



CLINICAL POLICY

Tube Feedings/Enteral Nutrition (Adult)

A. EFFECTIVE DATE :

June 30, 2020

B. PURPOSE :

To define the procedure for hanging, maintaining and caring for patients with enteral feedings.

C. POLICY :

1. Registered Nurses do not insert feeding tubes/nasogastric tubes.
2. Prior to initial use for administering feedings and medications, confirm that radiographic confirmation has been obtained in any blindly-placed tube (small-bore or large-bore) and that it is properly positioned in the GI tract. Do not rely on the auscultatory method to differentiate between gastric and respiratory placement.
3. Mark the exit site of the feeding tube at the time of initial radiograph.
4. Medications will not be added to enteral feeding formulas.
5. Registered Nurses may discontinue nasogastric tubes when ordered. Registered Nurses may not discontinue any other type of feeding tube.
6. Unlicensed personnel will not connect or disconnect a tube feeding.

D. SCOPE :

All clinical areas in which tube feedings are utilized.

E. DEFINITIONS :

1. **Closed or ready to hang enteral feeding system** – is a prefilled container that comes in a sterile, prefilled formula container that is spiked by the feeding tube.
2. **Open enteral feeding system** – uses formula from cans or bottles which is poured into a feeding tube bag or piston syringe.

F. MATERIAL(S) NEEDED :

Enteral feeding formula, Kangaroo pump, water, enteral feeding tubing, piston syringe kit

G. PROCEDURE :

1. The RN will review order for: type of formula, rate and advancement instructions. Formula orders will be sent daily from Food Service Department.
2. The Dietary Department will deliver formula to the Nutrition Room in the University Tower or the Nurses Station in the Connecticut Tower. If a bottle is in the patient's room and not used it must be thrown away, it cannot be stored in the Nutrition Room for future use.

3. Maximum formula hang time:
 - Open System: 8 hours
 - Closed System: 24 hours
4. Open System:
 - The amount of feeding in the bag should not exceed the 8 hour feeding volume.
 - The feeding bag/tubing must be changed every 24 hours.
5. Closed System:
 - Closed system bottles and tubing must be changed every 24 hours.
 - For bolus feedings: patient maybe disconnected by the RN and the tubing capped between feedings. Bottles and tubing must be changed every 24 hours for bolus feedings.
 - Nothing (including water) can be added to the closed system
6. The RN will elevate the head of the bed 30°-45° while the tube feeding is infusing and for 30-45 minutes after completion of feeding. The type of tube (post pyloric), particular patient circumstances and practitioner orders should dictate whether or not the tube feeding should be stopped if the head of the bed is elevated less than 30°. Consider reverse Trendelenburg for the bed if the patient cannot tolerate the head of the bed being elevated.
7. The RN will not check residuals routinely. A residual should only be checked if the patient presents with signs/symptoms not tolerating enteral feeding, for example: nausea, vomiting, abdominal distention, discomfort, fullness or bloating.
 - a. If the residual volume is >500 ml the tube feeding should be stopped and the practitioner notified.
 - b. If the residual is 250-500 ml, continue the feeding and recheck the residual in 4 hours: if on the re-check the residual is still >250 ml, notify the practitioner, a prokinetic agent may need to be considered. Do not stop the tube feeding unless ordered by the practitioner.
 - c. Residuals are returned to the patient and the volume is documented in the medical record. Residuals greater than 500 should NOT be returned to the patient.
8. The RN will assess the following prior to initiating the tube feeding, each time the tube is accessed, every 8 hours, and as needed, assess for:
 - a. Respiratory status, observing for signs of aspiration (i.e. sudden intense cough, increased amount of secretions, cyanosis, or decreased breath sounds).
 - b. Security of the tube and the appearance of the insertion site.
 - c. Placement of tube in the stomach by observing for a change in the enteral tube length during feedings. If a significant increase in the external length is observed, use other bedside tests (aspiration of gastric contents and auscultation) to help determine if the tube has become dislocated. If in doubt, stop the feeding, and notify the practitioner to possibly obtain a radiograph to determine tube location.
 - d. Signs of dehydration (i.e. poor skin turgor, decreased urine output).
 - e. Flush tubing with 30 ml of tap water:
 - i. At standardized intervals (usually every 4-6 hours, per order-pump may be used for flushing)
 - ii. After each residual check (when check is warranted by symptoms)
 - iii. Before and after intermittent bolus feedings
 - iv. After the interruption of a feeding

Sterile water flush is recommend for critically ill or immunocompromised patients as well as when administering medications to all patients.

When administering medications through a feeding tube, the RN will:

9. Verify if any hazardous drugs are to be given via the feeding tube and contact pharmacy for administration guidance.
10. Administer each medication separately. Liquid dosage forms should be used when available and if appropriate. Only immediate-release solid dosage forms may be substituted. Grind simple compressed tablets to a fine powder and mix with sterile water. Open hard gelatin capsules and mix contents with

sterile water.

11. Stop the feeding and flush the tube with at least 15 mL water prior to administering medication. Dilute the solid or liquid medication as appropriate and administer using a clean oral syringe (≥ 30 mL in size). Flush the tube again with at least 15 mL water taking into account patient's volume status. Repeat with the next medication (if appropriate). Flush the tube one final time with at least 15 mL water.
12. Restart the feeding in a timely manner to avoid compromising nutrition status. Only hold the feeding by 30 minutes or more when medication separation is indicated to avoid altered drug bioavailability.
13. Provide oral hygiene every 4 hours and as needed.
14. Weigh the patient three times per week or as ordered (usually Monday, Wednesday, Friday) and record in medical record.
15. If feeding tube is clogged, gently flush with 30ml of warm water. If clogging persists, notify practitioner (may consider ordering pancreatic enzymes). Nothing else should be added to the tube (NO carbonated drink, meat tenderizer etc. should be used).

PATIENTS WITH TRACHEOSTOMY: SPECIAL CONSIDERATIONS:

1. The RN will monitor closely for aspiration as this patient is at higher risk for vomiting and aspiration.
2. As a general rule, the RN will, keep cuff deflated. Inflating the cuff during feedings cannot be relied upon to prevent aspiration. Exceptions to deflate the cuff may be made for patients with:
 - a. A ventilator
 - b. A reduced level of consciousness
 - c. Poor cough/swallow
 - d. Poor gag reflex

PATIENTS WITH DOBHOFF TUBE: SPECIAL CONSIDERATIONS FOR THE RN:

1. Medications should be given in liquid form, if possible. If a medication is not available in liquid form, it must be crushed thoroughly and dissolved H₂O. Enteric-coated or time released capsules must never be crushed.
2. Dobhoff feeding tubes that are placed under direct visualization do not require verification of placement. Documentation in the medical record must reflect that the tube was placed under direct visualization. In circumstances when the tube is not directly visualized entering the hypopharynx/esophagus, radiographic verification of placement must be obtained.

H. ATTACHMENTS :

http://nursing.uchc.edu/assessment_documentation/docs/RTH%20setup%20procedure.pdf

I. REFERENCES :

Boullata J, Carrera A, Harvey, et al. ASPEN Safe Practices for Enteral Nutrition Therapy. Journal of Parenteral and Enteral Nutrition. 2017, 41(1), 15-103.

J. SEARCH WORDS :

Tube Feeding (s), Enteral Nutrition

K. ENFORCEMENT:

Violations of this policy or associated procedures may result in appropriate disciplinary measures in accordance with University By-Laws, General Rules of Conduct for All University Employees, applicable collective bargaining agreements, the University of Connecticut Student Code, other applicable University Policies, or as outlined in any procedures document related to this policy.

L. STAKEHOLDER APPROVALS :

On file

M. COMMITTEE APPROVALS :

N. FINAL APPROVAL :

- | | |
|--|---------------------------|
| 1. <u>Andrew Agwunobi, MD (Signed)</u>
Andrew Agwunobi, MD, MBA
UConn Health Chief Executive Officer | <u>07/06/2020</u>
Date |
| 2. <u>Anne D. Horbtauck, RN, BSN, MBA (Signed)</u>
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Clinical Policy Committee Co-Chair | <u>06/30/2020</u>
Date |
| 3. <u>Scott Allen, MD (Signed)</u>
Scott Allen, MD
Clinical Policy Committee Co-Chair | <u>07/02/2020</u>
Date |
| 4. <u>Caryl Ryan, MS, RN (Signed)</u>
Caryl Ryan, MS, RN
VP Quality and Patient Service & Chief Nursing Officer | <u>07/01/2020</u>
Date |

O. REVISION HISTORY :

Approved: 11/83

Review Date: 7/15, 4/16

Revision Date: 3/86, 12/88, 8/90, 9/93, 3/96, 10/97, 12/99, 7/02, 12/07, 5/08, 7/08, 1/13, 3/13, 6/20