**Gastrostomy Tube Feeding - Slow Drip/Continuous Method with Residual Check**

**Things to consider:**

* Be sure to take steps to ensure patient privacy when performing procedure
* The most significant risk with tube feedings is aspiration of feeding into the lungs; be sure the student is positioned properly with head elevated at least 30 degrees
* Encourage the student to assist in the procedure as much as he/she is able to help student learn self-care skills

**Needed supplies:**

G-tube replacement

Feeding container (bag)

Adaptor with tubing and clamp

Feeding solution in container at room temperature

60 ml catheter-tipped syringe

Pump

Warm tap water, if prescribed

Pole to hold feeding container

Student’s Individualized Health Plan (IHP) and/or healthcare provider’s orders

**Procedure:**

1. Review healthcare provider’s order including:
   1. the type of formula
   2. amount
   3. infusion type and rate
   4. frequency and timing of administration
   5. residual volume checks
   6. amount of water used to flush the tube
2. Explain the procedure to child at his/her level of understanding
3. Wash hands
4. Assemble equipment and place on a clean surface
5. Position child either sitting or supine with head up at least 30 degrees
   1. The most significant risk with tube feedings is aspiration of liquid nutrition into the lungs; be sure the student is positioned properly with head elevated at least 30 degrees
6. Put on gloves
7. Observe abdomen for signs of malposition or obstruction of gastrostomy tube such as difference in external tube length compared to baseline measurements or abdominal distention
   1. Compare external tube length to tube length measurements obtained after initial placement of the tube, contact parents/guardian and healthcare provider if discrepancy in measurements
   2. If student has abdominal distention do not administer feeding, instead contact parent/guardian and healthcare provider
8. Remove cap or plug from G-tube
9. If residual check is ordered, attach 60 mL catheter tip syringe with plunger to the end of the enteral tube
10. Unclamp the tubing and gently draw back on the plunger to remove any liquid or medication that may be left in the stomach (residuals)
11. Note the amount withdrawn from tube feeding
12. Return residuals to stomach passively (gravity)
13. Clamp the tubing and disconnect the syringe
14. Pour feeding/fluids into feeding container/bag, run feeding through tubing to the tip and clamp tubing
15. Hang container on pole
16. Place tubing into pump and set flow rate
17. Open safety plug and insert tubing into the G-tube
18. Open clamp completely
19. Program pump to prescribed feeding rate
20. When single feeding is completed (bag empty), clamp feeding bag tubing and remove
21. Attach catheter-tipped syringe and flush adaptor tubing and button with 5ml or prescribed water volume
22. After flushing, lower syringe below stomach level to facilitate burping, as needed
23. Disconnect syringe
24. Connect cap or plug to G-tube
25. Ensure that the clamp is not resting on the student’s skin
26. Keep the child in a feeding position for at least 30 minutes after completing feeding, if required
27. Wash syringe, feeding bag and tubing with soap and warm water and put in home container
    1. Catheter tip syringe and feeding extension tubing can be used repeated times for up to 24 hours
28. Remove gloves
29. Wash hands
30. Document assessment, interventions, and outcomes in student’s healthcare record
31. Follow up with parents/guardian and healthcare provider, as needed

**Resources:**

MIC—KEY LOW--PROFIILE GASTROSTOMY FEEDING TUBE: YOUR GUIDE TO PROPER CARE  
<http://www.mic-key.com/media/40679/r8201b_mic-key_care_guide_english.pdf>

MIC Enteral Feeding Tubes and Accessories  
<http://www.kchealthcare.com/media/2886710/u4850_mic_enteral_tubes.pdf>

Guidance and support to help you manage your gastrostomy tube (g-tube) Capsule Non-Balloon Mini ONE® Buttons  
<http://www.amtinnovation.com/pdf/AMT_NonBalloonPatientCare.pdf>

**References:**

Bankhead, R., Boullata, J., Brantley, S., Corkins, M., Guenter, P., Krenitsky, J., Lyman, B., Metheny, N.A., Mueller, C., Robbins, S., Wessel, J. (2009). Monitoring enteral nutrition administration. In: A.S.P.E.N. enteral nutrition practice recommendations*. Journal of Parenteral and Enteral Nutrition*, 33(2), 162-6.

Bowden, V. R., & Greenberg, C. S. (2012). *Pediatric nursing procedures (Third Edition)*. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins.

Connecticut State Department of Education. (2012). *Clinical Procedure Guidelines for Connecticut School Nurses*. Available at: <http://www.sde.ct.gov/sde/lib/sde/pdf/publications/clinical_guidelines/clinical_guidelines.pdf>

Porter, S., Haynie M.D., Bierle, T., Caldwell, T. & Palfrey, J. (1997). *Children and Youth Assisted by Medical Technology in Educational Settings. Guidelines for Care. Second Edition*. Paul H. Brookes Publishing Co., P.O. Box 10624, Baltimore, MD 21285-0624.

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