

6 Steps to Optimizing Nutrition in the ICU

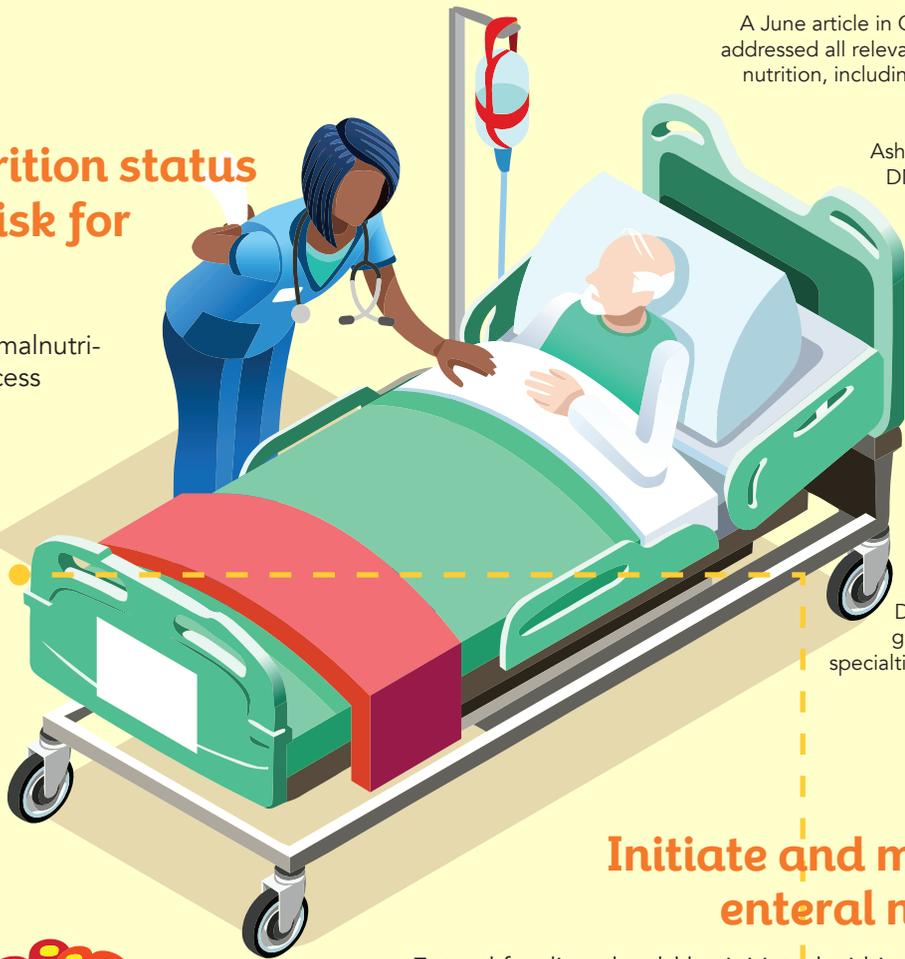
According to the American Association of Critical-Care Nurses (AACN), more than half of patients admitted to critical care units are malnourished, increasing their risk for serious complications and contributing to longer hospital stays and higher healthcare costs. Yet many of those eligible to receive enteral feedings do not receive adequate nutrition while hospitalized.

Thus, the American Society of Parenteral and Enteral Nutrition (ASPEN) created a new nutrition bundle to ensure that patients' nutritional needs are met during stays in the ICU. Created in conjunction with the Society of Critical Care Medicine, the bundle is one component of ASPEN's updated guidelines for assessment and nutritional support for the critically ill.

Assess patients' nutrition status to identify those at risk for malnutrition

Clearly, identification of patients with malnutrition or undernutrition early in the process is critical in terms of preventing poor long-term outcomes, but the two outcomes are not identified at a desirable rate because of poor screening practices.

Several screening tools can be used to detect malnutrition or nutrition risk, but the most common tools in acute care are the Nutrition Risk Screen 2002, the Nutrition Risk in the Critically Ill, and Malnutrition Universal Screening Tool. These take into consideration a patient's weight, loss of weight before admission, and severity of disease.



A June article in Critical Care Nurse addressed all relevant components of nutrition, including assessment and interventions.

Ashleigh VanBlarcom, DNP, RN, AGACNP-BC, and Mary Anne McCoy, PhD, RN, ACNP-BC, collaborated on the article while VanBlarcom was earning a DNP degree at Wayne State University College of Nursing in Detroit. McCoy serves as specialty coordinator of the DNP and AGACNP graduate certificate specialties at Wayne State

Initiate and maintain enteral nutrition

Enteral feeding should be initiated within 24-48 hours of admission for anyone unable to continue with traditional feeding. In addition to providing calories, enteral feeding reduces severity of disease while preserving the immune system. Without a food source entering the gastrointestinal tract and stimulating blood flow, control of systemic inflammatory cytokines can be lost, leading to inflammation and other harmful consequences.

Reduce risks for aspiration

The prevention of adverse outcomes such as aspiration needs to be an equally critical component of care. Keeping the head of the bed elevated, sparing the use of sedatives, and ensuring adequate bowel function are essential pieces of this puzzle.

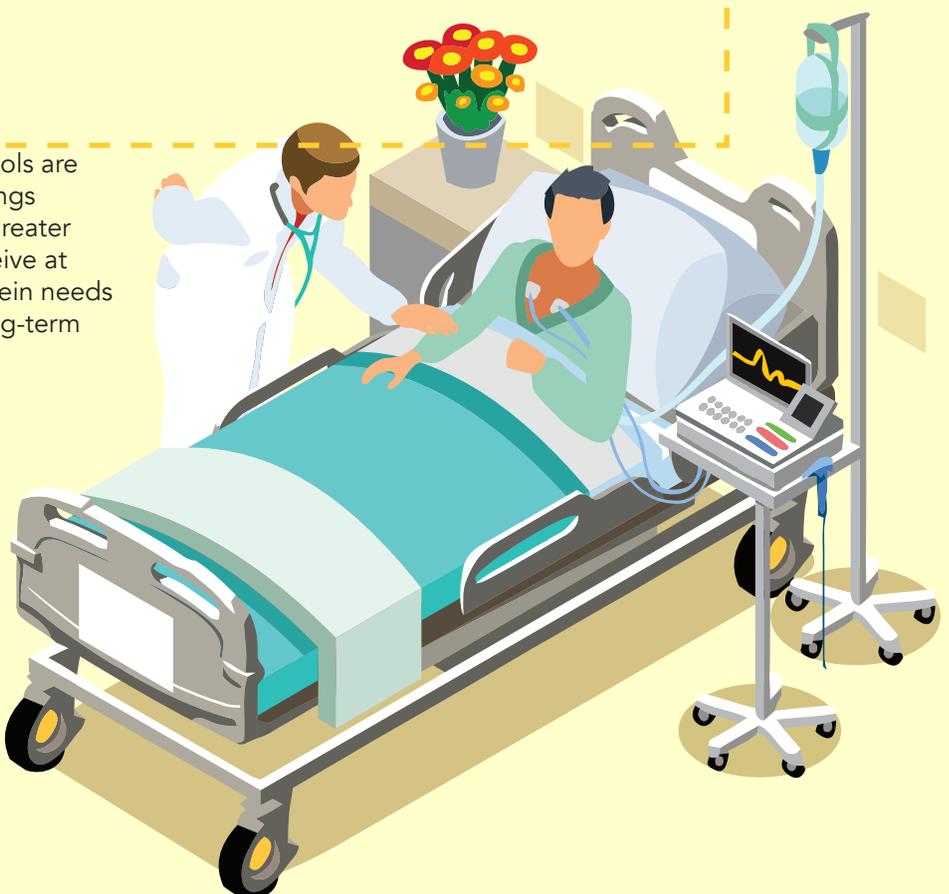
Implement enteral feeding protocols.

According to research, when bedside protocols are used, patients not only receive enteral feedings earlier in their admission but also receive a greater volume of enteral formula. Patients who receive at least 80% of their estimated caloric and protein needs while hospitalized have better short- and long-term outcomes.

Avoid the use of gastric residual volumes as an assessment of enteral feeding tolerance

Historically, GRVs or gastric residual values were used to mark retention of enteral feedings. Increased GRVs were due to delayed gastric emptying, we believed, and could lead to aspiration and pneumonia.

But new evidence indicates that GRVs do not correlate with gastric emptying, and are poor predictors of intolerance to enteral feedings. Multiple studies indicate that correlation or no correlation between GRV and increased aspiration and pneumonia can be obtained by adjusting the GRV cutoff value.



Consider parenteral nutrition early, when enteral feedings cannot be initiated

Mortality rates are significantly increased when malnutrition is present at the time of admission to the ICU and when enteral feedings are delayed for a week or longer.

Unfortunately, nutrition is often overlooked in the confusion and haste when a patient is admitted to the ICU. But with nurses and dietitians working hand-in-hand, many poor outcomes can be avoided and altogether reversed.