01.24 - Enteral Feeding Process (Adult and Pediatric)

Purpose

To prevent the ingestion of contaminated liquid feedings that could result in illness either through infection or intoxication.

Audience

All employees of UTMB hospitals, clinics, outpatient surgical center, contract workers, volunteers, and students involved in enteral feedings.

Definitions

- Open enteral feeding system—uses formula from tetra-paks or bottles which are poured into a feeding bag or syringe
- Closed enteral feeding system—a sterile container of prefilled formula that is ready to administer to the patient and is spiked with an administration set
- Reconstituted formula—powder formula that requires reconstitution with water
- Modular product—single nutrient products such as protein powders, MCT oil, fiber used to fortify nutrition regimens.
- Ready to Hang formula—enteral formulas packaged in sealed bags or containers that require no manipulation prior to use in a closed enteral feeding system
- Ready to use formula—enteral formulas that require no reconstitution prior to adding to refillable administration sets in an open feeding system
- Moat – The trench around the center hole of the feeding tube port

Physical Facility

- All enteral feedings must be prepared in a specific location that encourages the use of aseptic technique and ensures the delivery of safe enteral feedings.
- A handwashing facility must be in close proximity to the enteral feeding preparation area. Hands must be washed or an alcohol hand rub applied to the hands prior to preparing formula.

Preparation and Handling Procedure

1. Gather supplies.
2. Check manufacturer's expiration date before using.
3. Wash hands or apply an alcohol hand rub to the hands and wear gloves.
4. Wash the top of the can with soap and water before preparing formula.
5. Cover open cans securely with a clean cover before refrigerating.

6. Use aseptic no-touch technique when measuring and placing feeding tube.

7. Use sterile water to add to liquid concentrate formula or to reconstitute powder formula.

8. All equipment and utensils (i.e., measuring spoons, can openers) used in the preparation of formula must be properly cleaned with soap and water between batches.

9. Medications should not be added during preparation of formula. Medications may be added at the bedside or at feeding time.

10. Formula bags must be labeled with:

    a. Patient name

    b. Medical record number

    c. Formula name

    d. Expiration date and time

Storage of Formula / Feedings

- Containers should be stored in a cool dry area when not in use.
- Once opened, canned, ready-to-feed formula must be used immediately and not stored at the bedside or in the refrigerator.
- Reconstituted or diluted formula should be used immediately. Unused formula must be refrigerated in a new food safe container that can be screw capped. Refrigerated formula label should include formula name and expiration date/time. Discard the formula after 24 hours.
- Formulas must not be frozen since freezing may cause irreversible physical changes.
- Opened powdered formulas may be stored in a closed container according to manufacturer expiration date or up to 4 weeks (30 days). The date of opening should be written on the container, and it should be stored in a cool dry area when not in use.

  Modulars products in the adult patient population (protein, fat, fiber) should not be added to enteral formula, but administered via feeding tube per product instructions in prescribed amounts and frequency.

Hang Time of Feeding

- Open enteral feeding system with reconstituted formula must be delivered to the patient within 4 hours of preparation for neonates, pediatric and adult patients.

- Open system and ready to use formula hang time of 8 hours for adult and pediatric patients.
- Refillable sets (bag and tubing) must be replaced at 24 hours.

Connector Cleaning Procedures

- Clean internal hub or moat of feeding tube with sterile water or sterile saline every 24 hours and PRN if visibly dirty. Wipe away debris with gauze as needed.
- Proper tube maintenance is essential to ensure the fluid path stays clear, preventing blockage and bacterial buildup.
- See appendix A for cleaning instructions.

Reference

1. Infant and Pediatric Feedings. Third edition. Guidelines for Preparation of Human Milk and Formula in Health Care Facilities. Academy of Nutrition and Dietetics; 2019.
2. Boullata, J., et al. ASPEN Safe Practices for Enteral Nutrition Therapy. ASPEN (American Society for Parenteral and Enteral Nutrition): 41 (1), pp. 15-103, DOI: 10.1177/0148607116673053

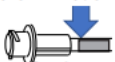
Appendix A

ENFit® Cleaning Procedures

Feeding Tubes with Male ENFit Connectors

(e.g. Nasogastric, Transpyloric, Orogastric, Percutaneous Endoscopic Gastrostomy Tubes and other ENFit devices)

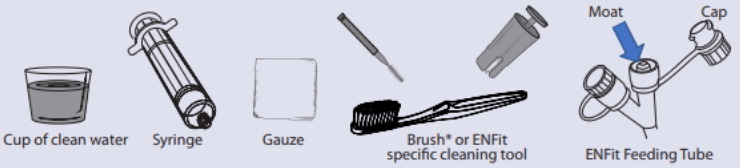
Tips for keeping ENFit feeding tube ports clean. Inspect before you connect!



- ***Priming Feeding Sets*** - Stop priming before fluid reaches the end of the tube.
- ***ENFit Syringe Draw Up*** - Wipe medication and nutrition from tip/outer threads, keep fluids out of dead space before connecting to feeding tube.

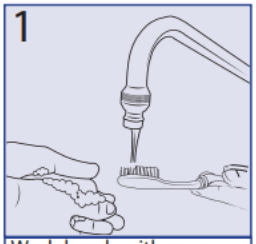
For best results, follow these instructions to clean tubes at least once a day or whenever material is visible.

Tube Cleaning Supplies & Terms



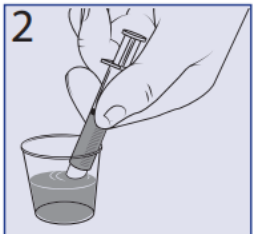
Note: Use a disposable brush or follow manufacturer's instructions if using ENFit specific cleaning brush.

1



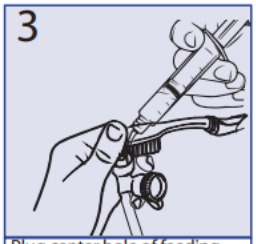
Wash hands with soap and water. Rinse brush with tap water.

2



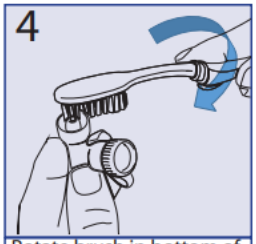
Fill syringe with water.

3



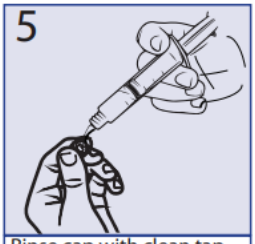
Plug center hole of feeding tube port with brush bristles. Forcefully flush moat with water.

4



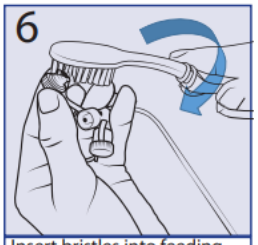
Rotate brush in bottom of moat.

5



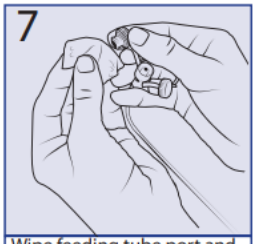
Rinse cap with clean tap water.

6



Insert bristles into feeding tube cap and rotate brush in cap to clean.

7



Wipe feeding tube port and cap with gauze. Clean supplies and allow to air dry.

Repeat steps 3 through 6 until cap and tube are thoroughly clean.

* A manual toothbrush is regulated as a medical device intended to remove debris from the teeth in some jurisdictions. Consult your licensed healthcare provider or Risk Manager regarding recommended use for cleaning feeding tube ports. Dispose of single use devices as instructed. Cleaning procedures courtesy of Children's Mercy Kansas City.

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