

ENTERAL FEEDING TUBES

Background

Several types of enteral feeding tubes exist to support adequate nutrition and hydration. The child's underlying diagnosis will determine their dependence on the feeding tube, whether it is the sole source of nutrition or supplemental intake. A range of diagnoses affect nutrition including neurological impairment, anatomical abnormality, and inability to safely support adequate intake. The need for the feeding tube may be permanent or temporary as it supports the child's growth and development.

Enteral feeding tubes are often referred to by their surgical location in the gastrointestinal tract: gastrostomy tube (GT) in the stomach and jejunostomy tube (JT) in the small intestine. A combination GJ tube; a GT placed in the stomach with a smaller tube threaded from the ostomy in the stomach to the small intestine also exists. It is important to administer formula, medication, and flushes to the correct location. The location of the feeding tube will also determine the plan for possible replacement.

In the school setting, the most common type of feeding tube appliance is a low profile or skin-level device, referred to as a "button." A button is a custom fit device, sized specifically based on the individual stoma size (e.g., French size (Fr) and length (cm)). Most buttons are held in place by a silicone retention balloon. The size of the balloon, filled with distilled or sterile water, is a helpful measurement to include on the student's health plan. Daily skin care and use of soap and water can help keep the stoma site healthy. Topical treatment may be ordered by a healthcare provider for any site complications (e.g., infection, granulation tissue).

The button device requires the attachment of an extension set (90-degree angle or straight connection) to access and administer any liquid. To avoid damage, no liquids should be inserted directly into the feeding port anti-reflux valve without the use of an extension set. The extension set should be disconnected when not in use to avoid pulling the button or irritating the stoma.

The ordered rate and volume will determine the time and equipment necessary to administer the feed or flush (e.g., bolus, continuous, gravity). When using a feeding pump, it is important to access features of the pump to manually set the volume and rate for accuracy.



If a feeding tube becomes dislodged, cover the site with gauze and gently apply pressure. Follow the healthcare provider order and school district policy for replacement. Note that the initial tube change post-surgery **must** be completed by the surgeon. Parents/caregivers should then proceed with changing the skin-level feeding tube device on a routine schedule at home.

Top Takeaways for School Considerations

An enteral feeding tube is a medical device used to provide an alternate route for nourishment and hydration to support a child's growth and development.

Intolerance of feeding can be exhibited by nausea, vomiting, cramping, pain, coughing and/or gagging. Breathing difficulty or changes in color could indicate aspiration and feeding should be stopped immediately.

Many schools will have a specific protocol for handling a dislodged feeding tube. Storing a backup feeding tube kit at school is encouraged. The custom sized kit can be available in the event the student needs to go to the emergency room.

Keeping extra formula as backup in the health room is encouraged not only for spills and leaks, but also in event of an unplanned extended day.

Kennedy Krieger Institute's Specialized Health Needs Interagency Collaboration

The Specialized Health Needs Interagency Collaboration (SHNIC) program is a collaborative partnership between Kennedy Krieger Institute and the Maryland State Department of Education.



Kennedy Krieger Institute

Considerations for the Individualized Healthcare Plan (IHP)

- Nursing diagnosis of imbalanced nutrition: less than body requirements, impaired swallowing, risk for infection and risk for impaired skin integrity
- Current diagnosed health condition including date of diagnosis, progress of disease process and other chronic health conditions
- Current medication and treatment orders (consider schedule, equipment needs and side effects)
- Allergies or food restrictions
- Nutrition interventions and equipment needs (consider brand/size of feeding tube, tube replacement, water flushes, fluid intake goal and supplements); note school district policy on tube replacement and consider keeping backup feeding tube kit at school if applicable
- Activity, positioning, transferring (consider precautions and/or restrictions)
- Equipment troubleshooting (consider equipment/device user manual, battery, charger)
- Consider emergency care plan(s) (ECP) and emergency evacuation plan(s) (EEP) as related to medical needs in the school setting, and staff education/training, as appropriate

Discussion Starters for Educational Team

1. Has the school staff been trained to implement the student-specific emergency plan?
2. Would the student benefit from evaluations or assessments in any of the following areas: physical therapy, occupational therapy, speech and language therapy, assistive technology, adapted physical education, functional behavior, psychology, hearing and vision?
3. Would the student benefit from additional academic support and/or modified education (e.g., copies of notes, extra time, reduced workload, simplified instructions, alternative formats for presentation of material, 504/IEP)?
4. Does the student require activity precautions to prevent injury?
5. Does the classroom environment support the student's needs and/or equipment (e.g., desk/seating options, maneuverability space, electrical outlets, flash pass for bathroom or nurse)?

Resources

Kennedy Krieger Institute: Pediatric Feeding Disorders Program
kennedykrieger.org

Tube Fed: Avanos Medical
tubefed.com/new-to-feeding-tubes/

AMT: MiniOne
appliedmedical.net/enteral/minione/



Scan QR code or visit **KennedyKrieger.org/Redirect** for more information.