whenever feeding is interrupted and before and after every administration of medication.

- Flush the feeding tube and adapter as instructed on the MAR
- Check for specific instructions from the delegating licensed nurse, the individual's physician, your agency's policy, or the manufacturer.

ONLY USE warm/tepid tap water for tube flushing unless otherwise directed by the delegating licensed nurse.

DO NOT USE mildly acidic liquids such as carbonated beverages or cranberry juice to maintain feeding tube patency. Recent research has demonstrated that these acids can cause whole protein formulas to coagulate and clog the tube. As a result some experts discourage this practice.

Do not flush the feeding tube if feeding is interrupted for vomiting, abdominal pain, un-resolving nausea, bloating, fever. Stop using the feeding tube immediately and notify the delegating licensed nurse or individual's physician.



If physician is notified, request the physician to communicate orders directly to the delegating licensed nurse.

Daily Checklist:

In addition to the care and maintenance procedures listed above, a Daily Maintenance Checklist may be used and may include:

- Checking the consumer for any pain, discomfort or pressure around the tube exit site, or more general abdominal pain or discomfort.
- Checking the tube exit site for redness, swelling, pain, or leakage of fluid or formula (stomach contents).
- Rotating the external bolster one-quarter turn each day to relieve pressure on the skin and allow for aeration, as directed by the delegating licensed nurse.
- Cleaning the tube exit site and its external bolster with mild soap and water as directed by the delegating licensed nurse.
- Checking the height of the external bolster with the consumer in both the sitting and lying positions. The bolster should lie just on top of the skin. If the bolster appears too tight on the skin or too high off the skin, notify the delegating licensed nurse, as it may need adjusted.
- Verify placement of the tube as instructed by your delegating nurse:
 - ◆ before every feeding
 - ◆ several times a day for continuous feeding
 - ◆ at medication administration times
 - ◆ when changing food administration bags



Unit IX

Potential Complications, Emergencies and Problems

Potential Complications:

- A. Gastroesophageal reflux (reflux of tube feeding from stomach into esophagus).
- B. Aspiration (of tube feed or of saliva into airway) during procedure or after insertion of tube.
- C. Peritoneal leak, peritonitis (irritation or infection in the abdomen, abdominal pain, change in behavior, fever, vomiting).
- D. Agitation.
- E. Gastric perforation (another hole in the stomach in addition to the hole for placement of the feeding tube)
 - Traumatically removed or dislodged causing gastric perforation and leakage of stomach contents into abdominal cavity or onto abdominal wall skin.
- G. Clogging of tube.
- H. Bleeding at insertion site.
- I. Hematoma (bruising) of abdominal wall.
- J. Erosion of bumper/button into abdominal wall.
- K. Wound dehiscence (separation of the wound in abdominal wall where feeding tube enters stomach).
- L. Leakage of gastric acid around tube onto abdominal wall skin causing skin irritation, skin chemical (acid) burn which can lead to skin breakdown and cellulitis.
- M. Cellulitis (infection of the skin around the feeding tube opening in the abdominal wall).
- N. Closure or stenosis of stoma (opening through the abdominal wall into the stomach).
- O. Ileus (bowel stops working, may have abdominal pain, vomiting, constipation, fever, dehydration).
- P. Diarrhea.
- Q. Fluid and electrolyte imbalance.
- R. Nutritional concerns, weight loss, weight gain
- S. Altered sense of self (loss of social aspects of eating, loss of dignity)



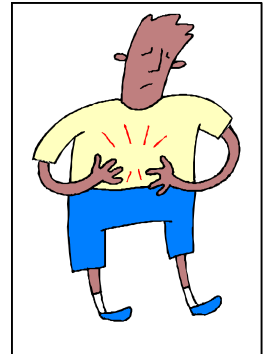
Potential emergencies with feeding tubes:

1. Report any symptoms of distress such as nausea, vomiting, breathing problem or choking, abdominal or chest pain, or coughing or fever to the delegating licensed nurse or the client's physician immediately and stop the feeding. These symptoms may indicate that a potential problem and that the continuation of feeding may be hazardous.

- ✓ Vomiting may lead to stomach contents getting into airway and causing breathing problems or distress

- ✓ If breathing problems occur, stop the feeding immediately and call 911

2. If an individual complains of abdominal pain, check the external bolster for proper adjustment, and check the tube's position. If the tube cannot be rotated easily and move freely in and out of the stoma, it may be embedded in the gastric wall or pulled into the peritoneum.



3. Check the skin for redness, swelling, build-up of red fresh tissue and leakage (irritation, granulation, infection and gastric leakage, bleeding).

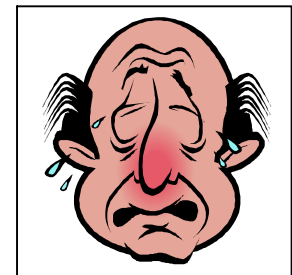
4. Report any pain (possible embedding of the tube or peritoneal infusion of food /liquid), leakage or redness (infection and/or acid burn) or bleeding to the delegating licensed nurse or the individual's physician. These conditions can be prevented by regular monitoring and care of the tube exit site.

5. If an individual with a feeding tube develops an increase in the number of bowel movements or liquid bowel movements (diarrhea), notify the delegating licensed nurse.

- Diarrhea may be accompanied by pain or cramping of the stomach (abdomen), fever, lightheadedness.
- Diarrhea may be simply due to the formula, soap film left in the feeding bag, medications, but may also be a sign of a serious bowel infection (bacteria can get into the formula and feeding equipment).
- Do not administer anti-diarrhea medication(s) unless specifically by a physician and delegated by a nurse.

6. If an individual with a feeding tube develops constipation (dry, hard, infrequent bowel movement), they may have to strain to have a bowel movement or have stomach (abdominal) pain or cramping.

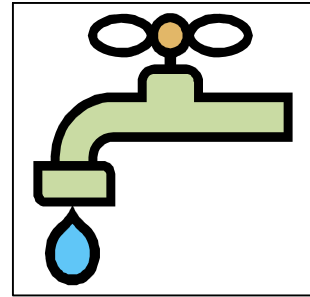
- Constipation may be due to the formula, not enough water intake, medications, and problems with the gastrointestinal system.
- Notify the delegating licensed nurse for instructions on water intake (including amount of water to use when flushing the feeding tube).
- The delegating nurse should also provide instructions regarding follow-up care or evaluations for the constipation



Feeding tube problems:

Excess Leakage:

1. The delegating licensed nurse will instruct you as to normal leakage and excess leakage for an individual, and specific steps to take to care for the leakage.
2. Excess leakage from the tube insertion site (stoma/hole) in the abdominal wall can often be corrected by adjusting the external bolster properly.
3. If leakage persists, contact the delegating licensed nurse or physician.
4. Apply a short term dressing to absorb any excessive leakage. Clean area with mild soap and water. Do not allow wet clothes or wet dressings to remain in contact with the skin as the stomach acid may cause a chemical burn of the skin. Change the dressing and clean area frequently if necessary.
5. If the stoma (hole/tube insertion site in the abdominal wall) is enlarged, the physician may replace the tube to improve stability.
6. Bleeding, redness/irritation around or from the stoma must be reported to the delegating licensed nurse.



Accidental Tube Removal:

1. Anytime an enteral feeding tube has been prematurely pulled out, the delegating licensed nurse and the individual's physician should be notified **IMMEDIATELY**. This is particularly important because a G / J Tube tract begins to close within two hours.
2. You may be instructed by the delegating nurse to cover the stoma site with a clean dressing.
3. **If the g-tube is unintentionally removed, rinse the tube off, put it back in the opening on the abdomen, tape it in place, and call the delegating licensed nurse and the client's physician immediately. DO NOT USE THIS TUBE.** You are reinserting the tube only for the purpose of keeping the tract open.

(Feeding tube problems continued)

Clogged / blocked tube (unable to flush the tube)

1. The delegating licensed nurse will instruct you on specific steps to take when a feeding tube becomes clogged or blocked. A blocked tube may be due to un-dissolved medication blocking the tube.

- ◆ The best way to prevent clogged tubes is by flushing the tube before and after every feeding and administration of medicine, or several times a day for continuous feeding with warm / tepid water or as directed by the delegating licensed nurse.

- ◆ Do not administer medications through a J-Tube.

2. In the event that the tube does become clogged, squeeze or roll the tubing with your fingers moving slowly down towards the individual's stomach; use a piston syringe to attempt to flush the tube with 50cc warm water; or follow instructions provided by the delegating licensed nurse.

3. Attach the flushing syringe to the end of the g-tube and gently pull back on the plunger to dislodge the clog. If the blockage remains, instill warm water (50cc) into the tube. Gentle pressure alternating with suction (push/pull) will relieve most obstructions. If unsuccessful, leave solution in tube for 3-5 minutes and repeat procedure. Follow the instructions given you by the delegating licensed nurse on what to do if the tube becomes clogged.

4. To unclog a tube, follow the delegating nurse's instructions only.



Nausea or cramping during feeding

1. Feeding may be entering the stomach too fast.

- ◆ Contact the delegating licensed nurse or follow instructions from the delegating licensed nurse to slow down the flow by lowering the feeding syringe for bolus feeding, and by slowing the pump administration flow rate for intermittent and continuous feeding.

2. The food (nutritional) supplement may be too cold.

- ◆ Contact the delegating licensed nurse or follow instructions from the delegating licensed nurse to warm the supplement, usually by allowing to come to room temperature.

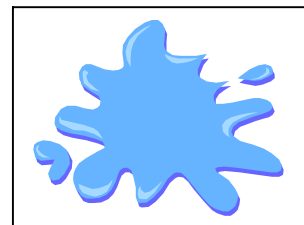
3. If nausea or cramping continue, stop the feeding and contact the delegating licensed nurse.

Feeding tube disconnection and spillage of tube feeding/formula:

1. Clamp tube and reconnect the tube, then unclamp and make sure it is running.

2. Clean skin with mild soap and water and pat dry.

3. Notify the delegating licensed nurse of the problem and to receive further instructions.



Unit X: Self-Administration Assessment Introduction and Tool

Introduction to Completion of Self-Administration Assessment

The purpose of the Self-Administration Assessment is to ensure that the client is able to **SAFELY self administer tube feedings and medications per G – J Tube**. Every client with DD has the right to self-administer their medications. The county board (CB) and the service provider are responsible for the safety of the individual with developmental disabilities.

When it is determined a Self –Medication Assessment is needed:

Consider the client's safety. If on occasion the client cannot safely self administer formula or medications (e.g. ◀ client experiences an episode of mental illness, ◀ client becomes physically ill, ◀ client goes to a new environment and cannot transfer skills to the new environment right away), **certified** staff will need to provide assistance or administer medications / formula to the client during those times. When the client is able, he can self administer formula / medications as indicated in the ISP.

The self administration assessment needs to be completed at a minimum of every 3 years, with a review done annually. A new assessment will be completed in the event of (but not limited to) the following occurrences:

- The needs of the individual changes
- The medication or formula packaging changes (ie. flip top can to screw top can; liquid formula to powder)
- There is a change in the usual medication routine (new location, new provider)

Where to complete the assessment

Complete the assessment in the setting(s) where the client takes / receives medications / feedings. This is to determine if the client is able to safely take medications or self administer tube feedings in his own environment.

Using the form

Answer each question on the form. Questions are answered with a "Yes" or "No." Follow the instructions on the form to determine where to go following a "Yes" or "No" response.

Processing the Assessment results

Once the assessment is completed, the Individual's Service Plan should specify how medication / formula administration will be done. See the form for statements that could be used. Check the appropriate statements to include in the ISP.

Other

Remember, clients have the right to do as many steps of the medication / formula administration as they can do either independently or with support, even if they are not assessed to be able to self-administer with or without assistance (5123: 2-6-02 (C)).

Medication(s) assessed at this time:

Attach another page if there is not enough space on the form to record meds/ formula or attach a copy of the MAR. Multiple Self-Administration Assessments may be used for an individual.

For example, if a client requires certified staff assistance due to multiple medications at 8am but can self – administer 1 medication at 12N or can self-administer formula, separate Self - Administration forms must be used and should be included in the ISP.

Reviewed by (May be other than those completing Self Administration Assessment Form):

- ◆ If the client has a SSA, the SSA should review the results and make the applicable indications on the IP.
- ◆ The delegating nurse should view and sign the assessment.
- ◆ The Med Administration course is a training for DD personnel and does not constitute authorization, or delegation from the RN teaching the course.

If two people do not agree with the assessment, a third party should be consulted. If an agreement cannot be determined, the DODD representative should be consulted.

Rev 11 - 08

Self - Admin Assessment for Adm Food / Meds per G/J Tube

Name of Individual (Client) _____

Signature & Title of Persons **Observing** Assessment (2 required). One of the observers **MUST** be a licensed nurse:

Nurse's Signature: _____ Date: _____ Time: _____

Other Observer's Signature: _____ Date: _____ Time: _____

Persons conducting assessment will need to have ALL necessary information regarding the individual's current medications and physician's orders for tube feeding. The demonstrations must take place during the actual assessment. See reverse side for additional documentation.

1. I know why I receive food / medications per G / J Tube
 YES Go to 2. NO Go to ☹

2. I know the name(s) of my formula / medications
 YES Go to 3. NO Go to ☹

3. I know when to take my formula / medications. I have demonstrated that I take my formula / medication(s) at the right time every day by using the clock or my routine (after the news, before lunch, etc).
 YES Go to 4. NO Go to ▼

4. I have demonstrated that I can read the label on the formula / medications and that I can administer the correct amount of formula / medications.
 YES Go to 5. NO Go to ☹

5. I have demonstrated I can regulate the rate of formula administration .
 YES Go to 6. NO Go to ☹ N/A Go to 6.

6. I know who to tell when I have 4-7 days of formula or medications left so I never run out.
 YES Go to 7. NO Go to ☹

7. I have demonstrated how to prepare my medications for self administration and have demonstrated ability to correctly self administer medications once they are prepared (crushed and dissolved in water)
 YES Go to 8. NO Go to ☹

8. I know how to store left-over formula and how to dispose of it if it is more than 24 hours old.
 YES Go to 9. NO Go to ☹

9. I know how to trouble shoot clogs and how to properly care for my equipment.
 YES Go to 10. NO Go to ☹

10. I have demonstrated harmful behaviors to self and cannot self administer my formula / medications with or without assistance.
 YES Go to ✗ NO See comment below

☹

Unable to Self Administer With or Without Assistance

Will Require Staff With Certification 2 in Administration of Food or Medications by G / J Tube

Continue to next assessment question.
Complete this form in its entirety.

▼

Self Administer With Assistance

Service Plan to Include: Time Reminder

Continue To Next Step

☺

Self - Administer Without Assistance

✗

Unable to Self Administer With or Without Assistance

Will Require staff with Certification 2 to Administer All Medication / Formula

Identified Behavior / Justification MUST be documented

If the answer to questions 1-9 were all **yes**, go to ☺

REMINDER: DD Personnel MUST have a current certification 1 as well as a current certification 2 in order to administer medication or formula by G / J Tube.

Self-Administration Assessment continued

Once the assessment is completed, the service plan for the individual should specify how medication administration will be done. Any of the following statements could be used in the service plan depending on what is correct for each specific person.

- I can self-administer medication(s)/ formula without assistance.
- I can self-administer medication(s) / formula with assistance (select one of the following related to the assistance).
 - The individual receives assistance with self-administration of medication(s) / formula through reminders of when to take the medication(s). Specify reminders needed in the client's ISP.
 - The individual receives assistance with self-administration of medication(s) / formula through physically handing the medication container / formula container to client. Provide specific instructions in the client's ISP.
 - The individual is physically impaired and the provider may open the medication container / formula container for the individual to assist with self-administration of medication / formula. Place specific instructions in the ISP.
 - The individual is physically impaired and the provider physically assists them with opening the medication or formula container and preparing the medication or formula for administration. Place specific instructions on the client's ISP

Other:

- I need certified staff to administer my medication. Use this if answer to any question leads you to the top box on the right side of this form. If any question, #1-9 is answered "no" use this answer.
- I require certified staff to administer my medications while I am learning to self-medicate. IP Team should consider Skill Development programs as appropriate. Use this answer if the client cannot consistently self-medicate. A specific plan should be written with goals and time frames. See 5123:2-6-02 (C).
- I can self-administer specific medication or task (ie. prepare formula, check placement of feeding tube, etc.)
 - Describe medication and/or task _____
 - Ability Level with task _____
 - Designate if independence or staff administration of a task/ medication is applicable to a specific location or time of day (ie. Work setting).

- I have demonstrated unsafe behaviors and am therefore unable to self-administer medication/ formula with or without assistance. Identify behavior / justification.

If the client has a history of unreliability or noncompliance the person doing the assessment may indicate that the client requires med administration / tube feeding for his / her own safety.

RESULT:

- Self Administration with assistance Self Administration
- Medication Administration/ Delegated Nursing (DN)
 - I live in a 5 bed or less setting and will receive my medication from staff that have a level one certification for medication **(or)** I will receive DN services per the state's DN rules

Medication(s) assessed at this time: (Attach another page if more space needed – or copy of MAR)

Medication / Formula Name	Dose	Route
_____	_____	_____
_____	_____	_____

Reviewed by:

SERVICE SUPPORT ADMINISTRATOR (signature & date): _____

NURSE (signature & date): _____

Unit XI

Conclusion:

- ♣ Enteral feeding tubes continue to evolve as new developments proceed from laboratories to clinical settings. For information on specific enteral feeding tubes, consult the manufacturer's instructions.
- ♣ Preventing complications and providing quick knowledgeable solutions will provide a positive tube feeding experience for the individual requiring use of a feeding tube. Tube feeding care requires precise guidelines, and the use of those guidelines to provide for the safe, effective delivery of enteral nutrition, hydration and medication administration.



References:

Brunner, Suddarth. "Textbook of Medical Surgical Nursing," J.B. Lippincott Co, Philadelphia, Seventh Edition, pp. 876-885.

Buff, D., "State legislation and use of feeding tubes in cognitively impaired patients," Journal of the American Medical Association, Vol. 290, No. 15, October, 2003, Letters Section Editor: Stephen J. Lurie, MD, PhD, Senior Editor.

Cincinnati Children's Hospital Medical Center, "Gastrostomy tube care and feeding instructions," www.cincinnatichildrens.org, Patient Education Program II 2008 1/93, Revised 2/96, 8/98.

Continuous Gastric, Jejunal, Nasojejunal, or Nasogastric Tube Feeding with Feeding Pump and Farrell Valve. <http://www.cincinnatichildrens.org/health/info/abdomen/home/gastric-jejunal.htm> Accessed Jan 09. Updated 2006

DeLaune, S., Ladner, P. "Fundamentals of Nursing: Standards and Practices," Delmar, Thomson Learning, Inc, Clifton Park, N.Y., Second Edition, pp. 11671187.

Enteral Nutrition Patient Education Handouts. The Ohio State University Medical Center, Columbus, Ohio; 1999:
<http://devweb3.vip.ohio-state.edu/Materials/NutritionIndex.htm>
<http://surglinks.com/tube.feeding.gastroparesis.htm>

Enteral Tube Feeding. <http://www.healthcare2z.org/ditem.aspx/277/Enteral+tube+feeding> Accessed Jan 09. Revised 2007

Health and Safety Alert 01-11-21: "Feeding Tubes". Ohio Department of Mental Retardation and Developmental Disabilities. Issue date 11-21-01.

Maynard, G., Jones, K., Guidry, J., "Phenytoin absorption from tube feedings," Archives of Internal Medicine, Vol. 147, No. 10, October, 1987.

Mitchell, S., Teno, J., Roy, Jason, Kabumoto, Glen, Mor, Vincent, "Clinical and organizational factors associated with feeding tube use among nursing home residents with advanced cognitive impairment," Journal of the American Medical Association, Vol. 290, No. 1, July, 2003, pp. 73-80.

RN.com, "Nurses' Guide to Enteral Feeding Tubes," San Diego, California.

Tube Feeding: Discharge Instructions. Northwestern Memorial Hospital, Chicago, Illinois; 7/99: www.nmh.org (Intermittent Tube Feeding and Continuous Tube Feeding instructions in section IX).

Tube feeding: http://www.oralcancerfoundation.org/dental/tube_feeding.htm Accessed Jan 09. Revised April, 2007.

Yeh, S., "Geriatric cachexia: the role of cytokines," American Journal of Clinical Nutrition, Vol. 70, pp. 183-197.

Unit XII: Appendix

PAGE	Content
37-38	Health and Safety Alert #17-3-07: Feeding Tubes
39-41	Glossary of Terms
42-43	Continuous Gravity Tube Feedings
44	PEG Tube Site Care and PEG Tube Feedings
45	Generic Guidelines for Administration of Feeding / Medication per G Tube
46-47	Skills Checklist for Tube Feedings
48	Documentation Guidelines and Other Instructions
49	Other Instructions
50	PEG Tube (picture)



Health and Safety Alert

(Adapted from #17 – 3 – 07)

FEEDING TUBES

Situation: There have been a number of serious issues arise associated with complications of feeding tubes.

Alert: Enteral feeding tubes are tubes placed in the gastrointestinal tract through an opening in the upper abdominal wall into the stomach. Gastric tubes (G-tube, PEG) are placed in the stomach and jejunostomy tubes (J-tube) are placed in the small intestine. These feeding tubes are used for a variety of reasons, including problems swallowing, recurrent aspiration and pneumonia, and inability to maintain adequate nutrition or fluid intake.

Most of the research on the efficacy of tube feeding has been done in the long-term care setting (nursing homes). The populations studied are somewhat dissimilar to the individual with developmental disabilities who develops dysphagia and difficulty swallowing. However, the decision process to proceed with placement of a tube for feeding, the complications of the procedure and subsequent feeding, and, the long-term outcomes are similar between the nursing home population and the adult population with developmental disabilities.

It is important for all stakeholders to have the opportunity to understand the benefits and risks of initiating enteral tube feeding for dysphagia or malnutrition (see list of articles at end of alert).

Critical steps to take following enteral feeding tube placement:

- 1. Discuss with the physician performing the procedure when to start using the feeding tube and the type of tube feeding to use..**
 - Leakage from the gastrostomy site (opening in the abdominal wall through which the tube enters the stomach) is a potential complication of feeding tube placement.
 - Some advocate feeding tubes not be used for 24-48 hours after placement, to allow for healing of the gastrostomy site to begin.
 - However, this is not universal practice, and many persons do well with more immediate initiation of tube feedings.
 - If use of an enteral feeding tube is delayed, then other means of providing adequate fluids is necessary.

(Critical Steps continued - Feeding Tubes from Safety Alert)

2. Review the potential complications of enteral tube feedings with direct care staff and nursing staff . These can be found in Table 2 of the Finucane et al article and are summarized below:

- Gastroesophageal reflux (reflux of tube feeding from stomach into esophagus)
 - Aspiration (of tube feed, of saliva, into airway)
 - ◆ During procedure
 - ◆ After insertion of tube
 - Peritoneal leak, peritonitis (irritation or infection in the abdomen, causes abdominal pain, change in behavior, fever, vomiting)
 - ◆ Insertion of feeding tube not a sterile procedure
 - ◆ Feeding tube solutions not necessarily sterile

 - Fever
 - Agitation
 - Vomiting
 - Diarrhea
 - Abdominal pain
 - Clogging of tube
 - Nutritional concerns
 - Individual exhibits unusual behavior

 - Leakage from the tube
 - Constipation or diarrhea
 - Bleeding at insertion site
 - Fluid and electrolyte imbalance
 - Migration or displacement of tube
 - Hematoma (bruising) of abdominal wall
 - Leakage or bleeding from the tube site
 - Erosion of bumper/button into abdominal wall
-
- Altered sense of self (loss of social aspects of eating, loss of dignity)
 - Closure or stenosis of stoma (opening through the abdominal wall into the stomach)
 - Cellulitis (infection of the skin around the feeding tube opening in the abdominal wall)
 - Ileus (bowel stops working, may have abdominal pain, vomiting, constipation, fever, dehydration)
 - Wound dehiscence (separation of the wound in abdominal wall where feeding tube enters stomach)
 - Some symptoms that may indicate feeding tube complications and the need for staff to get medical help for the individual immediately include
 - Gastric perforation (another hole in the stomach in addition to the hole for placement of the feeding tube)

References depicting benefits and risks of tube feeding:

Gillick M. Sounding Board: Rethinking the Role of Tube Feeding in Patients with Advanced Dementia. NEJM. 2000;342(3):206-210.

Finucane TE, Christmas C, Travis K. Tube feeding in patients with advanced dementia: a review of the evidence. JAMA. 1999;282:1365-1370.

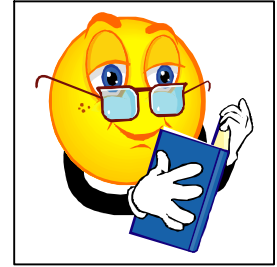
Lo B, Dornbrand L. Editorial: Understanding the Benefits and Burdens of Tube Feedings. Arch Intern Med. 1989;149:1925-1926.

Marik PE. Aspiration Pneumonitis and Aspiration Pneumonia. NEJM. 2001;344(9): 665-671.

McCann R. Lack of Evidence About Tube Feeding-Food for Thought. JAMA. 1999;282(14):1380-1381.

Glossary of Terms

Continuous gravity tube feeding: given by bottle or bag hooked to a feeding set all the time around the clock or at specific times over a set time such as 8 - 10 hours.



Bolster: Disc-like structure attached to the feeding tube at the point where the feeding tube enters the body. Its function is to stabilize the tube and prevent it from dislodging from the stomach.

Enteral nutrition: a term used to describe the direct infusion into the stomach or small intestine of nutrients in liquid form. It comes from the original Greek enteric meaning “of the intestine,” or “relating to or situated in the intestine.”

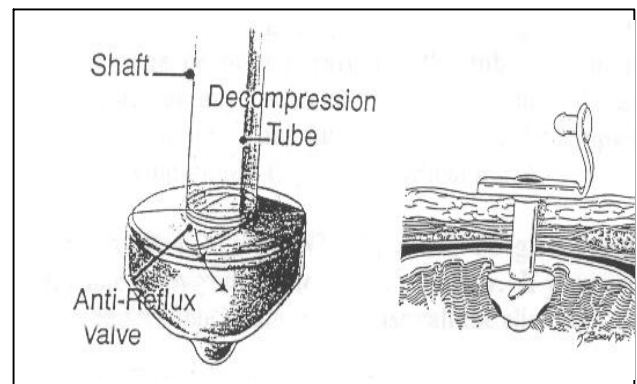
Feeding Tube or Enteral Feeding Tube: In this training, refers to either a gastrostomy tube or a jejunostomy tube.

- Nasogastric tubes (tube that goes into stomach through the nose) are not a part of this training and are not a delegable nursing task.
- The term **feeding tube** is interchangeable with **enteral feeding tube**, as enteral simply refers to a feeding tube that is placed into the gastrointestinal tract.
- Feeding tubes are made of biocompatible “special material” silica to help prevent damage to the gastrointestinal tract and skin.
- Feeding tubes are put in or taken out by the individual’s physician or nurse.

Gastric or Gastro: Relating to the stomach.

Gastrostomy Feeding Button: A “T” shaped plastic device held in place by a mushroom-shaped dome inside the stomach. A removable tube inserted into the button is used to deliver feedings

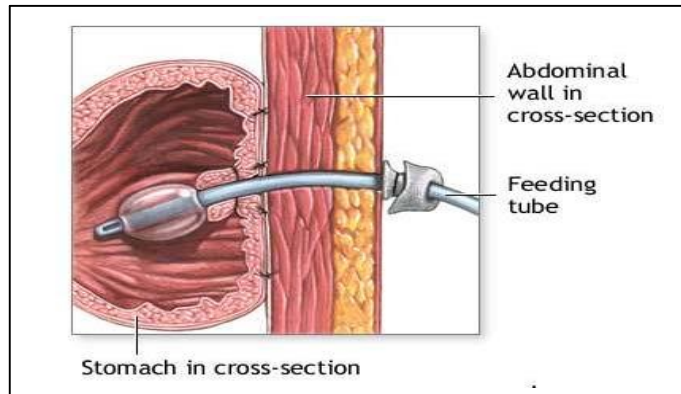
- The button remains in place at all times and is capped by an attached safety plug between feedings.
- In addition, the dome has an anti-reflux valve to further prevent leakage of stomach contents.
- A feeding is administered by inserting a small tube through the button into the stomach.
- When the feeding is completed the tube is removed and the safety plug closed.



Gastrostomy Tube or Gastrostomy Feeding Tube: Commonly abbreviated as "g-tube". A flexible tube or button (skin level device) that is placed into the stomach through an opening (small hole) in the abdominal wall. The word "gastrostomy" comes from two Latin root words for "stomach" (gastro) and "new opening" (stomy).

- This tube is used to vent the stomach for air or drainage and/or to provide an alternate way for feeding, hydration and medication administration.
- Food, liquids and medications infuse directly into the stomach.
- Gastrostomy tubes are commonly used in patients who need long-term feeding and hydration and are unable to take in adequate food or liquid by mouth.
- Gastrostomy tubes may be used in conjunction with jejunostomy tubes; some special tubes will actually be two tubes in one with openings in the stomach and the small bowel (jejunum).

Gastrostomy or Jejunostomy Tract: Path through tissue from stoma to the stomach or jejunum.



Gastric Residual: The amount of fluid and or food remaining in the stomach after a set time period

- Based on physician orders, the delegating licensed nurse will provide instructions if you need to check gastric residual, what amount is acceptable, what amount is too much, and what to do about it (e.g., greater than 50cc gastric residual, wait one hour, recheck gastric residual. If still greater than 50cc gastric residual, call the delegating licensed nurse. If less than 50 cc gastric residual, proceed with tube feeding as instructed.).
- Checked by attaching a 50 or 60 cc syringe to the feeding tube and withdrawing any fluid or food into the syringe; may need repeated depending on amount withdrawn.
- With bolus feeding, usually checked just prior to next feeding.
- With continuous feeding may be checked at specified intervals.



Intermittent gravity tube feeding: given at specific times of the day.

Jejunal or Jejuno: Relating to the jejunum, a segment of the small bowel.

Jejunostomy Tube or Jejunal Tube or Jejunostomy Feeding Tube: Commonly called a "J-Tube". It is a flexible tube placed in the jejunum (the middle section of the small bowel).

- Jejunostomy tubes are placed into the small bowel (jejunum) either through an opening (small hole) in the abdominal wall or through a specific port on a gastrostomy tube.
- Jejunostomy tubes are used to place food (nutrients) and liquids directly in the small bowel (jejunum). Medications are rarely administered through a j-tube due to clogging and problems with medication absorption from the gastrointestinal tract.
- Because the jejunostomy tube infuses substances into the small bowel (further "downstream" from the stomach and esophagus) some individuals experience less gastric (stomach) reflux of food and liquids as compared to a gastrostomy tube.
- Jejunostomy tubes are smaller in diameter than gastrostomy tubes and therefore maximum infusion rates and bolus feeding time will be greater in comparison, and j-tubes more easily clog and are less easy to unclog.
- Jejunostomy tubes are used when feeding into the small bowel (jejunum) is necessary such as in patients who cannot obtain adequate nutrition through the stomach, have stomach obstructions or have intestinal motility problems or severe gastric reflux.

Pump tube feeding: provides a prescribed amount of formula using a specialized pump and given at a constant rate; the formula may be given all the time around the clock over 24 hours (pump is continuous), or only at specific times such as over 8-10 hours (pump is cycled).

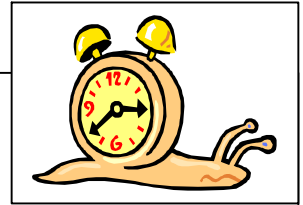
Stable Gastrostomy/ Jejunostomy (G / J) Tube is defined as a G / J tube that has been in place for a minimum of One month following *initial* placement and is free from complications.

Stoma: Hole in the abdominal wall which opens into the stomach (usually) or small intestine.

Syringe bolus tube feeding: given by syringe at specific times of day such as meal times.



Continuous gravity tube feeding:



The delegating licensed nurse will provide the DD personnel with specific intermittent tube feeding instructions. These instructions should include:

- Formula
- Times of the feedings
- Rate of feeding
- Number of feedings each day
- Amount of each feeding
- Tube flushes (when / how much water to use)

1. Follow general preparation guidelines.
2. Clean the work area, wash hands thoroughly and put on gloves.
3. Assemble equipment you will need: measuring cup, formula, water, gravity set tubing and feeding bag, 50-60cc syringe, hook or pole to hang feeding set.
4. Allow formula to warm to room temperature over 20 minutes or so if it has been refrigerated.
5. Explain procedure to consumer. Provide privacy.
6. Position the individual:
 - Verify tube placement per delegating licensed nurse instructions, for example, by **[a]** checking for tube graduation mark position; **[b]** injecting air into the tube with the syringe and listening for air bubbles in the stomach with a stethoscope; or by **[c]** aspirating (pulling back on the syringe to check for location of tube in the stomach).
7. Using the syringe, clear the tube of formula and check for tube patency by flushing the tube with the specified amount of warm/tepid tap water.
8. The delegating licensed nurse may have you check gastric residuals
9. Check the bottle for cracks or leaks; if any, get a new bottle.
10. Put the bottle in the plastic holding bag.
11. Close the flow clamp on the tubing.
12. Remove bottle cap; remove the cap from the feeding set and screw the top to the bottle.
13. Turn bottle upside down and hang from pole or hook at least 2 feet above client's head.
14. Squeeze the drip chamber until it is at least half full.
15. Open the flow clamp and fill the tubing before hooking it into your feeding tube.
16. Close the flow clamp on the tubing.
17. Attach the tubing of the gravity tube feeding set to the individual's feeding tube.
18. Open the clamps and set the flow rate.
19. When the bottle is empty, but some formula is left in the tubing, clamp the tubing.
20. Disconnect the feeding bottle tubing from the feeding tube.
21. Attach the syringe to the tubing, unclamp the tubing, and give the prescribed amount of warm / tepid tap water to clean the tubing.
22. Detach the syringe and clamp the tubing.

For small bottle:

240 cc or 8 ounce

(Continuous Gravity Tube Feeding continued)

Large Bag:

23. Close the clamp on the tubing of the feeding bag.
24. Slowly pour the prescribe amount formula into the feeding bag.
25. To keep the tube feeding from getting spoiled:
 - Always write the date and time on the tube feeding container when it is opened
 - Only hang the amount of tube feeding/formula the delegating nurse has instructed you to (generally enough for 8-12 hours)
 - Refrigerate any opened unused formula; throw away any open unused formula in 48 hours
 - Do not add fresh formula to formula left in the bag; throw away any old formula in the bag and rinse the bag before adding new formula
 - Change the tube feeding set every 48 hours
26. Hang the feeding bag on a pole or hook about 1-2 feet above the individual's head.
27. Open the clamp and allow formula to fill the tubing removing all the air (before hooking the tubing up to the feeding tube).
28. Close the clamp.
29. Using the syringe, flush the feeding tube with 30-60cc of warm/tepid tap water (the delegating licensed nurse will tell you how much water to use).
30. Connect the tubing of the feeding bag to the feeding tube using the feeding tube adapter.
31. Open the clamp and regulate the flow so the feeding drips in slowly; the delegating licensed nurse will tell you how many drops of formula in one minute to administer.
32. Stop the tube feeding at prescribed times to give prescribed water and prescribed medications
33. After entire amount is administered (when the feeding is finished), close the clamp on the tubing of feeding bag before all the formula runs out of the tube.
34. Disconnect the feeding bag tubing from the feeding tube.
35. Using the syringe, flush the feeding tube with the specified amount of warm/tepid tap water (the delegating nurse will tell you how much water to use). **Note: do not use hot water, and do not heat water in microwave, on a stove or over fire. Check temperature of water by placing a few drops on the underside of your wrist-if it feels hot on your skin, it is too hot to use.**
36. Detach the syringe and clamp the feeding tube.



Completing small bottle or large bag continuous gravity tube feeding:

37. Remove gloves and wash hands thoroughly.
38. Wash the feeding bag with small amount of dishwashing soap and water, rinse thoroughly to remove soap film, and hang the bag to dry. Change to a new bag as instructed by the delegating licensed nurse.
39. Document procedure by following your agency's policy and procedure for documentation or the delegating licensed nurse's instructions for documentation, which may include the following:
 - How placement was verified
 - Type of feeding and amount given
 - Color and amount of fluid aspirated and replaced
 - Client's response to the procedure

PEG Tube Site Care and PEG Tube Feedings

PEG Tube Site Care.

- Cleanse daily (or more often if drainage present) with mild soap and warm water
- You may use Vaseline on surrounding skin (thin layer) to prevent gastric juices from causing skin breakdown. Apply with a cotton-tipped applicator.
- Place a cut gauze pad or gauze fitted for drain site area if any discharge is present. This helps to protect the surrounding skin and needs to be changed whenever drainage is present.

PEG Tube Feedings: Bolus Feeding

- Elevate client's upper body to 45 degrees to prevent aspiration
- Client's upper body needs to remain in an elevated position for at least 60 minutes after the feeding has been administered.
- Assess the patency (openness) of the PEG tube by irrigating with 20-30 cc of water before and after each feeding.
- Aspirate for residual gastric contents to validate gastric emptying. If more than specified amount is aspirated into the syringe, alert the delegating nurse immediately.
- **Re-instill the gastric contents** to prevent fluid / electrolyte losses, unless instructed otherwise.
- Administer tube feedings at room temperature.
- Keep an accurate measurement of the tube to detect if it has become dislodged. Measure from the skin insertion site to the distal (far) end of the tube and record in a log or journal.
- **Stop the feeding and alert the nurse immediately if you observe**
 - ♣Belly pain
 - ♣Chest pain
 - ♣Shortness of breath
 - ♣Nausea or vomiting
 - ♣Fever
 - ♣Blood in aspirated stomach contents
 - ♣Inability to aspirate stomach contents
 - ♣Changes in skin color (turns dusky or blue)
 - ♣Inability of tube feed to enter the stomach
 - ♣Blood in aspirated stomach contents

Generic Guidelines for Administration of Feeding / Medications per G-Tube

1. Check g-tube site
2. Verify placement
3. Check for residual if physician has ordered
4. Flush with water
5. Administer diluted liquid medications
6. Flush with water
7. Administer crushed and diluted medications
8. Flush with water
9. Administer feeding
10. Flush with water

If tube falls out, rinse it off and reinsert it immediately, tape it to the abdomen, and then call the delegating nurse IMMEDIATELY. **DO NOT USE THIS TUBE.** You are reinserting it only for the purpose of keeping the tract open.

The client must **not** be lying flat when a tube feeding or medications are administered per g-tube. The client's torso must be elevated to at least 45 degrees during the feeding and for one hour after.

If giving a bolus feeding, be sure to administer the feeding over the time frame specified on the MAR or by the delegating nurse.

Be sure formula is at room temperature. If too cold, the tube feeding can cause cramping and discomfort.

Never mix medications with formula. Formula can cause medications to curdle and clog the tube.

Be sure to flush the tube with water before and after administering medications and before and after administration of a feeding. Flush with amount of water prescribed on the MAR.

NOTE: Do not use hot water and do not heat water in microwave, on a stove or over fire. Check temperature of water by placing a few drops on the underside of your wrist – if it feels hot on your skin, it is too hot to use. Water and formula should be at room temperature prior to administration.



Skills Checklist for Tube Feedings

- The delegating licensed nurse will provide the DD personnel with specific feeding instructions. These instructions should include:
 - ◀ Formula
 - ◀ Amount of each feeding
 - ◀ Number of feedings each day
 - ◀ Duration
 - ◀ Times of the feedings
 - ◀ Tube flushes (amount of water before and after feeding)
- Follow general preparation guidelines.
- Clean the work area, wash hands thoroughly and put on gloves
- Assemble equipment you will need: measuring cup, formula, water, gravity set tubing and feeding bag, 50-60cc syringe, hook or pole to hang feeding set
- Allow formula to warm to room temperature over 20 – 40 minutes if it has been refrigerated.
- Gravity set will need to be assembled according to package instructions.
- Explain procedure to consumer. Provide privacy.
- Position the individual and:
 - ◆ Verify tube placement per delegating licensed nurse instructions - for example, by: **(a)** checking for tube graduation mark position, **(b)** injecting air into the tube with the syringe and listening for air bubbles in the stomach with a stethoscope; or **(c)** by aspirating (pulling back on the syringe to check for stomach contents).

◆ If you are asked to check for residual (the amount of food left in the stomach after a specified time), the delegating licensed nurse will tell you the amount of the residual pulled into the syringe that is too much (a good rule of thumb is to report a residual of more than 50 cc).

◆ **If the residual amount is more than what the nurse has told you is acceptable, do not proceed with the medication administration and notify the delegating licensed nurse.**

- Using the syringe, clear the tube of formula and check for tube patency by flushing the tube with the prescribed amount of warm/tepid tap water. **Note: do not use hot water, and do not heat water in microwave, on a stove or over fire.** Check temperature of water by placing a few drops on the underside of your wrist-if it feels hot on your skin, it is too hot to use.
- Close the clamp on the tubing of the feeding bag.
- Slowly pour the formula into the feeding bag.
- Hang the feeding bag on a pole or hook about 1-2 feet higher than the client's head.



Intermittent Gravity Tube Feeding)con'd)

- Open the clamp and allow formula to fill the tubing removing all the air (before hooking the tubing up to the feeding tube).
- Close the clamp.
- Using the syringe, flush the feeding tube with the prescribed amount of warm/tepid tap water (the delegating licensed nurse will tell you how much water to use).
- Connect the tubing of the feeding bag to the feeding tube using the feeding tube adapter.
- Open the clamp and regulate the flow so the feeding drips in slowly; the delegating licensed nurse will tell you how many drops of formula in one minute to administer.
- After entire amount is administered (when the feeding is finished), close the clamp on the tubing of the feeding bag.

- Disconnect the feeding bag tubing from the feeding tube.

- Using the syringe, flush the feeding tube with the prescribed amount of water (the delegating licensed nurse will tell you how much water to use).

- Detach the syringe and re-clamp the feeding tube.

- Remove gloves and wash hands thoroughly.

- Wash the feeding bag with small amount of dishwashing soap and water, **rinse thoroughly to remove soap film**, and hang the bag to dry.
- Document by following your agency's policy and procedure for documentation or the delegated licensed nurse's instructions for documentation, which may include the following:
 - Interventions to ensure placement
 - Aspirate color and amount
 - Type of feeding and amount given
 - Consumer's response to the procedure

Staff Name: _____ Date: _____

Nurse's Name: _____

Documentation Guidelines and Other Instructions

Below are phrases you can use when documenting a Bolus tube feeding.

Condition of Insertion Site:

Depending upon what you observe, you may use any of the following phrases.

- No drainage. Site dry and skin intact.
- Site pink and tender to touch (or not tender to touch)
- Site red and warm to touch. Skin hard to touch. Client states area painful or “hurts”
- Area looks raw and irritated.
- Drainage present.
 - Covers 50% of gauze dressing
 - Drainage stain 3cm by 2 cm noted on clothing
 - Drainage is clear
 - Drainage pink in color
 - Drainage dark (or bright) red in color
 - Drainage yellow-green in color
 - Drainage smells (like rotting fish, sour, like rotten eggs, or whatever)
 - Discharge is watery (or thick or sticky)

Care of Insertion Site:

- None given. Site dry. Skin intact.
- Area washed with warm soap and water and dried with clean towel
- Thin layer Vaseline applied and clean gauze placed over the area
- Nurse / DD coordinator/ primary CG notified about condition of insertion site

Aspiration of Contents of Stomach

- Document amount aspirated in CCs (eg. Aspirated 35 CCs stomach contents)
- Returned 35 CCs aspirated stomach contents to stomach.
- Describe color (clear, tan, light green, brown, looks like coffee grounds)
- Document any problems aspirating contents or returning contents to stomach (eg. unable to aspirate stomach contents. Nurse notified. Feeding withheld.)
- Unable to aspirate stomach contents. Tube irrigated with 30 CCs water. Able to aspirate 50 CCs tan stomach contents.

Client Response to Tube Feeding and *Actions Taken*

- Client voiced no complaints. *Procedure completed without incident. 240 CCs feeding (specify name of feeding) instilled.*
- Client stated felt too full with only 120 of 240 CCs instilled. *Feeding stopped. Nurse called.*
- Client voiced chest pain. *Feeding stopped. Nurse / MRDD supervisor / physician / squad called*
- Client demonstrated shortness of breath with only 30 CCs instilled. *Feeding stopped. Nurse called.*
- Client's lips and fingers turned blue after 100 CCs feeding instilled. *Feeding stopped. Nurse notified.*
- Client began vomiting after 200 CCs feeding instilled. *Feeding stopped. Nurse notified.*
- Client began coughing after 10 CCs feeding instilled. Client turned blue. *Feeding stopped. 911 called.*

Other Instructions:

If you are ever in doubt about what to do, call the nurse.

Place a towel on client's lap when doing tube feeding.

Be sure to work on a clean, dry surface

Be sure to return stomach contents to the stomach after aspiration.

Call the nurse if you are unable to aspirate stomach contents. Hold feeding until you have received instructions from the nurse.

Call the nurse if you cannot get the tube feeding to go in.

Call the nurse if the feeding leaks out around the stoma (insertion site). Stop the feeding.

Call the nurse if you notice any blood in the stomach contents. Do not tube feed.

Call the nurse if the skin around the insertion site is broken down.

Call the nurse if the client has a temperature above 100.4 degrees F

Be sure to read the label on the tube feeding to assure administration of correct feeding. Check expiration date.

All feedings are to be at room temperature. If refrigerated, warm by allowing to sit at room temperature for 20 - 40 minutes. Never warm in a microwave or on the stove top.

Be sure to check tube placement as directed before instilling a tube feeding.

You can check tube placement by doing any of the following:

- Listen with a stethoscope for gurgling sounds while inserting 20CCs air into the stomach.
- Measure the length of tubing from insertion site to end of tube. (Preferred method)
- Aspirate stomach contents

Always irrigate feeding tube with specified amount of water **before** and **after** feedings. Be sure to guard against introducing air into the stomach.

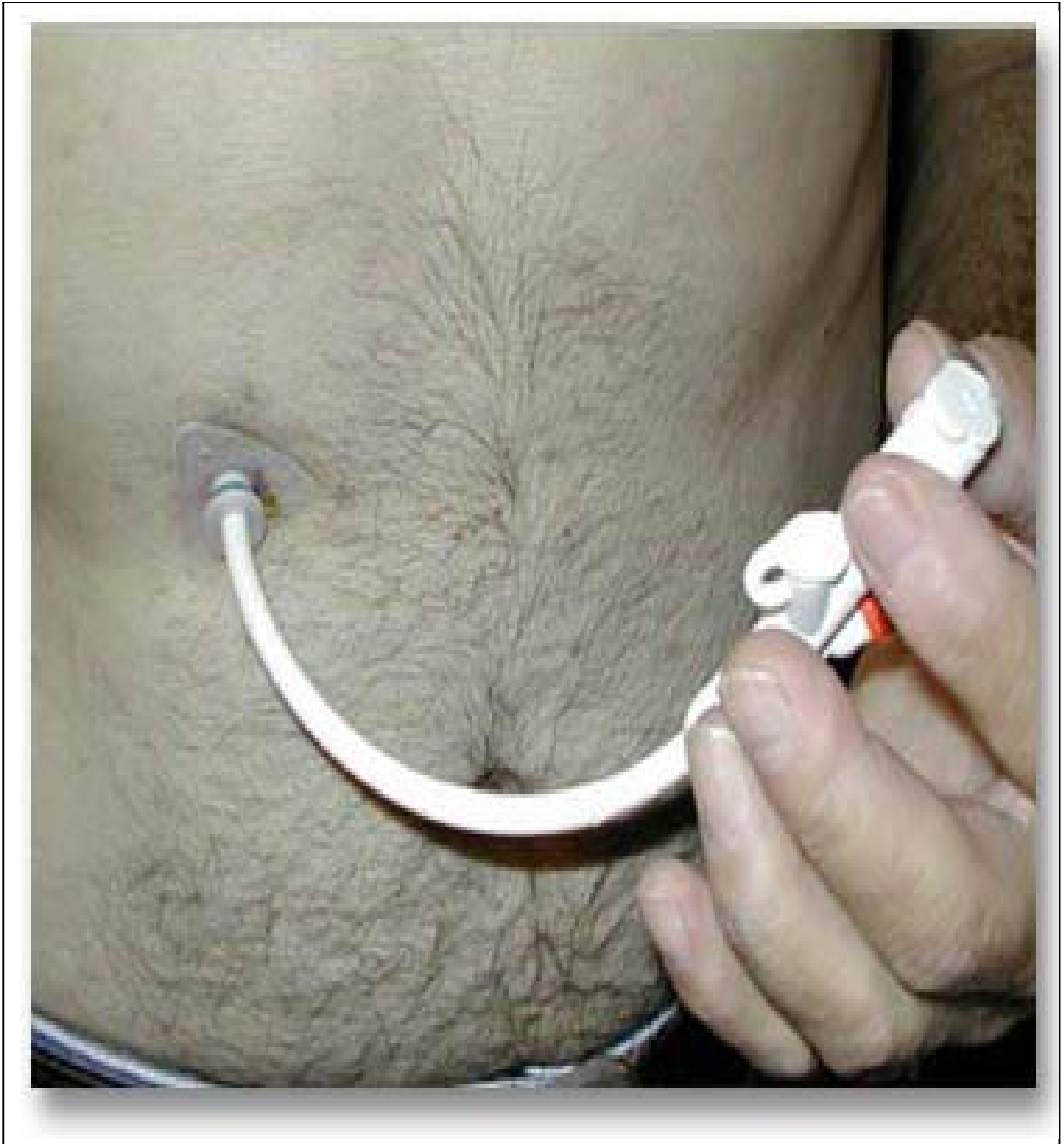
Always irrigate the feeding tube with specified amount of water **before** and **after** administering any dissolved medications through the feeding tube. Never administer medication with the tube feeding solution.

Have client **remain with upper body in at least a 45 degree angle** for **one full hour** after completing the tube feeding.

Be sure to document everything you did during the feeding. **EXAMPLES of Notes:** *8am. 240 CCs Gevity administered per PEG tube over 15 minutes. Tube placement verified by measuring tube from insertion site to end. Length 14 inches. 20 CCs tan stomach contents aspirated. Tube irrigated with 20 CCs water before and after tube feeding. Patient voiced no complaints. Skin around insertion site intact. Area washed with clear warm water and a gauze pad applied around the insertion site. Client left in upright position after feeding.*

9am. OSCal crushed and dissolved in 20 CC water administered per PEG tube. Tube irrigated with 20CCs water before and after med administration. Tube placement verified by measuring tube length. Length 14 inches from site to distal end of tube. Client left in upright position after medication administration.

PEG Tube



Source of picture: http://www.oralcancerfoundation.org/dental/tube_feeding.htm