

Enteral Nutrition Assessment and Administration Guidelines

Quality Monitoring Program

TexasQualityMatters.org

Objectives

- Identify alternatives to enteral nutrition (EN) , benefits, risks, and limitations of enteral nutrition
- Enhance knowledge of appropriate enteral nutrition techniques
- Identify potential complications involved with enteral nutrition and medication administration
- Identify preventative measures to reduce the risk of complications
- Identify individual special needs that may require specialized formulas

What Do You See?

[Image of a person receiving nutrition through a feeding tube and an image of a sweet potato]

Assessment Before Enteral Nutrition

- Advance Directive Review
- Optimize nutritional intake
- Evaluate the medication regimen
- Look for underlying causes of weight loss

Alternatives to Enteral Nutrition

- Careful hand feeding
- Provide therapy (physical, occupational or speech), if needed
- Consider appetite enhancers

Intended Health Benefits of Enteral Nutrition

- To provide adequate nourishment when there is unintended, reversible weight loss
- To improve clinical status
- To enhance comfort and quality of life
- To prolong life

Limitations of Enteral Nutrition

- In end-stage disease, there is NO persuasive evidence that enteral nutrition:
 - Prevents pressure sores
 - Prevents malnutrition
 - Prevents aspiration pneumonia
 - Prolongs life
- Enteral nutrition does not reverse the cachexia of end-stage illness

Disadvantages of Enteral Nutrition

- Causes physical discomfort
- Individual response to discomfort can lead to the use of restraints
- Does not provide the gratification of taste
- Can cause diarrhea, electrolyte imbalance, and hyperglycemia
- Adds risks of bacterial contamination

Best Practice Guidelines

1. Enteral nutrition is consistent with each resident's Advance Directive, goals for therapy, and is delivered ethically
2. Formula and volume is assessed and given to meet nutritional needs
3. Type and location of feeding tube is appropriate to each individual
4. Routine monitoring for problems and progress toward nutritional and medical treatment goals are documented regularly and thoroughly
5. Potential Problems with enteral nutrition are identified and preventative actions are taken
6. Principles of food safety are applied to preparation, storage, delivery, and administration of enteral formulas
7. Principles of safe medication administration are applied to promote avoidance of tube obstruction, avoidance of reduced drug efficacy, and avoidance of increased drug toxicity

1. Wishes Consistent with Goals and Plan of Care

- Document individual / family wishes regarding artificial nutrition and hydration
- Document a valid diagnosis for initiation of enteral nutrition
- Plan person-specific nutrition related goal for enteral nutrition that is used in the care plan
- Discontinue or wean from feeding tube when appropriate

2. Formula and Volume Meet Nutritional Needs

- Registered Dietitian provides comprehensive assessment of nutrition and hydration needs and develops Goals:
 - Compare nutrition needs to formula calories and other nutrients
 - Compare hydration needs to total free water in formula and flushes
- Provide formula that meets individual metabolic needs
 - Standard formula
 - Specialized formula
- Assess tolerance of enteral nutrition
- Assess environmental factors daily that can affect hydration

3. Type and Location of Enteral Feeding Tube

- Provide formula by the most appropriate route, system, and method of enteral nutrition
- Document route, system, and method of enteral delivery in the medical record

4. Documentation In The Medical Record

- Document every 24 hours
 - Formula, feeding route, and system
 - Additional fluid needed to meet needs
 - Actual amount of formula and fluid given
 - Tolerance of feeding
 - Assess and document weight, biochemistries, and clinical signs of tolerance

5. Identify Potential Problems

- Metabolic (i.e. fluid, glucose, and electrolytes)
- Gastrointestinal (GI) (i.e. nausea, vomiting, diarrhea, or abdominal pain)
- Mechanical (i.e. aspiration, tube clogging or tube migration, or skin irritation at site)

5. Take Preventive Action!

Prevent metabolic complications

- Provide appropriate amount of formula and water
- Assess lab values, body weight, and clinical signs
- Notify physician of any abnormalities

Prevent GI complications

- Provide the type and amount of formula at prescribed rate using appropriate delivery method
- Use clean technique for set up of delivery system
- Assess for infections
- Assess proper administration of medications

Preventing Mechanical Complications

- Routinely flush tube with sterile water
- Check feeding tube placement
- Keep head of bed elevated 30-45°
- Use aseptic techniques
- Clean around feeding tubes daily
- Document in medical record

6. Preventing Contamination

- Maintain proper temperatures during storage and delivery
- Maintain safe hang time
- Ensure clean hands and work surfaces when handling an enteral feeding tube
- Do not add medications or other substances directly to the formula

7. Medication Administration

- DO NOT add medication directly to enteral formula
- DO NOT MIX medications together that will administered via enteral feeding tube
- EACH medication should be administered SEPARATELY
- Prior to medication administration, stop the feeding and flush the tube with at least 15 ml of water

Summary

Follow these guidelines to promote positive outcomes for people with enteral feeding tubes

References

- Best Practice Guidelines for Tube Feeding: A Nurse's Pocket Manual, Abbott Laboratories
- A.S.P.E.N. Standards for Specialized Nutrition Support for Adult Residents of Long-Term Care Facilities
- A.S.P.E.N. Enteral Nutrition Practice Recommendations, VIII, B, 2009
- U.S. Department of Health & Human Services AHRQ Agency for Healthcare Research and Quality National Guideline Clearinghouse Guideline Summary NCG-7288