

Blended Food for Tube Feeding

Site Applicability

All VCH and PHC sites

Practice Level

Profession	Setting	Basic Competency	Advanced Competency (requiring additional education)
LPN, RPN, RN, NP	All VCH and PHC sites	<ul style="list-style-type: none"> Administering blended food for tube feeding with a patient specific order 	
RD	All VCH and PHC sites		With Restricted Activity A <ul style="list-style-type: none"> Enteral feeding orders

Requirements

- The dietitian must be consulted for tube feeding assessment and recommendations.
- In [acute care](#) and [long term care \(LTC\)](#) facilities, an order from the Physician(MD)/Nurse Practitioner(NP) must be obtained to initiate tube feeding.
- In acute care and LTC, the MD/NP order must specify that [blended food](#) may be used for tube feeding.
- In community settings, consult with dietitian and nursing practice support if patient will be using blended food for tube feeding.
- The dietitian must clearly document in the patient's chart that the patient/family/caregiver understands the risks associated with using [home-prepared blended food](#) for tube feeding and consents to those risks. Refer to [Supporting choices through informed decision-making and collaboration](#) documentation guidelines (LTC/Community) and the [VCH Ethical Decision Making Framework for Tube/Other Feeding Options](#), as needed.
- The dietitian must clearly document in the patient's chart that the patient/family/caregiver understands that the proper preparation method, food safety, and nutritional content of home-prepared blended food is their responsibility and that an ingredient list must be provided to the health care team for each home blended food recipe.
- In acute care and LTC, documentation must include ingredients of home-prepared blended food as provided by the patient/family/caregiver. In community settings, documentation must include the recipes/instructions provided to clients.
- In LTC settings, the [Environmental Health Office](#) must be informed when home blended tube feeds are being considered.
- In acute care and LTC, staff will administer facility-prepared blended or pureed food items, [commercial blended food formula](#) and [home-prepared blended food](#) for tube feeding.
- Patient/family/caregiver may prepare home blended food for tube feeding. The home blended food must be labeled with the date and can be refrigerated for up to 24 hours. It should remain

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refrigerated until just prior to administration and all unused refrigerated home blended food must be discarded after 24 hours.

- To maintain food safety, facility prepared blenderized or pureed food, home blended food and fluids held at room temperature must be used within 2 hours, whether alone or mixed with formula.
- A 14 French (Fr) size feeding tube or larger is strongly recommended for use of blended food for tube feeding. Requests for blended food for patients with smaller Fr size feeding tubes may be feasible but may need to be limited to thin fluids without food particles.

Need to Know

- The term “patient” is used throughout this document; it can be used interchangeably with client or resident.
- Blended food is safe and effective for tube feeding, whether it is used exclusively or in combination with enteral formulary products.
- Requests for blended food for tube feeding are supported when possible and are evaluated on a case by case basis by the dietitian.
- Acute care and LTC facilities can provide existing food service menu items for tube feeding use. Food services are not able to prepare [individualized blended food recipes](#) for tube feeding.
- The [VCH PHC Master Oral and Enteral Nutrition Formulary](#) provides a wide range of products to meet the nutritional needs of most individuals and it includes a commercial food based blended formula.
- Blended food can be safely administered with an enteral feeding pump using the open system, by gravity infusion, or with a syringe.

Guideline

Blended food can be used when patients or their substitute decision maker (SDM) has a preference for blended food as an alternative or supplement to standard tube feeding formula. This could be for reasons relating to allergies, tolerance concerns, or personal choice.

Dietitian Responsibilities:

Assessment

1. **Consider the benefits of blended food for tube feeding which include:**
 - Improved gastrointestinal (GI) tolerance
 - Improved microbiome diversity
 - Enhanced diet quality
 - Personal choices are supported
 - Enhanced meal time experience/nurturing opportunity
2. **Consider the risks or burdens using blended food for tube feeding:**
 - Unknown or unpredictable nutrient intake
 - Tube occlusion if blended food is improperly prepared or used with a smaller French tube size (e.g. 8 to 12 Fr) than is recommended (e.g. at least 14 Fr)
 - Foodborne illness if home blended food is improperly prepared, stored or administered

- Adverse effects from blended food (e.g. food allergies, medication interactions)
3. **Ensure the following criteria are met when using blended food for tube feeding:**
- GI tract is functional (examples of when GI tract dysfunction may limit ability to feed enterally include: bowel discontinuity, mechanical obstruction, paralytic ileus).
 - There are no medical contraindications or conditions that limit the use of whole foods (e.g., severe pancreatitis, metabolic disorder, or conditions requiring the use of an elemental or semi-elemental formula) or limit amount of fluids (e.g., CHF with the requirement for a fluid restriction).
 - Consider the feeding tube size; a 14 Fr or larger is recommended for use of blended food for tube feeding. Requests for blended food for patients with smaller Fr sized tubes may be feasible, but may need to be limited to thin fluids without food particles.
 - Ensure that patient/family/caregiver is aware of potential limitations with jejunostomy feeding, as there is no research to date on the use of feeding blended food through a jejunostomy feeding tube.
 - Assess the patient/family/caregiver ability and readiness for preparing and managing home blended tube feeding (e.g. consider psychosocial factors).
 - If patient/family/caregiver is preparing home blended food for tube feeding ensure that the patient/family/caregiver is able to safely prepare and store the blended food (e.g. access to a blender and working refrigerator). Refer to [Using Blended food for Tube Feeding \(BB.210.U97\)](#).
 - Patient/substitute decision maker (SDM) has made an informed decision to proceed with the use of blended food and this is clearly documented in the chart.
4. **Determine appropriate blended food option in collaboration with patient/family/SDM.**
- Options may include:
- Commercial food-based blended formula available on the facility enteral formulary
 - Selection of facility-prepared blenderized foods, pureed foods or fluids from the facility menu
 - Home-prepared blended food which meet the criteria above
 - Standard enteral formula can remain the primary source of nutrition with the above options used as an adjunct to their nutrition care plan
 - Refer to [Appendix A: Blenderized Tube Feeding Food and Fluid Selection Guide](#)
5. **Determine appropriate blended food delivery method**
- All methods of infusion (e.g. pump, gravity or syringe) are possible for both commercial food based blended formula and blenderized or pureed foods, but the following should be considered when determining which method or product to use:
 - If continuous or nocturnal tube feeding is ordered, commercial food based blended formula is preferable as it can be held at room temperature for up to 8 hours once opened.
 - As some commercial food based blended formulas are very thick, the addition of extra fluid may be necessary to create a thinner texture and ensure proper flow when administered by pump or gravity infusion.

- Home blended food and facility prepared blenderized or pureed food is to be smooth fluid (e.g. smoothie thickness) and contain no visible food particles in order to be reliably delivered by pump or gravity infusion.
- Facility prepared blenderized or pureed food and home prepared blended food can be held at room temperature for a maximum of 2 hours.

Intervention

1. Discuss the option of using blended food for tube feeding with capable patient or if patient is incapable, discuss with family/caregiver/SDM by explaining:
 - The risks and benefits (refer to [Blended Food for Tube Feeding - Is it right for me?](#))
 - The options for using blended food for tube feeding in acute care/LTC
2. Determine if the desired blended foods are appropriate for the current medical/nutrition concern, tube type, and delivery method.
3. Discuss findings with MD/NP in acute care and LTC and obtain an order for use of blended foods for tube feeding, if appropriate.
4. Develop a nutrition care plan that includes all pertinent information, such as the blended food ingredients, tube feeding schedule, hang time, who is responsible for administering the tube feed, etc.
5. Communicate with staff in the care setting:
 - Providing the nutrition care plan containing pertinent information, such as the tube feeding schedule, hang time, who is responsible for administering the tube feed, etc.
 - Providing guidance depending on the blended food option and administration method ordered. For example, if facility-prepared pureed food items are to be administered by syringe, communicate that staff may need to add fluid to create a texture that can be drawn up into a syringe.
 - Collaborating with staff on how to store and administer the blended food items.
 - Providing guidance and support to staff and on how to store and manage the blended food items.
6. Provide patient/family/caregiver education on the following:
 - Food safety guidelines and preparation of blended food ([Using Blended Food for Tube Feeding](#) and [Blended Food for Tube Feeding While You Are In Our Care](#))
 - Directions for food safe transportation of blended food to facility and safe storage options as needed.
 - Administration of blended foods as needed.

Evaluation of the Nutrition Care Plan

Acute Care: Evaluate the effectiveness of the nutrition care plan (refer to [Enteral Tube Feeding – Dietitian Guidelines in Acute Care](#)). Re-evaluate the nutrition care plan on a regular basis, when there are significant changes to the patient’s medical condition and prior to discharge planning.

Community and LTC: Evaluate the effectiveness of the nutrition care plan. Re-evaluate the nutrition care plan on a regular basis, upon discharge from hospital and when there are significant changes to the patient’s medical condition.

Nursing Responsibilities:

1. Collaborate with the dietitian in the development of the nutrition care plan and to ensure that patient/family/caregiver education needs are met for safe administration of blended food or fluids for tube feeding.
2. Follow the tube feeding administration guidelines as per site guidelines. Follow dietitian instructions for the blended tube feeds to ensure the appropriate consistency is administered.
3. Follow dietitian orders for administration and flushes as per the tube feeding orders.
4. Follow the [Enterostomy Feeding Tubes: Care and Management](#).
5. Participate with the dietitian in educating patient/family/caregivers on managing blended foods for tube feeding.
6. If unintended outcomes arise (e.g. GI symptoms, tube occlusion), contact the MD/NP and Dietitian.

Transitions in Care (e.g. discharge from acute to home/LTC or from home to LTC)**Dietitian Responsibilities:**

- Timely communication and collaboration for successful transitions to support blended foods for tube feeding is key. It is recommended that there is dietitian to dietitian communication and a plan in place with at least 48 hours notice.
- Upon transfer to a different care setting, re-evaluate if use of blended foods for tube feeding can be supported. For example in LTC, [Environmental Health Office](#) must be informed; in Home Health, the ability and means to prepare blended foods will need to be determined.

Documentation**Dietitian Responsibilities:**

- Document assessment, interventions and discussions with patient/SDM and MD/NP according to VCH/PHC documentation standards.
- Document that the patient/SDM understands the risks associated with use of home-prepared blended food for tube feeding. Refer to documentation guidelines in – [Supporting choices through informed decision-making and collaboration](#).
- Document in the health care record and the care plan that the patient/SDM understands that proper preparation, food safety and nutritional content of home prepared blended foods is their responsibility.

Dietitian and/or Nursing Responsibilities:

- Documentation of home blended food ingredients provided by the patient/family/caregiver who has prepared the home blended food will be dated and kept in the Health Record.
- Document blended food intake as per documentation standards and facility enteral nutrition practices.
- Document unintended outcomes, e.g. GI symptoms, tube occlusion and follow-up actions.

Site Specific Practices

Home Health/Community Setting:

- Home blended tube feeds are managed by the patient/family/caregiver in the home. The dietitian is responsible for providing consultation and the appropriate education relating to a patient's home prepared blended food.

Patient and Family Education

- [Blended Food for Tube Feeding - Is it right for me? BB.210.T56](#)
- [Using Blended Food for Tube Feeding BB.210.U97](#)
- [Tube Feeding by Syringe – BB.210.H65](#)
- [Tube Feeding by Enteralite Infinity Pump: Open System BB.210.H61](#)
- [Tube Feeding by Kangaroo Joey Pump: Open System BB.210.H64](#)
- [How to Give Tube Feeds by Gravity BB.210.H91](#)
- [Blended Food for Tube Feeding While You Are In Our Care BB.210.B44](#)

Evaluation

Patient is tolerating tube feeding and nutrition/hydration goals are met with no adverse events.
Patient/family/SDM is satisfied with the nutrition care.

Related Documents

- [VCH/PHC Master Oral and Enteral Formulary](#)
- [VCH/PHC Oral and Enteral Formulary – Selection Guide](#)
- [VCH/PHC Diet Writing Guidelines BD-00-07-40083](#)
- [Supporting choices through informed decision-making and collaboration BD-00-07-40103](#)
- [VCH Ethical Decision Making Framework for Tube/Other Feeding Options](#)

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Definitions

- **Blended food** – food that is in liquid form and flows easily through a feeding tube
- **Home blended food** – blended food that is prepared by family or caregivers
- **Individualized Recipe** – a recipe prepared for an individual to meet their specific nutrition needs
- **Commercial food based blended formula** – commercially prepared formula made from whole foods
- **Commercial liquid or pureed food products** – e.g. packaged juices or smoothies; pureed soups

Appendix A: Blenderized Tube Feeding Food and Fluid Selection Guide

Feeding Tube Size	20 French (Fr) or larger	14 Fr or larger	12 Fr or smaller
Suggested Diet Texture	<p>In acute care and LTC, a pureed diet may be ordered</p> <p>Thick pureed foods and liquids without solid food particles</p> <p>All liquids as well as smooth semi-solid foods that can be thinned with other liquids but do not require blending (e.g. pudding and yogurt)</p>	<p>In acute care and LTC, a blenderized diet may be ordered if available</p> <p>Foods blended to a fluid consistency using added liquid as needed</p> <p>All liquids as well as foods that are semi solid that can be thinned with other liquids but do not require blending (e.g. pudding and yogurt)</p>	<p>In acute care and LTC, customized liquid meals may be ordered</p> <p>Thin liquid foods without particles. No solid or semi-solid foods, no thick fluids</p>
Food Options	<p>Pureed entrees and mixed dishes including pureed items such as pasta, sandwiches, vegetables, meat, poultry, fish, tofu and legumes</p> <p>Pureed grains including oatmeal, quinoa, noodles, rice, bread and other baked goods.</p> <p>Cream of wheat does not need to be pureed</p> <p>Pureed fresh or canned fruit, apple sauce</p> <p>Fruit juices</p> <p>Milk, milk alternatives, plain or vanilla yogurt, cream</p> <p>Pureed soups, strained soups or clear broth.</p> <p>Pureed desserts, smooth puddings, ice cream, sherbert, popsicles</p>	<p>Blenderized entrees and mixed dishes including blenderized pasta, sandwiches, vegetables, meat, poultry, fish, tofu and legumes</p> <p>Blenderized grains including oatmeal, cream of wheat, quinoa, noodles, rice, bread and other baked goods</p> <p>Blenderized fresh or canned fruit, apple sauce,</p> <p>Fruit juices.</p> <p>Milk, milk alternatives, plain or vanilla yogurt, cream</p> <p>Pureed soups (thinned as needed), strained soups or clear broth</p> <p>Blenderized desserts, ice cream, sherbert, popsicles</p>	<p>Strained soup, clear broth</p> <p>Fruit juices without pulp</p> <p>Milk and milk alternatives</p> <p>Nutritional supplement drinks</p> <p>Salt, honey, sugars, syrups, oil</p> <p>Tea, coffee</p>

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Feeding Tube Size	20 French (Fr) or larger	14 Fr or larger	12 Fr or smaller
	<p>Smooth condiments and seasonings such as gravy, lump-free sauces, butter and margarine melted into warm food, salt, mayonnaise, honey, jellies, sugars, syrups, oil</p> <p>Tea, coffee</p>	<p>Smooth condiments and seasonings such as gravy, lump-free sauces, butter and margarine melted into warm food, salt, mayonnaise, honey, jellies, sugars, syrups, oil</p> <p>Tea, coffee</p>	
Feeding Method	<p>Syringe Push: must be used to administer thick blended foods</p> <p>Gravity or Pump Infusion: can be used with foods blended or thinned to a fluid consistency</p>	<p>Syringe Push Syringe Funnel Gravity Infusion Pump Infusion</p> <p>*Note: There may be flow difficulty with pump or gravity infusion due to the higher viscosity of blenderized food</p>	<p>Syringe Push Syringe Funnel Gravity Infusion Pump infusion</p>
Administration Considerations	<p>Some pureed foods may be too thick to draw into a syringe for feeding. Mix in liquids to thin the pureed food as necessary to create a texture thin enough to draw into a syringe or to administer by gravity or pump infusion.</p> <p>Do not feed hot or frozen foods:</p> <ul style="list-style-type: none"> Wait for hot food to cool to lukewarm or room temperature Wait for frozen food (e.g. ice cream) to thaw before feeding Wait for cold foods to come to room temperature before feeding 	<p>Do not feed hot or frozen foods:</p> <ul style="list-style-type: none"> Wait for hot food to cool to lukewarm or room temperature Wait for frozen food (e.g. ice cream) to thaw before feeding. Wait for cold foods to come to room temperature before feeding Mix hot and cold food items together to create a lukewarm or room temperature <p>When mixing foods, combine items that have complimentary flavours.</p> <p>Emphasize nutritional balance and consuming protein</p>	<p>Do not feed hot or frozen foods:</p> <ul style="list-style-type: none"> Wait for hot food to cool to lukewarm or room temperature Wait for frozen food (e.g. ice cream) to thaw before feeding Wait for cold foods to come to room temperature before feeding Mix hot and cold food items together to create a lukewarm or room temperature <p>When mixing foods, combine items that have complimentary flavours.</p>

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Feeding Tube Size	20 French (Fr) or larger	14 Fr or larger	12 Fr or smaller
	<p>When mixing foods, combine items that have complimentary flavours.</p> <p>Emphasize nutritional balance and consuming protein containing foods first (vs lower nutrient foods).</p>	<p>containing foods first (vs lower nutrient foods).</p>	<p>Emphasize nutritional balance and consuming protein containing foods first (vs lower nutrient foods).</p>
Concerns	<p>This diet is more labour intensive compared to the blenderized diet option.</p> <p>*Note: Additional fluids required to thin pureed foods may not be appropriate for patients who require a volume restricted tube feeding (e.g. those on a fluid restriction).</p>	<p>Blenderized foods prepared with extra fluid will have a higher overall water content and may not be appropriate for patients who require a volume restricted tube feeding (e.g. those on a fluid restriction).</p>	<p>Unlikely to provide adequate nutrition (may be deficient in macronutrients and micronutrients) in a reasonable volume if being provided as sole source of nutrition.</p> <p>Risk of excessive fluid provision and may not be appropriate for patients who require a volume restricted tube feeding (eg those on a fluid restriction)</p>
Foodservice Ordering Tips for in Acute Care or Long Term Care	<p>A Pureed diet can be ordered, however the following adjustments are suggested:</p> <ul style="list-style-type: none"> Specify no custard, scrambled eggs, or oatmeal Cream of wheat may be suitable for tube feeding if no large lumps Pureed congee is preferable if a hot cereal is desired. Request “food in bowls” Request extra fluids and an empty bowl to facilitate mixing food and fluids together 	<p>A Blenderized diet provided by facility foodservices includes nutritional supplement drinks, clarify with patient/SDM if this is acceptable.</p>	<p>A clear fluid or full fluid diet may be ordered but the following semi-solid food items should be restricted:</p> <ul style="list-style-type: none"> gelatin oatmeal pudding

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