Enteral Nutrition in Adults Policy and Procedure			
Program/Dept.:	Professional Practice	Document Category:	Patient Care
Developed by:	Professional Practice Registered Dietitians Nurse Practitioner	Original Approval Date:	September 2002
Approved by:	Director Professional Practice SVP Patient Engagement & Chief Nursing Executive	Reviewed /No Change Date(s):	(Mon/Year)
Review Frequency:	Every 3 years	Reviewed/Revised Date(s):	October 2020 October 2024

1.0 Purpose

To outline the practice standards and guidelines for the management of enteral nutrition and enteral medication administration in adults.

2.0 Scope

Nurses, Nurse Practitioners, Physicians, Registered Dietitians, Pharmacists and Pharmacy Technicians.

3.0 Policy

3.1 Indications for enteral nutrition support include but are not limited to:

a. Malnourished patients expected to be unable to eat for greater than a 5 to 7-day period.
b. Normally nourished patients expected to be unable to eat for greater than 7 to 9 days.
c. Low output enterocutaneous fistula.
d. Adaptive phase of short bowel syndrome.
e. Following severe trauma or burns.
f. Neurologic disease or other causes (i.e., cerebrovascular accident, multiple sclerosis) resulting in severe dysphagia.
g. Organ system failure including respiratory failure where patient is ventilator dependent.

3.2 Enteral nutrition orders are entered by a Provider or Registered Dietitian (RD) using one of three Order Sets titled:

a. Enteral Feeds – New Start
b. ICU Enteral Feeds – New Start
c. Enteral Feeds – For RD use

3.3 Confirmation of tube placement after insertion/reinsertion must be verified using a chest x-ray by Provider or Radiologist when not inserted in Interventional Radiology or endoscopy. Following placement, Provider or Radiologist shall confirm and document that tube is ready for enteral feeding.

3.4 Hang time of enteral nutrition formulations must not exceed 8 hours at room temperature unless otherwise ordered.

4.0 Procedure:

4.1 Verify tube placement prior to initiation of enteral nutrition feeding. See Nasogastric and Orogastric Tube Insertion and Maintenance in Adults Policy and Procedure.

4.2 Refillable enteral nutrition administration sets (bag/container/connector and tubing) must be changed every 24 hours.

4.3 Follow Routine Practices Policy and Procedure when preparing enteral feeding and accessing feeding tubes.

4.4 Positioning for Feeds:
a. Review patient order prior to initiating each feed.
b. Elevate the head of the bed to 45º (optimum) - 30º (minimum) during administration and for one hour after feeding is complete unless otherwise indicated.
c. If head of bed cannot be elevated (e.g., spinal precautions) consider using reverse Trendelenburg position.

4.5 Preparation and Prevention of Contamination of Enteral Formulations:
a. Unopened ready-to-feed formulations should be stored in a cool, dry designated area.
b. Feeding product should not be stored in direct sunlight or near direct heat e.g. window still.
c. Confirm expiry dates on all containers. Expired or damaged formula containers should be discarded.
d. Administer enteral formula at room temperature.
e. If enteral feed is in a can, wipe top with alcohol swab before opening.
f. Shake all containers well before adding to tube feeding reservoir.
g. Avoid adding new formula to the remaining amount from previous feed.

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4.6 Preparing Supplies for Enteral Feeding:
a. Pour ordered formula into enteral administration bag.
b. Intermittent feeds may be administered with a syringe per Registered Dietitian orders.
c. Program feeding pump. Prime tubing with formula using the pump.
d. Connect enteral administration set with compatible connector to the enteral feeding tube and begin enteral feeding. Use ENFit® connectors when available.

4.7 Assessing Tolerance and Gastric Residuals:
a. Regular monitoring of enteral feeding tolerance is required.
b. Signs of intolerance could include but are not limited to abdominal distention, nausea or vomiting, diarrhea or constipation, decreased bowel sounds, abdominal discomfort, etc. Signs of intolerance should be reported to the Provider and Registered Dietitian.
c. Measure gastric residuals as per Appendix A, Adult Enteral Feeding Flow Chart.

4.8 Medication Administration through a Feeding Tube:
a. Do not add medications to enteral feeding formula.
b. Sterile water is the preferred diluent for medication administration.
c. Multiple medications should be administered separately, flushing with 5 – 10 mL of water between each medication, and flush with 30 mL water before and after medication administration. Use sterile water for flushing with critically ill or immunocompromised patients (patients in ICU).
d. Inform pharmacy to review medications for administration.
   i. If medication administration is in a tablet form and can be crushed, crush into a fine powder
   ii. If medication administration is in a capsule form and can be opened, ensure that the beads in the capsules are not crushed

iii. If medication administration is in liquid form, pharmacy can change to tablet form (if available and possible) that is crushable

e. Dilute viscous and hyperosmolar liquid medications with 30 mL water before administration.

4.9 Patients with Diabetes:

a. If there is an interruption of feeds in patients with diabetes receiving insulin and/or oral hypoglycemic agents, contact the Provider to consider intravenous IV fluid order (with dextrose).

4.10 Documentation:

a. Document the following in the Enteral Nutrition Assessment and Gastrointestinal Assessment as applicable:
   i. Time feeding started and finished.
   ii. Degree of head of bed elevation. If head of bed cannot be elevated, document reason.
   iii. Tolerance of feeding
   iv. Number of stools, consistency and color
   v. Weekly weights (minimum q Tuesdays) or as ordered (daily in ICU)
   vi. Residual volume (if appropriate/ordered)
   vii. Type of feeding product and infusion rate

b. All fluids (including pre/post medication fluids) are documented in the Intake and Output Assessment.

5.0 Definitions:

ENFit®: A standard for enteral feeding product connections that has been adopted worldwide to increase patient safety. ENFit® is purposely designed to ensure that feeding tube connectors are incompatible with connectors for unrelated delivery systems.

Enteral Nutrition: The delivery of nutrients beyond the esophagus via feedings tubes. It is indicated for patients whose gastrointestinal tract is functional and whose oral energy/nutrient intake is insufficient to meet nutritional need. The decision to initiate enteral nutrition support is based on a nutritional assessment and should be a collaborative decision involving the patient and/or family/substitute decision maker.

Provider: A healthcare professional who is permitted by Federal and Provincial legislation, their regulatory college, and practice setting (where applicable) to place patient orders and/or prescribe medications.

6.0 Related Documents

Total Parenteral Nutrition (Adult) - Policy and Procedure
Nasogastric and Orogastric Tube Insertion and Maintenance in Adults Policy and Procedure.
Patient Standards of Care Policy and Procedure

7.0 Key Words

Enteral, enteral nutrition, enteral feeds, gastric feeding

8.0 Reviewed by/Consultation with

Gastroenterologist
General Surgeon
Gastroenterology, NP
Registered Dietitian Group
Professional Practice Clinicians

9.0 References

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Sharma, L. (2018). Nasogastric Suction: Clinician Information. The Joanna Briggs Institute.

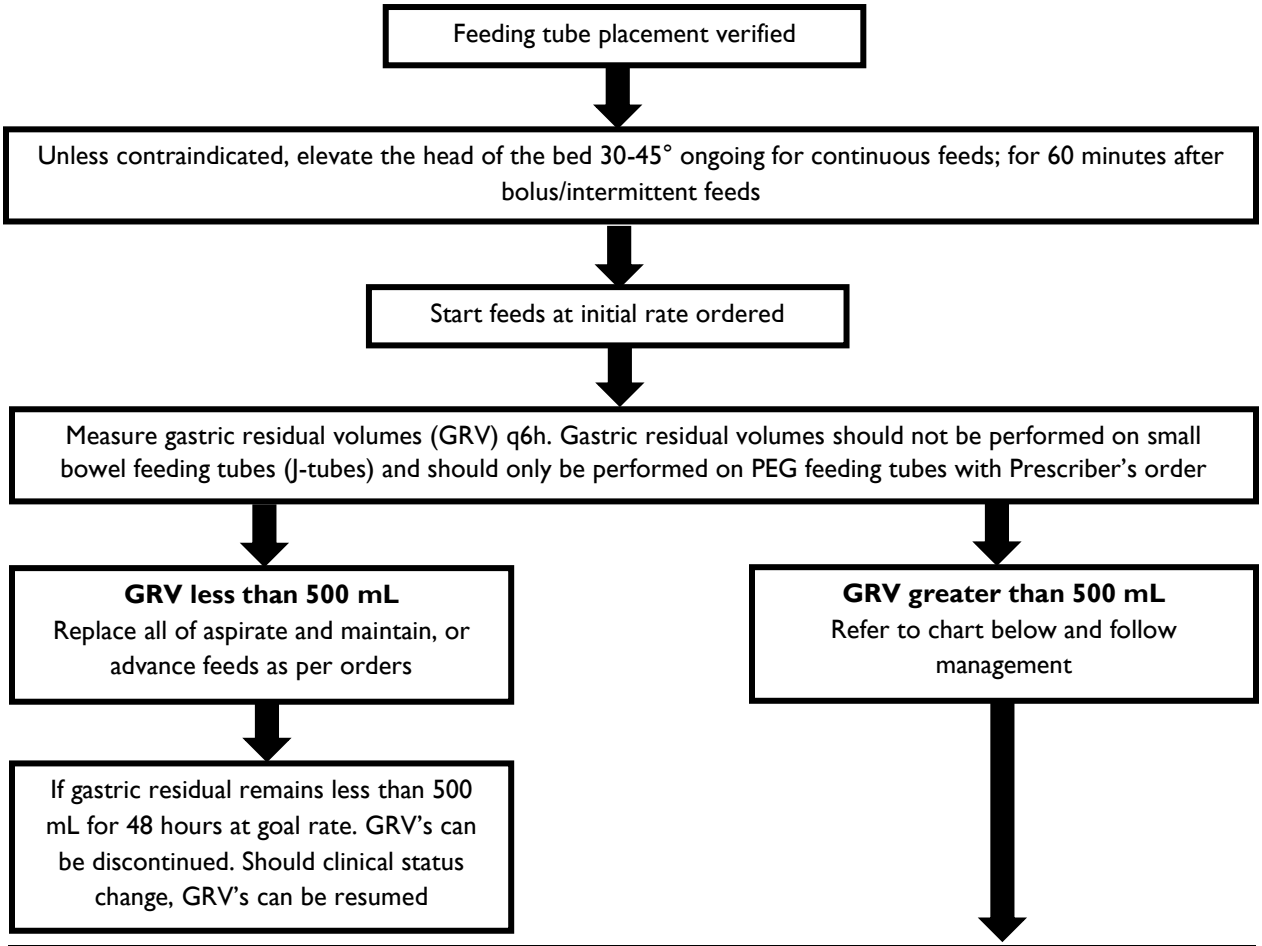
Walsh, K., & Schub, E. (2016). Nasogastric Tube: Inserting and Verifying Placement in Adult Patient. Cinahl.

10.0 Appendices

Appendix A: Adult Enteral Nutrition Feeding Flow Chart
Appendix B: Engagement/Stakeholders/Approvals
Appendix C: Education and Implementation Plan
Appendix D: Communication Plan
Appendix E: EPPIC Publishing Request

Enteral Nutrition in Adults Policy and Procedure

Appendix A: Adult Enteral Nutrition Feeding Flow Chart



1st GRV greater than 500 mL *	2nd GRV greater than 500 mL	If after 24 hours on motility agent, still greater than 500 mL
Verify head of bed at 30-45° unless contraindicated. Replace all of aspirate up to 500 mL; discard the rest. Assess for physical signs of intolerance, if none, maintain rate, checking GRV in 6 hours. If nausea, emesis, abdominal distention, hold feeds for 2 hours, then get an order from the Prescriber to restart feeds at half the previous rate and continue to monitor GRV's q6h. If able, place patient on their right side for 15-20 minutes before checking residual.	Replace all of the aspirate up to 500 mL; discard the rest. Contact Prescriber to consider order for motility agent per best practice.	If GRV persistently greater than 500 mL and/or physical signs of intolerance present and/or emesis, contact Prescriber to consider: • NG tube decompression • Small bowel feeding tube placement • If ileus, then TPN

*Because first high GRV has been shown to be an isolated event 80% of the time.