# **Enteral Nutrition Care Pathway for Critically III Adult Patients**

This ASPEN pathway provides steps and resources for managing critically ill adult patients requiring enteral nutrition (EN), starting at needs assessment through transition out of the ICU.

#### Determine EN Appropriateness and Beneficial Effects

- Determine if GI tract is functional, bowel sounds not necessary
- Assess that patient is unable to take sufficient oral nutrition
  EN provides beneficial effects including decreased infection over PN

Resources: 2016 Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Adult Critically III Patient

### **Complete Nutrition Assessment**

- Assess for presence of malnutrition
- Determine nutrient and therapy goals including macro- and micronutrient and fluid needs
- Assess organ function and if it impacts nutrient dosing
- Resources: 2016 Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Adult Critically III Patient Determination of Nutrition Risk and Status in Critically III Patients: What Are Our Considerations?

#### Assess and Place Enteral Feeding Access Device

- Assess for current enteral access and its appropriateness for current clinical condition
- Determine aspiration risk and need for small bowel versus gastric feeding
- If needed, place small-bore naso-enteric feeding tube with desired gastric or small bowel tip location
- Confirm proper tube placement prior to feeding

Resources: 2016 Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Adult Critically III Patient Safe Practices for Enteral Nutrition Therapy JPEN 2016 Development of a Competency Model for Placement and Verification of Nasogastric and Nasoenteric Feeding Tubes for Adult Hospitalized Patients

To view an interactive, online version of the pathway, visit nutritioncare.org/ENPathway.

#### Select Appropriate EN Formula

Consider the following question for formula selection: Does the patient have specific nutrient needs due to their condition?

- High caloric requirements and/or fluid restriction Select a more fluid restricted, energy dense formula
- Burn or trauma patients Consider use of formula with additional glutamine
- Persistent diarrhea Consider use of a mixed fiber-containing formula
- Suspected of malabsorption or lack of response to fiber Consider use of a small-peptide formula
- Renal impairment Consider use of an electrolyte altered formula

• If none of the above – Consider use of a standard formula

Resources: 2021 Guidelines for the Provision of Nutrition Support Therapy in the Adult Critically III Patient JPEN 2021 ESPEN practical and partially revised guideline: Clinical nutrition in the intensive care unit Enteral Nutrition Formula Guide

#### Prescribe EN Correctly Using Standardized Process

- Use Computerized Provider Order Entry (CPOE) if available
- Use computerized Clinical Decision Support (CDS) tools including algorithms and alerts
- Prescribe formula, administration rate or method, and daily volume
- Use volume-based feeding protocols
- Prescribe continuous or intermittent delivery methods as appropriate

Resources: 2016 Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Adult Critically III Patient Safe Practices for Enteral Nutrition Therapy JPEN 2016

#### **Required EN Order Elements**

- Patient information
- Formula name (generic and /or trade name)
- Delivery site (route) and enteral access device
- Administration method and rate
- Nurse-driven EN protocols for volume-based feeding

Communicate order to department that supplies EN formulas

Resources: 2016 Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Adult Critically III Patient Safe Practices for Enteral Nutrition Therapy JPEN 2016



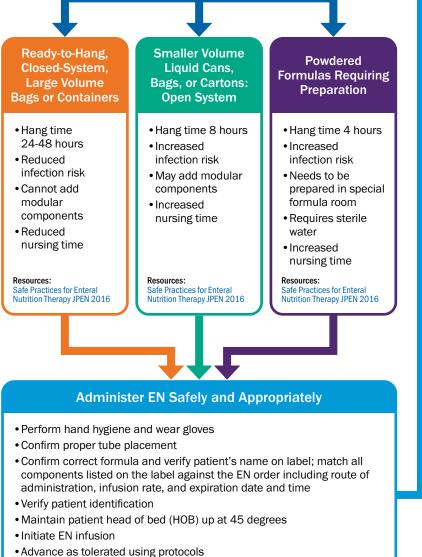
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- Formulas are supplied as ready-to-hang, closed-system, large volume bags or containers; smaller volume cans, bags, or cartons; and powdered formula
- Understand how the formula is ordered, prepared, and delivered to the bedside
- Formulas labels should reflect required order elements and include expiration dates

Resources: Safe Practices for Enteral Nutrition Therapy JPEN 2016



Deliver medications safely

Resources: Safe Practices for Enteral Nutrition Therapy JPEN 2016

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#### References

McClave SA, Taylor BE, Martindale RG, et al; Society of Critical Care Medicine; American Society for Parenteral and Enteral Nutrition. Guidelines for the provision and assessment of nutrition support therapy in the adult critically ill patient: Society of Critical Care Medicine (SCCM) and American Society for Parenteral and Enteral Nutrition (ASPEN). JPEN J Parenter Enteral Nutr. 2016;40:159-211. Bould to JL, Carena AL, Hongan L, Edd AC, Step L, Step

Boullata JI, Carrera AL, Harvey L, et al. ASPEN safe practices for enteral nutrition therapy. JPEN J Parenter Enteral Nutr. 2017 Jan;41(1):15-103

## • Document tolerance and advancement to goal feedings • Do not use gastric residual volumes as part of routine care to monitor ICU patients receiving EN Reassess nutritional status periodically Resources: 2016 Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Adult Critically III Patient Safe Practices for Enteral Nutrition Therapy JPEN 2016 Development of a Competency Model for Placement and Verification of Nasogastric and Nasoenteric Feeding Tubes for Adult Hospitalized Patients **Initiate Discharge Planning** for Transition of Care · Identify new care setting Identify prescriber and new care team Assess enteral access and if long term access is needed, place gastrostomy, jejunostomy or combined G/J as needed Determine if patient continues to need current EN prescription Communicate EN order, labs, frequency, and monitoring parameters to new care team Resources: Safe Practices for Enteral Nutrition Therapy JPEN 2016

**Monitor and Reevaluate Patient** 

Initiate monitoring protocol

Evaluate efficacy and goals of therapy

Alter formula, rate, or volume as needed



- Develop error reporting program within institution QI/QA department
- Implement infection control for EN handling
- Monitor use of appropriate EN in ICU population
- Monitor tolerance to EN and use of supplemental PN in ICU population
- Measure percent of nutrient requirements received by patients

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Pathway development supported by

