

GASTROSTOMY FEEDING: BOLUS METHOD

I. GENERAL GUIDELINES

A. PURPOSE

1. A gastrostomy is a surgical opening into the stomach through the surface of the abdomen.
 - a. A gastrostomy tube (G-tube) is a flexible tube (catheter) inserted into the stomach through an opening in the abdominal wall. The tube is held in place inside the stomach by a balloon or a retention dome.
 - b. A gastrostomy button is a small skin-level feeding device held in place inside the stomach by a mushroom-shaped dome or fluid-filled balloon.
 - c. The device remains in place at all times and is capped by an attached safety plug between feedings. Most feeding devices have an anti-reflux valve to prevent leakage of stomach contents.
2. The gastrostomy tube device may be used to administer food, fluids, and medications directly into the stomach. This method is used to bypass the usual route of feeding by mouth when:
 - a. Swallowing is impaired by an obstruction of the esophagus
 - b. Swallowing is impaired and the student is at risk for choking and/or aspiration.
 - c. The student has difficulty taking enough food by mouth to maintain adequate nutrition.

B. GENERAL INFORMATION

1. The bolus method is used for a specific amount of feeding given at one time via a syringe barrel and enters the stomach by gravity. Located on the gastrostomy tube/device (button), the syringe barrel fits into an extension set feeding port.
2. The skin level tube/device is ventilated by using the appropriate tubing to open the anti-reflux valve. When venting is required, open the gastrostomy tube; attach the barrel of a 60cc syringe to drain abdominal contents or to release air or gas.
3. Generally, there are no restrictions where a student may be fed. The student may be fed with other students in the cafeteria, a classroom or in a private setting according to his/her preference. The setting should be clean. The student's instruction should be minimally impacted by feeding. Explain the procedure to the student at his or her level of understanding. Encourage student participation as much as possible to help the student achieve

maximum self-help skills. During feeding time, the student needs to remain stationary and should be able to continue sedentary school activities. No bolus feeding is to be administered while on the bus.

C. GUIDELINES

1. Feeding by mouth will be done only if ordered by the prescribing healthcare provider.
2. Position student in a sitting or lying position with head elevated at least 30 degrees. When the student is lying flat, there is a greater danger of regurgitation or aspiration.
3. Stop feeding immediately if a student regurgitates or vomits, complains of abdominal pain, becomes restless, or has difficulty breathing. If any of these conditions occur, vent the gastric device/tube and notify the school nurse and parent immediately. If there is a change in skin color or breathing difficulties occur, stop feeding immediately. Notify the school nurse and call 911 if indicated.

D. PERSONNEL

1. School nurse or school physician.
2. Designated school personnel under direct or indirect supervision of the school nurse.

E. EQUIPMENT

1. Provided by parent:
 - a. 60 cc catheter tip syringe
 - b. Appropriate tubing with extra extension tubing sets (device) or appropriate connecting tubing sets such as adapter or transition connectors
 - c. Prescribed formula or pureed food
 - d. Container for measuring water
 - e. Container for measuring formula
 - f. Gauze squares if needed
 - g. Paper tape if needed
 - h. Water for flushing.
2. Provided by school:
 - a. Mild soap for skin cleansing
 - b. Disposable non latex gloves
 - c. Paper towels
 - d. Liquid detergent for washing equipment
 - e. Plastic bag for waste disposal.

II. PROCEDURE

ESSENTIAL STEPS	KEY POINTS AND PRECAUTIONS
1. Wash hands.	Explain procedure to student and encourage participation in the feeding procedure as much as possible.
2. Assemble supplies and arrange on a clean flat surface.	Maintain the clean field during the feeding procedure by placing supplies on a paper towel.
3. Check formula expiration date and shake well. Measure prescribed amount into a container.	Formula should be given at room temperature. Refrigerate any unused portion in covered container labeled with student's name, date, and time. Unused portion may be refrigerated as recommended by manufacturer.
4. Position student with head elevated at least 30 degrees.	Helps prevent regurgitation, vomiting or aspiration.
5. Put on gloves.	
<p>6A. For Skin Level Device:</p> <ul style="list-style-type: none"> a. Unplug the feeding port b. Insert clamped extension tubing to the feeding port c. Attach 60 cc syringe barrel (without plunger) to the extension tube d. Unclamp the tube and lower the syringe barrel until stomach contents can be seen or gas is released e. Clamp the feeding tube. 	<p>This insures proper placement in the stomach. If no stomach contents or gas is obtained, notify the school nurse.</p> <p>May need to use extension tubing with some gastrostomy devices. Make sure the connection is secure.</p>
<p>6B. For Gastrostomy Tube Feeding:</p> <ul style="list-style-type: none"> a. Attach 60 cc syringe barrel (without plunger) to the gastrostomy tube b. Unclamp the tube and lower the syringe barrel until stomach contents can be seen or gas is released. c. Clamp the tube. 	<p>Ensures proper tube placement in the stomach. If no stomach contents or gas is obtained, notify school nurse.</p>
7. Pour formula into syringe barrel, holding syringe at stomach level. Unclamp the tube.	
8. Raise syringe 3 to 6 inches above stomach level.	

ESSENTIAL STEPS	KEY POINTS AND PRECAUTIONS
9. Raise or lower the syringe to adjust flow rate.	Flow rate is regulated by gravity. If liquid will not go in, notify the school nurse.
10. Allow feeding to flow slowly and continue to add until completed.	<p>Feeding should take a minimum of 20 minutes per 8 ounces to prevent regurgitation, vomiting, diarrhea, and abdominal distention.</p> <p>Water for hydration may be given over a shorted period of time.</p> <p>Keep formula in the syringe at all times until feeding is completed to prevent air from entering the stomach.</p> <p>If restlessness, difficulty in breathing, change in skin color, vomiting, regurgitation or abdominal distention occurs; or if the student complains of pain, stop the feeding immediately. Perform venting. Notify the school nurse immediately.</p>
11. Follow feeding with 30 to 50 cc of water to flush tubing.	This clears tubing and maintains patency
12. If medication is prescribed, administer as ordered by the health care provider.	Use the appropriate port and syringe. Flush medication port with 5 – 10 cc water before and after administering each medication.
<p>13A. Skin-level Device: Clamp and disconnect extension tubing from feeding port. Plug feeding port.</p> <p>13B. Gastrostomy Tube: Clamp and secure gastrostomy tube.</p>	Use of clamp on gastrostomy tube may cause pressure area should student lie on it.
<p>14. Vent the stomach when necessary or according to the healthcare provider's orders.</p> <p>14A. Skin-level Device: Use an air-releasing device or extension tubing attached to a 60cc syringe barrel.</p> <p>14B. Gastrostomy Tube: With 60 cc syringe barrel attached to feeding tube, raise it above stomach level and allow gas to escape.</p>	Venting (decompression) allows removal of excess air or fluids from the stomach. Venting is used to relieve bloating, distention or gagging.

ESSENTIAL STEPS	KEY POINTS AND PRECAUTIONS
<ul style="list-style-type: none"> a. Hold syringe above stomach level and unclamp tube. b. Slowly lower syringe to level lower than stomach, controlling return of stomach contents. c. Allow stomach contents and/or air to flow out. d. Return stomach contents to stomach. 	<p>This usually takes between 1-3 minutes.</p>
<p>15. Student to remain upright for at least 30 minutes after feeding</p>	<p>Helps prevent vomiting, regurgitation or aspiration. Do not allow student to lie flat. Ambulatory students may resume school activities when tolerated</p>
<p>16. Inspect area around gastrostomy device/tube and gently clean around the stoma with mild soap and water as needed. Cover with dry gauze if indicated.</p>	<p>Check for signs of redness, swelling, greenish/yellow drainage, foul odor, or leakage of stomach contents. Inform the school nurse.</p>
<p>17. Wash equipment with liquid detergent and rinse. Allow to air dry.</p>	<p>Air drying reduces the risk of mold and mildew.</p>
<p>18. Dispose of waste materials.</p>	<p>Universal Precautions require all waste materials be double bagged.</p>
<p>19. Remove gloves and wash hands.</p>	
<p>20. Document:</p> <ul style="list-style-type: none"> a. Time of feeding b. Type and amount of formula given c. Amount of water given d. Student's response e. Medication(s), if given. 	<p>If medication is administered, document on medication log per district policy.</p>

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