**Plano Independent School District**

**School Health**

**Enteral Feeding Administrative Guideline**

**Purpose**

To provide enteral nutritional support and/or safe medication administration to a student who is unable to have access by mouth. Gastrostomy is an operation performed to create an opening into the stomach for the purpose of administering foods, fluids and medication when unable for various reasons to eat or drink by mouth therefore requiring an opening directly into the stomach or small intestines in order to provide the needed nutrition, fluids and/or medications for survival.

**Definitions**

* **Bolus –** feeding that is drained through a tube and syringe, given several times per day.
* **Digestive enzymes –** molecules that catalyze the breakdown of large molecules (usually food) into smaller molecules.
* **Electrolytes –** minerals in your blood and other body fluids that carry an electrical charge.
* **Enteral** – into the gastro intestinal tract.
* **Formula –** a substance prepared according to a prescription such as baby food.
* **Gastric –** relating to the stomach.
* **Gastrostomy –** a surgical procedure for inserting a tube through the abdomen wall and into the stomach.
* **Gastrostomy Button –** also called MIC-KEY. Skin level device used for feeding into the stomach.
* **Gravity –** a feeding that is given by force of gravity, by holding fluid in an open syringe or feeding set above the height of the stomach and letting it flow through the feeding tube into the stomach.
* **Residual** – the quantity left over in the stomach between feedings.
* **Syringe –** a simple pump consisting of a plunger that fits tightly in a tube.
* **Universal Precautions –** precautions designed to prevent the transmission of blood borne pathogens such as human immunodeficiency virus, hepatitis B and other blood borne pathogens when first aid or health care is provided **.**

**Program Coordinator**

Coordinator for District Health

Special Educator Nurse Case Manager

**Responsibilities**

* Coordinates with Plano ISD principals and/or building manager and school nurses in the selection of employees for training.
* Assure quality improvement by revising this guideline as required through the monitoring of training.
* Communicate with medical officer on issues related to care.

**Environment/Settings**

There is no restriction on where a student may receive enteral feeding care. A setting that provides for privacy and cleanliness with access to a sink for the mixing of feeding and cleaning of supplies.

**Applicable Documents**

* Administrative guideline
* Training checklists
* Problem List
* Physician orders
* Individual Health Care Plano ISD

**Medical Control**

The medical advisor of the enteral feeding administrative guideline is the Plano ISD’s medical officer. The medical officer will direct the following:

* Medical direction in the formulating of the guideline.
* Review and approve the above.
* Evaluation as needed.

**Restrictions**

* Physician Orders will be followed for all enteral feedings. These orders are valid for one school year. Any change in feedings will require new Physician Orders.
* Tap water will be used for all flushes unless otherwise specified in the Physician Orders, or if the parent requests. If bottled water is requested, the parent must supply the bottled water.
* Unused portions of opened formula will be labeled, timed, and dated and may be refrigerated for up to 24 hours before being discarded. No formula will be allowed to hang in the feeding set for more than 4 hours unless otherwise specified in the Physician Orders.
* Pump feeding sets will be rinsed with clean water and allowed to air dry and clean paper towel, between feedings and used for no longer than 24 hours before being discarded.
* Extension tubing and syringes will be rinsed after each feeding. At the end of the day, clean with warm water and dish soap, rinse with water and allow to air dry with all ports open. Extension tubing and syringe may be used for up to 4 to 6 weeks before being discarded.
* Extension tubing and syringes may be cleaned in solution of 1:1 vinegar and water for 20 minutes if tubing does not come clean easily.
* All formula and feeding supplies will be provided by parents.

**Requirements**

* Current physician orders
* Consent to communicate with health care provider
* Development of IHP by RN
* Parental consent for care of student
* Supplies provided by parents

**Suggested Personnel and Training**

Gastrostomy care and enteral feeding may be given by an RN or unlicensed personnel as trained by the RN. The caregivers should have proven competency based training in appropriate techniques and problem management.

Basic skills checklists will be used in competency based training in appropriate techniques and problem management. District procedures and checklists outline specific steps to be taken. Once the procedures have been mastered, the completed checklists serve as a documentation of training.

**Training**

* Registered nurse is the person responsible for training.
* Unlicensed personnel may be trained by the RN.
* Training is done yearly and as needed throughout the year.
* Guideline, problem list, health care practitioner orders, IHP and parent requests are to be reviewed prior to training and throughout the year.
* Individual Health Care Plan is completed by the nurse.
* Competency checklist must be signed and dated yearly and periodically throughout the year as needed for verification of skills.
* Information is shared with other employees on a need to know basis.

**Procedural Guideline**

1. **Gastrostomy Feeding -Bolus/Gravity Method**

*(Equipment and feeding supplies provided by parent.)*

1. Identify correct student to receive feeding.

2. Check Physician’s Order’s for type of formula, amount to be given, duration, route, etc.

3. Wash hands.

4. Gather and assemble equipment:

• Liquid formula or feeding solution, at room temperature

• 60ml or other large syringe or other feeding container

• Extension tubing

• Water (to flush tubing after feeding)

• Gloves

5. Note expiration date and/or opened date on formula. All opened formula must be stored in the

 refrigerator and labeled with date and time opened. Opened formula is used within 24 hours.

6. Refrigerated formula should be removed from refrigerator prior to feeding and allowed to

 warm to room temperature. Formula container may be placed in warm water, also.

* Do not microwave formula.

7. Clean top of container. Shake formula well to mix thoroughly.

8. Measure prescribed amount of formula to be given.

9. Explain procedure using explanations the student can understand. Encourage the student to do as much of the procedure as is capable, so as to achieve maximum self-care skills.

10. Position student upright as specified in student plan.

*Students usually sit (or may lie on their right side with their head elevated) during feeding. Make sure clamp is not pressing on skin.*

11. Wash hands and put on gloves. Maintain Universal Precautions throughout procedure.

12. Inspect skin at gastrostomy site for redness, tenderness, swelling or irritation, or presence of drainage or gastric leakage.

* Report abnormal findings to the school nurse and parents.

13. Remove plug from g-button and insert clamped extension tubing. Rotate to lock into place.

14. Check residual only if stated in Physician’s Orders. Attach syringe to end of extension tubing and unclamp. Gently lower syringe below stomach level to check for residual. Record amount and replace if indicated. Do not proceed with feeding if large amount of residual noted. Wait approximately 30 minutes and recheck for residual.

* Some students may not need to have residuals checked. Note the amount that was withdrawn from the feeding tube and return the contents of the syringe to the stomach because stomach contents contain electrolytes and digestive enzymes. Removing them can result in electrolyte imbalance.

15. Clamp the extension tubing and disconnect tubing from g-button by rotating to unlock. Replace g-button plug.

16. Pour formula into syringe until half full and open clamp to prime. Reinsert extension tubing into g-button after removing plug and rotate to lock into place.

17. Unclamp tube, and allow formula to flow at prescribed rate.

* Never force formula into the tube.
* If tube is obstructed, do not feed.

18. Raise or lower syringe to change rate.

* The higher the syringe is held, the faster the feeding will flow into the stomach.

19. Continue to add formula to syringe until feeding amount is complete. . Keep syringe partially filled to prevent air from entering stomach.

* Depending on the age and capabilities of the student, have him/her assist with the feeding by holding syringe or pouring fluid into it. Provide oral stimulation, if ordered.
* Be alert to any unusual changes in the student’s tolerance of the feeding. Nausea/vomiting, cramping, or diarrhea may indicate that the feeding is being given too quickly or formula is too cold.

20. Vent g-button, if ordered, for abdominal distention/discomfort using appropriate venting tube.

21*.* When feeding nears completion, instill prescribed amount of water into syringe to flush.

* This will clear tubing of formula.

22. Clamp tubing and rotate to unlock. Remove tubing and replace plug into g-button.

* Clamp tubing prior to removing or stomach contents may leak out of the tube.

23. Refer to student’s individualized health care plan for guidelines regarding positioning and activity after feeding. Generally students remain in an upright position for at least 30 minutes after feeding completion.

24. Rinse extension tubing and syringe in warm water until clean. (If last feeding of the day, wash syringe and extension tubing thoroughly in warm soapy water). Allow to air dry and store appropriately. On Fridays and as needed if tubing or syringe does not become clear easily, soak in 1:1 vinegar /water solution for 20 minutes. Keep all ports open. Allow to air dry. Rinse prior to next use. Discard if becomes crusted or unable to clean.

* Extension tubing and syringes may be used for up to 4-6 weeks.

25. Remove gloves. Wash hands.

26. Document feeding -amount, residual amount, feeding tolerance, and any concern about gastrostomy site in student’s log. Notify school nurse and family of any changes or concerns.

1. **Continuous/Pump Method**

**(***Equipment and feeding supplies provided by parent).*

1. Identify correct student to receive feeding.

2. Check Physician’s Order’s for type of formula, amount to be given, duration, route, etc.

3. Wash hands.

4. Gather and assemble equipment:

• Liquid formula or feeding solution, at room temperature

• 60ml or other large syringe (to check for residual, if ordered)

• Extension tubing

 • Feeding pump and set

• Water (to flush tubing after feeding)

• Gloves

5. Note expiration date and/or opened date on formula. All opened formula must be stored in the

 refrigerator and labeled with date and time opened. Opened formula is used within 24 hours.

6. Refrigerated formula should be removed from refrigerator prior to feeding and allowed to warm

 to room temperature. Formula container may be placed in warm water, also.

* Do not microwave formula.

7. Clean top of container. Shake formula well to mix thoroughly.

8. Measure prescribed amount of formula to be given.

9. Explain procedure using explanations the student can understand. Encourage the student to do as much of the procedure as is capable, so as to achieve maximum self-care skills.

10. Position student upright as specified in student plan.

* Students usually sit (or may lie on their right side with their head elevated) during feeding. Make sure clamp is not pressing on skin.

11. Wash hands and put on gloves. Maintain Universal Precautions throughout procedure.

12. Inspect skin at gastrostomy site for redness, tenderness, swelling or irritation, or presence of drainage or gastric leakage.

* Report abnormal findings to the school nurse and parents.

13. Remove plug from g-button and insert clamped extension tubing. Rotate to lock into place.

14. Check residual only if stated in Physician’s Orders. Attach syringe to end of extension tubing and unclamp. Gently lower syringe below stomach level to check for residual. Record amount and replace if indicated. Do not proceed with feeding if large amount of residual noted. Wait approximately 30 minutes and recheck for residual.

* Some students may not need to have residuals checked. Note the amount that was withdrawn from the feeding tube and return the contents of the syringe to the stomach because stomach contents contain electrolytes and digestive enzymes. Removing them can result in electrolyte imbalance.

15. Clamp the extension tubing and disconnect tubing from g-button by rotating to unlock. Replace g-button plug.

16. Attach extension tubing to feeding set tubing. Secure clamps on both sets of tubing. Pour prescribed amount of formula into feeding set. Open both clamps to prime. Re-clamp and reinsert extension tubing into g-button after removing plug and rotate to lock into place.

* Some feeding pumps have a ‘Prime’ setting and will prime tubing once inserted in pump.

17. Correctly secure tubing in feeding pump and unclamp. Program pump according to Physician’s Orders. Unclamp tube, and start pump. (May tape tubing connection to reduce chance of accidental disconnection)

* Never force formula into the tube.
* If tube is obstructed, do not feed.

18. Continue to add formula to feeding set as needed until feeding amount is complete.

* *Depending on the age and capabilities of the student, have him/her assist with the feeding. Provide oral stimulation, if ordered.*
* Be alert to any unusual changes in the student’s tolerance of the feeding. Nausea/vomiting, cramping, or diarrhea may indicate that the feeding is being given too quickly or formula is too cold.

19*.* When feeding nears completion, instill prescribed amount of water into the feeding set (may use syringe) to flush.

* *This will clear tubing of formula.*

20. Clamp tubing and rotate to unlock. Remove tubing and replace plug into g-button.

* *Clamp tubing prior to removing or stomach contents may leak out of the tube.*

21. Vent g-button, if ordered, for abdominal distention/discomfort using appropriate venting tube.

22. Refer to student’s individualized health care plan for guidelines regarding positioning and activity after feeding. Generally students remain in an upright position for at least 30 minutes after feeding completion.

23. Rinse extension tubing and syringe in warm water until clean. (If last feeding of the day, wash syringe and extension tubing thoroughly in warm soapy water). Allow to air dry and store appropriately. On Fridays and as needed if tubing or syringe does not become clear easily, soak in 1:1 vinegar /water solution for 20 minutes. Keep all ports open. Allow to air dry. Rinse prior to next use. Discard if becomes crusted or unable to clean.

* Feeding set tubing and bag may be used for 24 hours only.
* Extension tubing and syringes may be used for up to 4-6 weeks.

24. Remove gloves. Wash hands.

25. Document feeding -amount, residual amount, feeding tolerance, and any concern about gastrostomy site in student’s log. Notify school nurse and family of any changes or concerns.

**Medical Officer Signature**

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Physician’s Signature/Plano ISD Medical Officer