

# Home Blended Food for Tube Feeding

Handbook



Nov 2025

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## Introduction

Home blended food for tube feeding is the use of food that has been blended to a consistency that can be given through a feeding tube. Using blended food in place of formula; or in combination with formula, offers options for adults who have feeding tubes.

This handbook has information using home blended food for tube feeding. The information is to help guide discussions between you, your dietitian, and other healthcare team members. Before starting, check with your healthcare team to ensure your feeding tube can be used with home blended foods.

Your dietitian can help you:

- determine your nutrition needs
- find recipes for special diets, like for food allergies or intolerances
- choose how often you'd like to use home blended food
  - Some people choose to have only home blended food. Others may choose to have formula as well.
- review recipes for home blended foods for nutrition content to ensure you are getting enough

## Getting started

### Step 1: Gather tube feeding equipment and supplies

See page 18 for a list of equipment and supplies to help you get started.

### Step 2: Choose a blender

A high-power blender is suggested to make home blended food for tube feeding. When choosing a blender, or checking your blender at home, look for:

- power: 1100–1500 watts or more
- common blender brands, but other brands can work too:
  - Blendtec® Blenders
  - Nutri Ninja® Pro Blender
  - Salton® Power Blenders

- Vitamix® Blenders
- If you use a regular blender or food processor, you may need to blend the food longer and strain it to get it thin and smooth.

### Step 3: Plan home blended meals for tube feeding

#### **Encourage family meals**

- Join your family at the table for meals.

#### **Follow [Canada's food guide](#)**

- Have plenty of vegetables and fruit.
- Choose whole grain foods, like oats, quinoa, brown rice, and 100% whole wheat bread.
- Choose protein foods, including those that come from plants.
  - Protein foods include: beans, dairy foods like milk and yogurt, eggs, fish, lentils, meat, poultry, split peas, and tofu.
- Limit highly processed foods, like cakes, cookies, deli meats, and potato chips.

#### **Variety is important**

- Try different plant and animal-based protein foods at each meal to help you get enough protein.
- Use different coloured vegetables and fruits to help you get the vitamins and minerals you need.
- You can use fresh, frozen, or canned foods to make home blended foods.

#### **Timing of meals and snacks**

- Have meals and snacks at about the same time each day.
- Snacks should take 10–15 minutes, and meals 20–30 minutes to go through your feeding tube.
  - Your dietitian can help you make a schedule and talk about the time meals and snacks can safely take (infusion times).

- If you use a syringe, evenly space the amount of food you have throughout the meal. This can help with digestion and help you monitor your hunger and fullness levels.

### **Foods that blend well**

Many foods can be blended for tube feeding, including protein foods, whole grains, vegetables, and fruits.

Foods that are usually cooked before eating should be cooked well before blending. This helps to soften the texture to allow for a smooth blend, which is safer for tube feeding.

Some examples of foods to cook before blending include:

- protein foods such as eggs, fish, meat poultry, and legumes like beans, lentils and split peas.
- whole grain foods, like barley, oats (oatmeal), quinoa, and rice
- vegetables, like carrots, potatoes, spinach, sweet potatoes, and squash

Foods that are soft enough without cooking usually blend easily. These include:

- protein foods, like canned legumes, cottage cheese, smooth nut or seed butters, tofu, and yogurt
- vegetables and fruits, like apples, blueberries, mango, canned fruits, and leafy green vegetables like spinach and collard greens
- whole grain foods, like 100% whole wheat bread
- fats, like avocado, full-fat dairy foods, and oils

### **Liquids to add to your blended food**

The liquid or fluids you add to your blended food helps to make the blended food a consistency that can easily flow through your feeding tube. Examples include:

- formula or nutrition supplement drinks
- fortified plant-based beverages, like soy or coconut
- liquid leftover from cooking
- milk
- water

## Step 4: Food safety

Formula is made to be free of harmful bacteria. Home blended food is safe when you follow food safety recommendations when buying, preparing, and storing your blended food.

### Grocery store

- Put raw meat, poultry, or fish in separate plastic bags to help keep bacteria from these raw foods away from other foods in your cart.
- Get hot or cold foods last so they stay at a safe temperature until you get home.
- Bring an ice pack or cooler to help keep cold foods cold.

### Fridge

- Keep your fridge at 4°C (40°F) or colder. If your fridge does not show the temperature, place a small thermometer inside.
- Home blended food will last longer when kept in the fridge in an airtight container, jar, or bottle.
- Discard home blended food that is older than 2 days.

### Freezer

- Keep your freezer at -18°C (0°F) or colder. If your freezer does not show the temperature, you can buy a small thermometer to place inside.
- Thaw frozen foods:
  - In the fridge.
  - In bowl in a sink with cold water.
    - Change the water every 30 minutes to keep it cold.
  - In the microwave on the defrost setting.

### Pantry

- Keep dry and canned food in a cool, dry pantry. To be food safe, clean the tops of cans before opening. After opening packages or containers, follow the safe storage directions on the label.
- Store the leftovers from canned foods in an airtight plastic or glass container. Do not use the can the food comes in.

- When you shop for canned food, make sure there are no dents, leaks, or bulges on the can. These can be signs that the food may have harmful bacteria in it.

To learn more about food safety, visit [Canada.ca/FoodSafety](https://Canada.ca/FoodSafety).

## Step 5: Make home blended food for tube feeding

### Clean

- Wash your hands well with hot soapy water.
- Wash surfaces where food will be made with hot soapy water.
- Use clean pots, pans, measuring cups, and spoons.
- Wash fruits and vegetables well. Wash pre-washed foods well, too.
- Clean counters, appliances, and utensils with hot soapy water between cooking steps.

### Prepare

- Try to make home blended food fresh (as needed) for each meal and snack when possible.
- Save the water after cooking vegetables or meat to use as liquid when blending.
- Chop food into small pieces.

Ensure all cooked foods are at a safe internal temperature to prevent foodborne illness. Do not use raw or undercooked egg, fish, or meat in your blended food for tube feeding.

To learn more about safe cooking temperatures, visit [Canada.ca/FoodSafety](https://Canada.ca/FoodSafety).

### Blend

- Once the food has cooled slightly, place it in the blender and blend for 3–6 minutes until smooth.
  - Steam from hot food may push the blender lid off, which is a risk for burns. Let the food cool slightly to prevent this.
- The ideal food consistency (texture):
  - is easily pushed through a syringe or runs

- easily through the bag and tubing
- is smooth with no lumps and seeds
- may flow off the end of a spoon like liquid honey
- See [Tips for blending food for tube feeding](#) (pg. 12).



Smooth blend that flows like liquid honey

### Safe storage

- Home blended food should stay at room temperature less than 2 hours, or less than 1 hour in temperatures greater than 32°C (90°F).
  - If meals are longer than 2 hours, ask your healthcare team for advice as this can be a food safety risk.
- Label your blended food if you're not having it right away. Write what the blended food is, date, and time it was made, and store it in the fridge or freezer as soon as possible.
  - For example: Butter chicken, rice, mixed vegetables. Made Feb. 22, 2020 at 6:00pm.
- When you remove the blended food from the freezer, add the date and time you started to thaw the food to the label.
  - For example: Thawed May. 22, 2025 at 11:15am.

### Using home blended food outside of your home

You may need to have meals outside of your home, like at work or on a trip.

- Pack foods that need to be kept cold or hot in a cooler or insulated travel mug to keep the blended food at a safe temperature.
- Cold foods can be stored with an ice pack or a frozen water bottle in a cooler.
- Like at home, follow food safety guidelines. Any home blended food kept at room temperature for longer than 2 hours or 1 hour in 32°C (90°F) temperature should be thrown away.

## Using home blended food

Before you begin to have blended food made at home, make sure you have all the equipment and supplies you will need.

Alberta home nutrition support programs recommend providing home blended food by syringe or large bore gravity feeding sets. Pumps are not routinely provided because their design may not work well with home blended food.

A large bore gravity feeding set lets the blended food flow from the feeding bag into your tube without a pump. Large bore refers to the wider tubing used with it.

You may choose to buy a pump and pump feeding sets for yourself. If so, read the owner's manual for more information and make sure you have the right supplies.

## Preparation

Blended food that is frozen can be thawed safely in the fridge, microwave, or in a bowl of cold water. Do not thaw at room temperature. Thawed blended food may need to be blended again to return to a smooth consistency.

If serving the blended food warm, make sure it's not too hot. Stir well to evenly heat the blend. Test a drop of blended food on the inside of your wrist or the back of your hand. It should feel warm, not hot or burning.

### If using a syringe

- Use the syringe to flush your tube with water first.
- Then, using the same syringe, push the blended food into your feeding tube.
- Once the blended meal or snack is complete, follow with a water flush to clear any food left in the tubing. Your dietitian may suggest additional water flushes for you.
- Ensure tube fed blended meals are finished in less than 2 hours for food safety.



Syringes come in different brands and in volumes.

### If using a large bore gravity feeding set

- Your home blended food should be thin and smooth enough to flow through the bag and tubing easily.

- Before connecting the feeding set, fill the gravity feeding set bag with home blended food.
- Open the clamp to allow food to fill the tube. This is called priming. Priming helps to reduce air in the tube. Close the clamp once the food has filled the tube.
- Using a syringe, flush your tube with water. Your dietitian will help you with how much water you need to flush with.
- Now you can connect the feeding set to the feeding port, then open the clamp.
- Once the home blended meal is complete, flush the feeding set with water to help remove any food left in the bag or tube. Your dietitian may suggest additional water flushes for you.
- Do not leave home blended food in a feeding bag for more than 2 hours unless it is kept cool in the fridge.



Large bore gravity feeding set and ENFit® syringe.

Your feeding tube should be large enough to reduce the risk of clogging when using home blended food. The feeding tube size should be at least 14 French.

### Cleaning and sanitizing equipment and supplies

Clean all equipment and supplies after each use. This includes your blender, syringes, and tube feeding set and port. Follow the instructions from the manufacturer or your healthcare team if you have them.

If no instructions are available, follow these steps:

- Take apart the blender. Wash all parts that touch food with warm, soapy water.
- Wash other items used (like dishes, measuring cups, and spoons) with warm, soapy water.
- Rinse everything with warm water.
- Soak items in a mixture of 7.5 L water and 2 Tbsp (30 mL) bleach for 2 minutes.
- Let everything air dry. Do not use a towel to dry.

## Monitor

Monitor how you feel when getting your blended meals. Stop the meal if you:

- feel full
- have pain in your stomach or belly
- feel nauseous
- vomit

Wait a few minutes before trying the blended food again.

## Clogged feeding tube

### To lower your risk of a clogged tube

- Your blended food should be smooth. Blend the food again or strain it if there are chunks of food left after blending.
- Make sure that the food is the right consistency. See “Tips for blending food for tube feeding” section below.

### Tips to try if you think your tube is clogged

If you are having difficulty flushing your tube with water, it might be clogged or blocked. Try the method below to unclog your tube.

- Try to flush your tube with warm, not hot, water using a syringe.
- Apply a gentle back-and-forth motion with the plunger of the syringe.
- Let the warm water sit in the tube for about 5 minutes.
- Repeat the process if needed.

If the clog is not cleared after trying multiple times, contact your healthcare team or urgent care for help.

## Tips for blending food for tube feeding

- Blend the food in a high-powered blender for 3–6 minutes. Food is fully blended when it is smooth, and the color is the same throughout.
- Home blended food should be thin and smooth.

- If you can pull up the blended food in a 50 mL or 60 mL syringe easily, then the consistency is likely good.

### If the blend is too thick

- Warm the blended food to help thin it.
- Add liquid.
  - If you need more calories, add to the blended food:
    - 100% pure unsweetened fruit juices
      - Limit to ½ cup (125 mL) each day.
    - milk or fortified plant-based beverages like soy
    - oil or melted butter
    - oral rehydration solution like Hydralyte® or a homemade recipe
    - formula or nutrition supplement drink like Ensure®
  - If you don't need more calories add:
    - cooking liquid from vegetables or meat
    - water

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For recipes to make your own oral rehydration solutions, visit [ahs.ca/NutritionHandouts](https://ahs.ca/NutritionHandouts)

Talk with your dietitian about which liquids may work best for you.

### If the blend is too thin

- Add cooked foods that help thicken the blend, such as starchy vegetables like potatoes and yams, grains, oatmeal, or pasta.

### Some foods may clog the tube

Foods that are a risk of clogging the tube include:

- fruits with seeds, like blackberries and raspberries
- nuts and seeds, like sesame seeds and poppy seeds
- cooked ground meats

Use a strainer with small holes or a fine mesh after blending these foods to make the blended food smooth.

### Soak dried fruit, like prunes, cranberries, and dates in juice or water until soft

- Remove fruit pits before blending.
- Blend well or strain to remove large pieces.

### **Steam vegetables before blending them**

- Some vegetables do not blend well even after cooking. These include stringy vegetables like celery, corn, and kale. Strain your blend if these ingredients are used.

### **Soak and cook dried beans, split peas, and lentils in water, then blend well**

- For best results, drain and discard the soaking and cooking water to reduce gas and bloating.
- Use a strainer to remove pieces that did not blend.
- If using canned beans, split peas, and lentils, they don't need to be cooked. Just drain and rinse well before blending.

### **Use moist-heat methods to cook meat**

- For best results, cook meat by braising, steaming, poaching, stewing, or boiling.
- Avoid tough meats, like jerky, bacon, and casings of sausages. Tough meat does not blend well.
- Always follow [internal cooking temperature guides](#) ([Canada.ca/FoodSafety](https://Canada.ca/FoodSafety)) for meat to ensure food safety.

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To learn different cooking methods, visit: [Atco Blue Flame Kitchen](#).  
Select How-To, then [Cooking](#)

### **Pre-grind nuts and cooked grains**

- Grind nuts, like almonds, and cooked grains, like oats and quinoa, separately before adding them to blend with the meal.
- Try using a food processor or coffee grinder to grind nuts and grains.

## Additional information

### Travel

You can still use blended food while away from home. If packing equipment and supplies is hard, try store-bought puréed food or nutrition supplement drinks. Buy them before you leave, or after you arrive.

If this will not work well for you, bring a formula you tolerate with you. You will already be familiar with this formula and how your body responds to it. Discuss options with your dietitian.

### Emergency care plan

Emergencies can happen at any time. People who are fed by tube need to plan in case of emergencies.

Important information to include in your plan:

- Names and contact information for family, friends, or caregivers trained in tube feeding.
- Type of formula to use in case of emergency.
- A copy of your current tube feeding care plan. This includes the delivery method (syringe, pump, or gravity feeding set) and schedule for meals and snacks, volume of water flushes, and length of infusion time for meals and snacks.
- Where bottled water and pureed or strained foods are kept in your home.

Check out an example to help guide you: [Emergency care plan: Template](#).

### Home blended food in hospital

Check with your healthcare team to see if it is safe to use blended food during your admission and discuss if safe storage options are available.

## Preparation

If determined it is safe, you or your family may bring in pre-made home blended food for use in hospital. Like at home, you need to make sure it is safe, nutritious, and is the proper consistency.

- Take care to keep blended food at a safe temperature when bringing it to the hospital. The blended food must be stored following food safety precautions in the patient room or in the patient-use kitchen on the unit, based on site availability and processes.
- In hospital, all home blended food must be used within 24 hours of being made or used within 24 hours once thawed from frozen. This time is different from when you are at home and can depend on hospital food safety requirements.
- Clearly label the blended food with your full name, date, time it was made, and when the food will expire. If using frozen blended food, please add the date and time the food was removed from freezer to be thawed.

For example:

- Doe, John. Made Oct 1, 2025 at 10:30h. Expires Oct 2, 2025 at 10:30h.
- Doe, John. Made Oct 1, 2025 at 10:30h. Thawed Nov 10, 2025 at 11:02h.  
Expires Nov 11, 2025 at 11:02h
- To prepare for hospital stays, keep copies of recipes ready to bring with you. Your dietitian can use the recipes to assess the blended food given in hospital.
- Bring a list of any supplements or other health products you may be taking. Some products may be safe, and some may interact with medications. Talk to your healthcare team about these products.

## Getting your home blended food in hospital

- Like at home, you or a family member will provide the blended food. Your healthcare team cannot do this for you.
- Supplies for tube feeding may be supplied for you during your hospital stay. You may be able to choose to use a syringe or a large bore gravity feeding set. Ask your healthcare team what is available to you.

- You may find that you are unable to have all your meals as home blended food, due to time, fatigue, or availability of your blends. You can choose a hospital formula as an alternative if this is the case.
- Like at home, blended food still needs to be provided in under 2 hours for food safety.

### Hospital formula for tube feeding

If you are admitted to hospital, there may be medical reasons why a hospital tube feed formula is preferred. Your healthcare team will work with you to include hospital tube feed formula in your care plan. They can also help you change back to home blended food when you are medically ready.

The healthcare team is committed to working with you to make sure that you have safe and healthy food during your hospital stay.

If you have any questions, please ask your healthcare team.

## Resources

Check out the resources below for more information or support:

- [Alberta Health Services: Health Link 811](#)
  - Call 811. Ask to talk to a dietitian.
- [Health Canada: Canada's Food Guide](#)
- [Health Canada: Safe Cooking Temperatures](#)
- [Home Blended Foods for Tube Feeding Video Series](#)
  - Even though the series was made for families with children who are fed by tube, the methods, tips, and approaches are the same for adults.
  - Also available on MyHealth.Alberta.ca: [Learning about home blended food for tube feeding in children](#)

## Equipment and supplies

Here are the basic items you will need to safely have blended food for tube feeding at home.

### Preparation

- High-powered blender for smooth blends (see [Step 2: Choosing a blender](#))
- Measuring cups and spoons
- Microwave-safe dishes, pots, or pans for cooking ingredients
- Strainer or sieve to remove large pieces that might clog tubes
- Storage containers that are safe to use in the fridge and freezer

### Administration

- Feeding syringes, like 60 mL or 100 mL ENFit® syringes, with O-ring style rubber stopper
- Large bore gravity feeding bags or reusable tube feeding pouches (if using the gravity method for meals and snacks)
- Feeding pump and pump-compatible feeding sets (if using a pump for your meals and snacks)
- Extension sets compatible with the feeding tube, like ENFit® or Legacy®
- Feeding tube, often size 12–14 French or larger to reduce clogging

### Other items

- Funnel to help pour home blended food into feeding sets
- Back-up store-bought formula (recommended in case home blends are not available or safe to use)

## Emergency care plan: Template

Family, friends, or caregivers trained to provide home blended food for tube feeding:

Name:

Phone number:

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Formula to use in case of emergency:

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Delivery method and schedule for meals and snacks, volume of water flushes, and length of infusion time:

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Location of bottled water and type of pureed or strained foods stored at home for emergency use:

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Other information:

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