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2026 Enteral Nutrition Shortage Recommendation: Enteral Gravity and Pump Feeding Set Shortage Management

ASPEN has developed shortage recommendations to assist members and other clinicians in coping with enteral nutrition (EN) shortages for their patients. These product shortage recommendations were approved by the ASPEN Enteral Nutrition Committee and Board of Directors.

Document Contents:

- [General Recommendations for Enteral Gravity and Pump Feeding Set Shortage Management](#)
- [Introduction of “Rinse and Reuse”](#)
- [Specific Considerations for Shortage Management](#)
- [Special Population Considerations](#)
- [Rinse and Reuse Recommended Procedure](#)
- [ASPEN Resources](#)
- [Manufacture Resources](#)
- [References](#)
- [About ASPEN](#)

Important Note: These recommendations do not constitute medical or other professional advice and should not be taken as such. To the extent that the information published herein may be used to assist in the care of patients, the primary component of quality medical care is the result of the professional judgment of the healthcare professionals providing care. The information presented here is not a substitute or replacement for the exercise of professional judgment by healthcare professionals; rather, it is intended to supplement professional training and judgment. Circumstances and patient specifics in clinical settings may require actions different from those recommended in this document; in those cases, the judgment of the treating professionals should prevail. Use of this information does not in any way guarantee any specific benefit in outcome or survival.

These shortage recommendations are intended only for use during product shortages, when adequate product is unavailable. These measures are not ideal for ensuring safe and optimal patient care and should not be considered standard practice. Any deviation from manufacturer-recommended practices should be temporary and reversed once adequate product supply is restored. No single strategy will work for all organizations. Institutions must carefully evaluate each option, weighing potential risks and benefits before implementation. These recommendations are provided with the understanding that they are followed at the institution’s own risk, and each organization assumes responsibility for any resulting outcomes.

Questions regarding these recommendations should be directed to clinicalpractice@nutritioncare.org.

General Recommendations for Enteral Gravity and Pump Feeding Set Shortage Management

- **Continually assess indications for EN on an ongoing basis.** For all patients, routinely assess and reassess patient-specific indication(s) for nutrition support and requirement for EN; provide nutrition via the oral route when possible and clinically appropriate.¹
- **Use gravity and pump feeding sets only when indicated.** Assess clinical status and select or modify appropriate EN administration methods.
 - Considerations for when to use gravity or pump:
 - Type of tube: gastric vs jejunal
 - Volume/rate tolerance, need for controlled delivery
 - Evaluate patients for readiness to transition from pump to or gravity or bolus to an alternative feeding method
- **Communicate with all stakeholders involved in the EN use process early and often** (e.g., manufacturers/distributors, central supply and/or home product supply companies, nutrition services, providers, pharmacy, IT). Communication is essential to understanding the current stock, procurement issues, and bedside practice. Establish a process to maintain clear communication across all departments.
- **Do not stockpile.** Purchase only quantities needed in the interest of fair allocation.
- **Develop an organizational strategy.** Include EN supply shortages in the healthcare organization's strategies and procedures for managing supply shortages. These procedures should include processes to:
 - Notify clinicians when a shortage of EN supplies occurs; educate staff on practice changes prior to implementation
 - Consider manufacturer recommendations and practice guidance of EN supply shortage management
 - Identify/monitor patients whose EN regimen has been modified due to supply shortage to ensure safety, nutritional adequacy, and tolerance.
 - Individuals receiving home EN
 - Notify and educate patients and caregivers when their EN regimen has been adjusted.
 - Notify clinical care teams when the EN regimen is adjusted (note: if method of administration is adjusted, new prescriptions are required).
 - Notify clinicians, patients, and caregivers when the shortage resolves and resume previous regimen and standard institutional policies if clinically appropriate.
- **Establish a triage system** for allocating limited resources that is fair, transparent, and consistent, guided by ethics and best practice, and supported by interprofessional collaboration (nutrition support clinicians, bioethics committees, legal advisors, ethicists, patient representatives, and other key stakeholders) that benefits the most patients while minimizing harm.^{2,3}

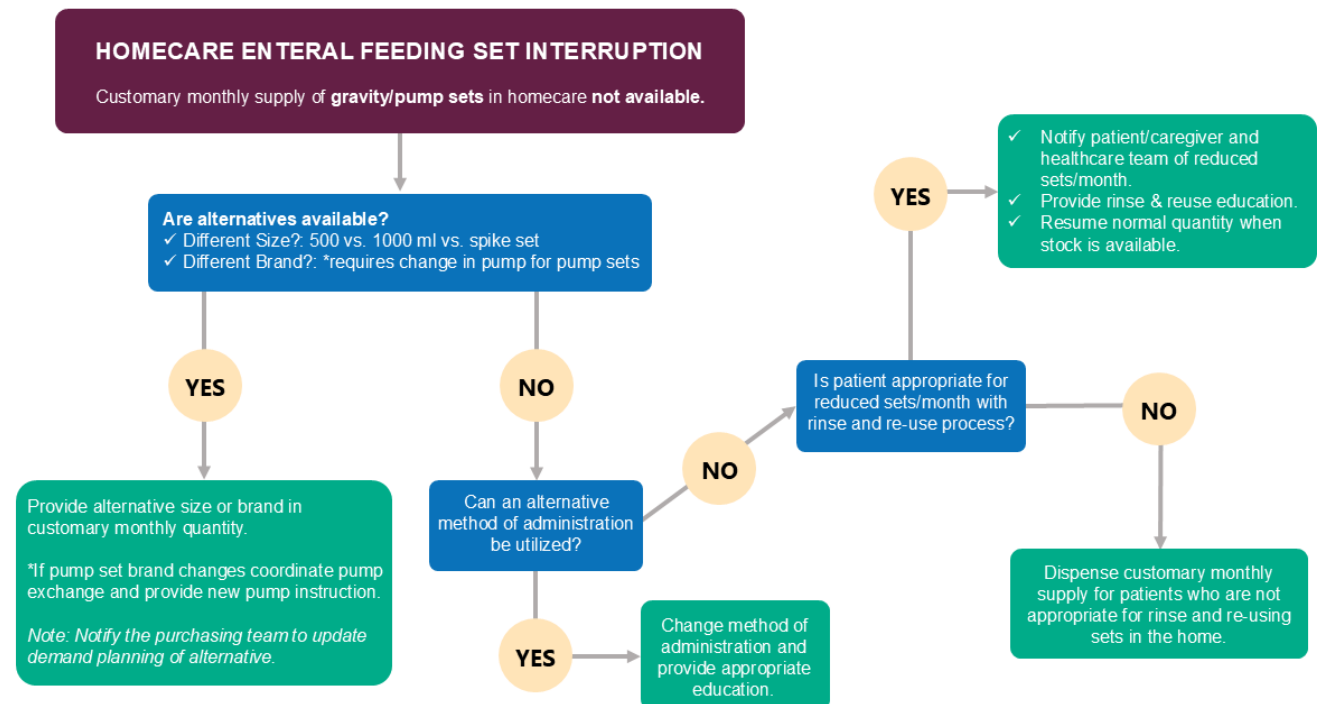
Introduction of “Rinse and Reuse”

All enteral feeding set manufacturers provide clear recommendations for the approved duration of use for pump and gravity feeding sets. Typically, spike feeding sets used with ready-to-hang (closed system) containers are approved for up to 48 hours, while feeding sets used for open systems (pouring prescribed amount of formula into bag style feeding set) are recommended for use for 24 hours per manufacture Instruction for Use. Emphasize the importance of routine rinsing of open feeding sets within the standard 24-hour use period, to help reduce contamination risk.^{4,5} Facilities should have a clear policy addressing this practice and ensure adherence to formula manufacturer recommendations, including appropriate hang times, to support patient safety.

For the purposes of this guidance, “rinse and reuse” refers specifically to the extended use of enteral feeding sets beyond the manufacturer’s recommended timeframe. For example, using an open system feeding set for 48 hours instead of the recommended 24 hours would reduce typical utilization from approximately 30 sets per month to 15 sets per month. The following sections will review general recommendations during supply shortages, the use of decision trees, considerations for at-risk populations, a proposed rinse and reuse protocol, and supporting resources and references.

Specific Considerations for Shortage Management

Decision Tree: Homecare Enteral Supply Interruption



When an interruption of gravity or pump feeding sets is identified in the homecare setting, the first step is to determine the availability of alternative supplies and to confirm if sourcing alternative supplies is needed. Consult with manufacturers or distributor partners to identify other sizes or variations within the same product line that could temporarily support patient needs.

Gravity Feeding Set Considerations

For gravity feeding sets, alternative sizes or brands may be used to help bridge a supply interruption. For example, a 500 mL set may be substituted for a 1000 mL set, or a small-bore gravity feeding set may be used in place of a large-bore option, when clinically appropriate. When substitutions are made, clinicians should consider how changes may affect the patient’s established feeding routine or daily schedule. A smaller volume feeding set, for example, may require more frequent filling, potentially increasing caregiver

burden, disrupting sleep or work schedules, and affecting adherence to prescribed feeding regimens. Changes in feeding set size or flow capacity may impact feeding duration, flush frequency, and hang times. Patients and caregivers should be proactively counseled on these differences and provided strategies to adjust feeding plans as needed during the supply interruption.

Pump Feeding Set Considerations

Pump feeding sets are brand-specific and cannot be interchanged without replacing the feeding pump. Transitioning to an alternative pump requires intentional planning, including patient and/or caregiver education on the new device, with updated instruction prior to use. Alternative sizes or types of pump feeding sets within the same brand may also be used to help bridge a supply interruption, using the same considerations noted above for gravity feeding set.

Coordination and Communication

When alternative sizes or brands are selected, ensure that the patient receives appropriate guidance on what to expect, including changes to set up, feeding schedules, or daily routines. Coordination with purchasing, the manufacturer, and/or the distributor is essential to support demand planning, communicate substitutions, and minimize the risk of prolonged or recurrent supply disruption.

Temporary Changes to the Method of Administration

If no suitable alternative supplies exist, assess whether the patient is clinically appropriate for a temporary change in the method of administration. During a pump feeding set shortage, this may involve transitioning the patient to bolus or gravity feeding. During a gravity feeding set shortage, bolus or pump feedings may be considered. If a change in method is appropriate, work with the patient's care team to obtain an updated prescription and provide the necessary education to the patient and/or caregiver(s).

Reduced Use of Feeding Sets (Rinse-and-Reuse)

If a change in administration method is not appropriate, determine whether the patient may safely receive fewer feeding sets per month by using a rinse-and-reuse process. The level of reduction should be guided by the severity and anticipated duration of the supply interruption as well as overall product availability.

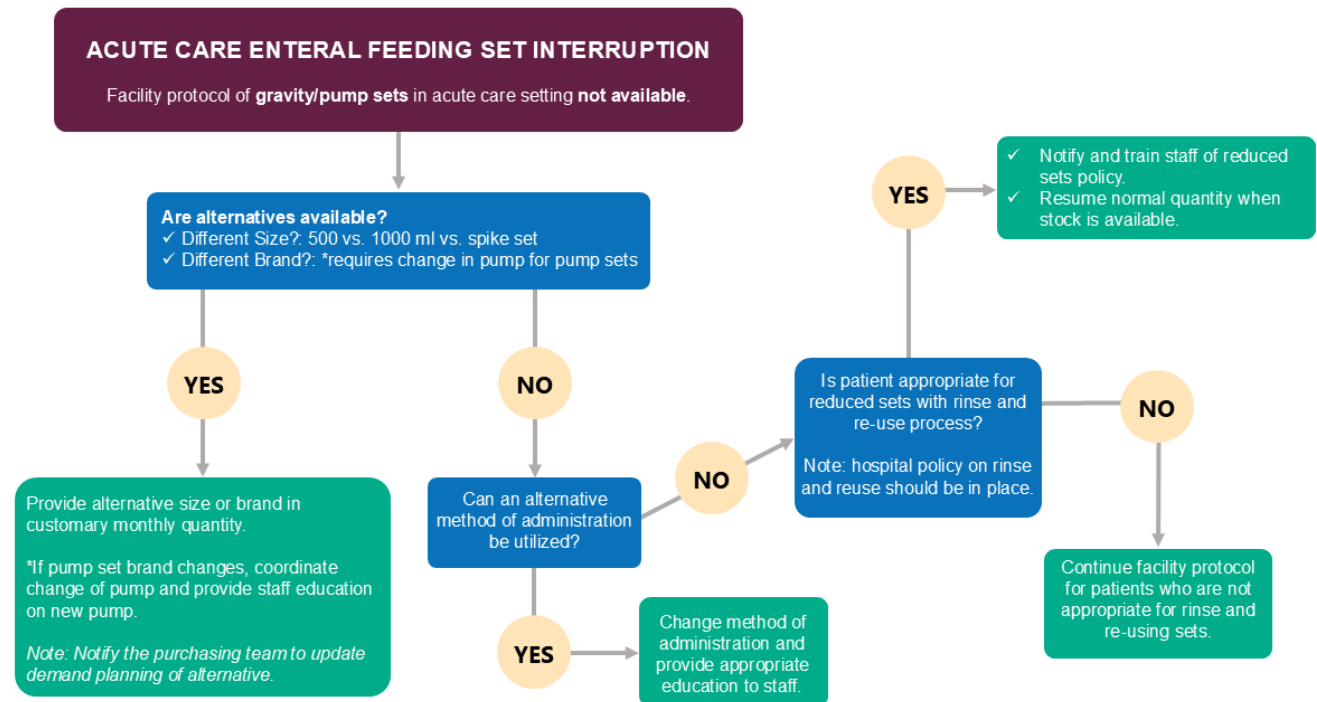
For patients who are appropriate for reduced feeding set use, clinicians should notify the patient and/or caregiver(s) and provide detailed education on rinsing, reusing, storage between uses, and how many days or uses each feeding set may safely support.

Patients Not Appropriate for Reduced Feeding Set Use

If the patient is not an appropriate candidate for reduced-feeding set use, dispense their customary monthly quantity if inventory allows. See additional information in the special population considerations below.

Using the Decision Tree to Guide Supply Allocation

Following this decision tree during supply disruptions helps prioritize access for patients with the greatest clinical need, supports patient safety, and promotes the most equitable use of limited feeding supplies.

Decision Tree: Acute Care Supply Interruption

When an interruption of gravity or pump feeding sets is identified in the acute care setting, the first step is to evaluate current inventory and utilization to confirm if sourcing alternative supplies is needed, then determine the availability of alternative supplies. Involve central supply or purchasing to consult with manufacturers or distributor partners to identify other sizes or variations within the same product line that could temporarily support patient needs.

Gravity Feeding Set Considerations

For gravity feeding sets, alternative sizes or brands may be used to help bridge a supply interruption. For example, a 500 mL set may be substituted for a 1000 mL set, or a small-bore gravity feeding set may be used in place of a large-bore option when clinically appropriate.

Pump Feeding Set Considerations

The first step is to assess current facility practices to determine whether open system feeding sets are being replaced more frequently than the manufacturer's recommended duration of use. If so, consider whether adjusting practice to align with the manufacturer's recommendations would sufficiently support conservation of the existing, limited inventory. When appropriate, implement this as a temporary policy adjustment and ensure staff education is provided, including clear instructions on proper rinsing and handling of feeding sets as applicable. If additional conservation measures are required and reuse of feeding sets beyond the manufacturer's recommendations is being considered, this would constitute a separate, additional temporary policy change and should be addressed accordingly.

Pump feeding sets are brand-specific and cannot be interchanged without replacing the feeding pump, which may not be feasible in the acute care setting. Transitioning to an alternative pump requires intentional planning, communication, and education prior to implementation. Alternative sizes or types of pump feeding sets within the same brand may also be used to help bridge a supply interruption, using the same considerations noted above for gravity feeding set considerations.

Coordination and Communication

When alternative sizes or brands are selected, ensure that the clinical teams receive appropriate guidance and training on any changes in protocols or practice, including changes in setup, administration, feeding schedules, and daily workflows. Coordination with purchasing, the manufacturer, and/or distributors is

essential to support demand planning, communicate substitutions, and minimize the risk of prolonged or recurrent supply disruption.

Temporary Changes to the Method of Administration

If no suitable alternative supplies exist, assess whether the patient is clinically appropriate for a temporary change in the method of administration. During a pump feeding set shortage, this may involve transitioning the patient to bolus or gravity feeding. During a gravity feeding set shortage, bolus or pump feedings may be considered. If a change in method is appropriate, work with the clinical team to obtain an updated enteral order and provide the necessary education to all clinical teams involved in the EN use process, and the patient and/or family.

Reduced Use of Feeding Sets (Rinse-and-Reuse)

If a change in administration method is not appropriate, follow organizational policies and procedures for use of EN feeding sets. Development of temporary changes to EN policy and procedures may be required, dependent upon severity and anticipated duration of the supply interruption, as well as overall product availability. Organizations may need to consider prioritization of feeding sets to high-risk patient populations and define which patients may safely be eligible to receive EN utilizing a fewer number of feeding sets with a rinse-and-reuse process.^{2,6}

For patients who are appropriate for reduced feeding set use, organizations should communicate and provide detailed education to all clinical staff caring for patients receiving EN on rinsing, reusing, storage between uses, and the number of uses each feeding set may safely support.

Patients Not Appropriate for Reduced Set Use

If the patient is not appropriate for reduced-feeding set use, follow organizational policy or protocol for the use of feeding sets, as inventory allows.

Using the Decision Tree to Guide Supply Allocation

Following this decision tree during supply disruptions—especially long-term ones—helps prioritize patients with the greatest clinical need, support patient safety, and promotes the most equitable use of limited feeding supplies.

Special Population Considerations

Determine at risk or not appropriate for reuse feeding set patient population

Some patients may not be appropriate candidates for rinsing and reusing pump or gravity feeding sets due to specific clinical considerations, such as individuals with compromised immune systems or neonates, who may require strict adherence to single-use protocols to minimize contamination.

Using pump feeding sets beyond the manufacturer's recommended timeframe may affect flow accuracy and delivery rates. For patients who require precise feeding, if this variability could pose clinical risks to the individual patient, it might make them unsuitable for reuse of feeding sets during your clinical evaluation.

Additional populations, in addition to those mentioned in this section, may not be appropriate for reusing feeding sets. Clinical judgment and interdisciplinary collaboration should be used to determine the appropriateness of this practice during times of shortage.

Rinse and Reuse Recommended Procedure

Water

Use safe and clean drinking water when rinsing the feeding sets. Drinking water is defined as “distribution water and bottled water”⁷ or potable water. If your institution has additional guidelines on water use, follow your institution's policy.

How to Rinse Open Feeding Set

The following steps provide rinsing instructions and are not a validated disinfection protocol.

1. Wash hands and follow standard precautions.
2. Disconnect the feeding set from the patient.
3. Follow the pump manufacture guidance on:
 1. Whether or not to remove the feeding set from the pump during the rinsing process.
 2. Removing power supply during rinsing process if needed.
4. Discard any remaining formula from the bag of the feeding set by opening the cap and pouring it out.
5. To rinse the bag:
 1. Fill the bag of the feeding set with warm water.
 2. Close the cap and gently shake to rinse the interior of the bag.
 3. Open the cap and pour out the water.
 4. Repeat steps 5.1-5.3 until the water drains clear.
6. To rinse the tubing:
 1. Fill the bag of the feeding set with a small amount of water.
 2. Using the priming features of the pump or feeding set, prime the tubing.
 3. Repeat steps 6.1-6.2 until the water drains clear.
 4. Prime remaining water from the feeding set, including the bag and tubing.

Recommendation on How to Store Feeding Set Between Use

With intermittent feeding, organizations need to develop a protocol on best practice on how to store the feeding sets between feedings. Once the feeding set has been rinsed, the best practice recommendation is to store the feeding sets in refrigerator inside a plastic bag between uses.^{8,9,10} In acute care, a patient label should be placed on each bag.

How Long to Reuse Feeding Set

Feeding sets should be discarded if there is visible damage, such as cracks or leaks, or once they have reached the maximum reuse duration recommended based on the patient's inventory. Even when no defects are present, feeding sets should only be reused according to the organization's temporary shortage usage policy; for example, if a patient receives 15 sets per month, each set should be used for no more than two days.

ASPEN Resources

Bechtold ML, Brown PM, Escuro A, et al. When is enteral nutrition indicated? *J Parenter Enteral Nutr.* 2022; 46: 1470-1496. [doi:10.1002/jpen.2364](https://doi.org/10.1002/jpen.2364)

Boullata JI, Carrera AL, Harvey L, et al. ASPEN Safe Practices for Enteral Nutrition Therapy. *JPEN J Parenter Enteral Nutr.* 2017;41(1):15-103. [Doi: 10.1177/0148607116673053](https://doi.org/10.1177/0148607116673053)

Manufacture Resources

[EntraFlo H20™ Nutrition Delivery System Operating Instructions](#)

[Infinity® Enteral Feeding Pump Operator's Manual](#)

[Kangaroo Omni™ Enteral Feeding Pump Instructions for Use](#)

[PUGGLE™ Enteral Feeding Pump and Feeding Set Instructions for Use](#)

[Vesco Enteral Feeding Pump® User Guide](#)

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9. Lyman B, Williams M, Sollazzo J, et al. Enteral feeding set handling techniques. *Nutr Clin Pract.* 2017;32:193-200. <https://doi.org/10.1177/08845336166808408>.
10. Hubbard GP, Van Wyk J, Grinyer L, et al. Appropriate handling and storage reduce the risk of bacterial growth in enteral feeding systems reused within 24 hours. *Nutr Clin Pract.* 2023;1-13. [Doi:10.1002/ncp.11058](https://doi.org/10.1002/ncp.11058)

About ASPEN

The American Society for Parenteral and Enteral Nutrition (ASPEN) is dedicated to improving patient care by advancing the science and practice of nutrition support therapy and metabolism. Founded in 1976, ASPEN is an interprofessional organization whose members are involved in the provision of clinical nutrition therapies, including parenteral and enteral nutrition. With members from around the world, ASPEN is a community of dietitians, nurses, nurse practitioners, pharmacists, physicians, PAs, researchers, scientists, and students from every facet of nutrition support clinical practice, research, and education. For more information about ASPEN, please visit www.nutritioncare.org.