# **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: ASPEN Adult Critical Care Clinical Guidelines

#### **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

Improve Patient Outcomes: ASPEN's Step-by-Step Guide to Addressing

ASPEN Adult Critical Care Clinical Guidelines

#### **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
- If needed, place small-bore naso-enteric feeding tube with desired gastric or small bowel tip location
- Confirm proper tube placement prior to feeding

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#### Select Appropriate EN Formula

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

- High caloric requirements and/or fluid restriction - Select a more fluid restricted, energy dense formula
- Surgical or trauma patients Consider use an immunomodulating formula
- Persistent diarrhea Consider use of a mixed fibercontaining formula
- Suspected of malabsorption or lack of response to fiber -Consider 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: ASPEN Adult Critical Care Clinical Guidelines

#### **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

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#### **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

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## Procure, Prepare, and Label the Formula

- 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: ASPEN Safe Practices for Enteral Nutrition

#### Ready-to-Hang, Closed-System. **Large Volume Bags** or Containers

- Hang time 24-48 hours
- · Reduced infection
- · Cannot add modular components
- Reduced nursing time

Resources: ASPEN Safe Practices for Enteral Nutrition

#### **Smaller Volume** Liquid Cans, Bags, or Cartons: Open System

- Hang time 8 hours
- · Increased infection
- May add modular components
- · Increased nursing time

Resources: ASPEN Safe Practices for **Enteral Nutrition** 

#### **Powdered** Formulas Requiring **Preparation**

- · Hang time 4 hours
- Increased infection
- Needs to be prepared in special formula room
- Requires sterile water
- Increased nursing

## Resources: ASPEN Safe Practices for

**Enteral Nutrition** 

# Enteral Nutrition Care Pathway for Critically III Adult Patients



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## Administer EN Safely and Appropriately

- · Perform hand hygiene and wear gloves
- · Confirm proper tube placement
- Confirm correct formula and verify patient's name on label; match all components listed on the label against the EN order including route of administration, infusion rate, and expiration date and time
- · Verify patient identification
- Maintain patient head of bed (HOB) up at 45 degrees
- · Initiate EN infusion
- · Advance as tolerated using protocols
- Deliver medications safely

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#### **Monitor and Reevaluate Patient**

- · Initiate monitoring protocol
- Evaluate efficacy and goals of therapy
- Alter formula, rate, or volume as needed
- 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

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#### 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: ASPEN Safe Practices for Enteral Nutrition

#### **Enteral Nutrition Quality Improvement Program**

- 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

Resources: ASPEN Adult Critical Care Clinical Guidelines
ASPEN Safe Practices for Enteral Nutrition

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

#### References:

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