

Eating Well When You Have a Chyle Leak

What is chyle?

Your body makes a fluid called chyle in the small intestine when it digests foods. Chyle is made up of fat that we eat, important proteins, and white blood cells.

What is a chyle leak?

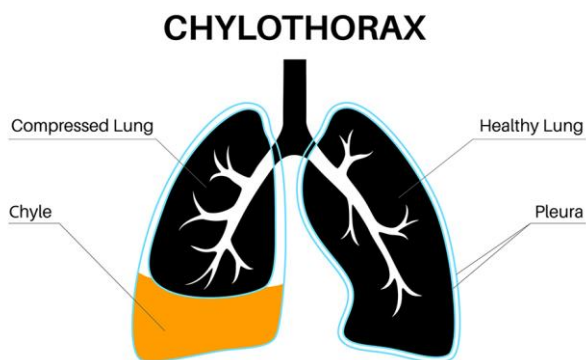
Chyle can 'leak' if the lymphatic system is not working as well as it should or is hurt from an accident. The chyle can't get to where it needs to go. It then leaks into other places, like the neck, chest or lungs, or abdomen.

Managing a chyle leak

Chylothorax

Chylothorax is when a chyle leak builds up around the lungs. Chyle puts pressure on the lungs, making it hard to breathe.

A chest tube drains the chyle around the lungs and can make breathing easier.



Chylous ascites

Chylous ascites is when a chyle leak builds up in the abdomen. The buildup puts pressure on the lungs and other organs.

A needle or tube is placed in the abdomen so the fluid can drain.



Role of nutrition

If the chyle buildup continues, a minimal fat (very low fat) diet is recommended. This diet will lower the amount of chyle made by the body.



Try to eat the lowest amount of fat you can each day.

The less fat eaten, the less chyle your body makes.

Follow a minimal fat diet

Enjoy different very low fat foods to get enough nutrition. Tips:

- Don't add any fats while cooking or before eating. This includes butter, margarine, oils, and sauces.
- Use fat-free cooking methods instead of frying. Try baking, grilling, broiling, barbecuing, or steaming.
- Use non-stick cookware, like frying pans, if available.
- Avoid deep fried foods.

Try the **food lists** and **sample meals** in this handout to help plan meals and snacks.

Follow a minimal fat diet for:

Vitamin and mineral supplements

It may be hard to get enough nutrition from only food on this diet.

Ask your healthcare team if you or your child need to take any supplements.



Read food labels

Use food labels to help you find foods that are very low in fat.

Use the Nutrition Facts table to see how much fat is in a food. Choose foods with less than 0.5 g fat per serving.

If the package says “fat-free,” there is less than 0.5 g fat for each serving. Check the Nutrition Facts table each time you shop.

Nutrition Facts	
Serving size	Per ½ cup (125 mL)
	Calories 120 % Daily Value*
Total fat grams per serving	Fat 0.5 g 1 %
	Saturated 0 g 0 %
	+Trans 0 g
	Carbohydrate 30 g
	Fibre 3 g 11 %
	Sugars 19 g 15 %
	Protein 1 g
	Cholesterol 0 mg
	Sodium 0 mg 0 %
	Potassium 456 mg 10 %
	Calcium 1 mg 0 %
	Iron 0 mg 0 %
*5% or less is a little , 15% or more is a lot	

Compare the serving size on the label with the amount your child will eat.

Eat protein foods

Protein is needed to heal and recover. Choose protein foods with very little or no fat.

Check out the **food list** for examples of protein foods that have minimal fat.

Tips to lower the fat of protein foods:

- Trim the visible fat off meat and poultry.
- Choose leaner or lower-fat cuts of meat. This includes white meat on poultry, and beef or wild game with no or very little marbling.
- Choose dairy foods with 0% M.F (milk fat) such as skim milk or yogurt made with skim milk.

Tips to get more nutrition

- Eat small amounts more often if you or your child are not feeling well. It may be easier to eat 5–6 small meals a day than 2–3 larger meals.
- Try fat-free or very low fat nutrition supplement drinks or powders to get extra calories and protein, such as:
 - Boost® Soothe™
 - Boost® Fruit Flavored Beverage™
 - Beneprotein® protein powder
- Medium chain triglyceride (MCT) oil is a fat that doesn't increase the chyle in the body. It has extra calories and nutrition.
 - Adults can use up to 3–5 Tbsp (45–75 mL) of MCT oil per day.
 - It can be added to hot cereals, soups, skim milk, tea, and coffee.
 - MCT oil use and amounts for children are based on the needs of each child.
 - Talk to your or your child's dietitian if you'd like to learn more.

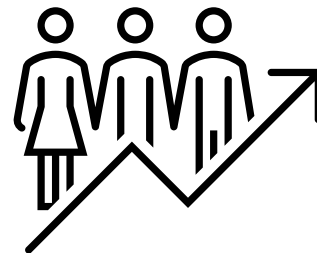
If your child is losing weight

Childhood is a time for growth and development.

Your child may be weighed and measured at their health visits. These measures are recorded on a growth chart to show their growth pattern. A healthy growth pattern is different for each child.

Your child may need extra nutrition to maintain their growth.

Talk to your dietitian about your child's growth and nutrition needs.



Foods to choose or avoid

The table below lists examples of foods to help guide your choices. It may not include everything you or your child eats. Check the label each time you buy a food or drink.

Tip: Eating smaller amounts can help lower the overall fat grams per serving.



Foods listed may not be appropriate for all ages. Some foods are not advised for younger children. This includes choking risk, food safety risk, and food or drinks not recommended for children.

Ask your dietitian for guidance.

Low-fat foods to choose	High-fat foods to avoid
Protein foods (milk and dairy alternatives)	
<ul style="list-style-type: none"> • fat-free cheese • fat-free cottage cheese • fat-free custards or puddings (made with skim milk) • fat-free evaporated milk • fat-free sour cream • fat-free yogurt, yogurt drinks, yogurt tubes • skim milk and skim milk powder 	<ul style="list-style-type: none"> • condensed milk • cream, half and half, whipping cream custards or puddings made with 1% milk or higher • milk: 1%, 2%, 3.25% (homogenized), flavored (such as chocolate, strawberry) • processed cheese spread • regular fortified soy beverage, other plant-based beverages that are too high in fat (almond, oat, rice) • regular or low fat cheese • regular or low fat cottage cheese • regular or low fat evaporated milk • regular or low fat sour cream • regular or low fat yogurt, yogurt drinks, yogurt tubes • whole milk powder
Protein foods (meat and plant-based protein foods)	
<ul style="list-style-type: none"> • egg white or egg white substitute • fat-free deli meats (such as turkey, chicken) • fat-free 'hot dogs' and low-fat 'veggie dogs' • fat-free fortified soy beverage • fish, light tuna, canned in water or broth • fish, white (such as cod, haddock, tilapia) • legumes such as beans, lentils, peas • lean chicken or turkey breast, skinless • lean elk, moose, rabbit • protein powder (casein, soy, whey) 	<ul style="list-style-type: none"> • all fried protein foods • bacon • beef, duck, goat, goose, pork, venison • bologna, salami • egg yolk • fish canned in oil • regular or low-fat deli meats • ribs • nuts, seeds • nut or seed butter • protein powder (pea, chickpea) • tofu • sausages, wieners, 'hot dogs' • seafood and shellfish (clams, lobster, mussels, oysters, shrimp, and scallops)

M.F. = milk fat

Low-fat foods to choose	High-fat foods to avoid
Vegetables and fruits	
<ul style="list-style-type: none"> • 100% fruit and vegetable juices • all fresh vegetables and fruits, except those on the avoid list • frozen, canned, or dried vegetables and fruits with no added fat • fruit sauces, dried fruit leathers • fat-free or low fat tomato or pasta sauce 	<ul style="list-style-type: none"> • avocado • coconut and coconut milk • French fries • regular tomato or pasta sauce • vegetables that are battered, fried, or scalloped • vegetables, potatoes, salads, and fruits made with sauces, butter, or breading
Grain foods	
<ul style="list-style-type: none"> • barley, couscous, pasta, rice (all plain) • fat-free bagels, breads, buns, pitas without added fats, nuts, or seeds (plain), white • fat-free breadsticks, Melba toast, rice cakes • fat-free crackers • fat-free cookies, granola bars • hot and cold cereals 	<ul style="list-style-type: none"> • bannock • cakes, cookies, dessert bars, muffins • pastries, pies • cheese and egg bread, buns, croissants, high fat crackers • crackers (regular, low fat) • chow mein noodles, fried rice • ravioli, tortellini stuffed with cheese or meat • granola type cereals with coconut, nuts, seeds • packaged pasta or noodle dishes • whole grain and whole wheat bread products
Fats and oils	
<ul style="list-style-type: none"> • fat-free gravy, sauces (plum, soy, teriyaki) • fat-free salad dressings • medium chain triglyceride (MCT) oil 	<ul style="list-style-type: none"> • butter • regular and low-fat salad dressings • margarine (regular, plant-based) • oils (all types except MCT oil) • regular gravy, sauces • regular soups, cream soups
Condiments and seasonings	
<ul style="list-style-type: none"> • fat-free condiments (ketchup, mayonnaise, mustard, relish) • fat-free or ultra-low fat whipped topping • herbs, spices, salt, pepper • honey, jams, jellies, syrups (fat-free maple, chocolate, strawberry) • pickles • salsa 	<ul style="list-style-type: none"> • olives • regular condiments • regular whipped topping

Low-fat foods to choose	High-fat foods to avoid
Other food and drink	
<ul style="list-style-type: none"> • coffee, tea • fat-free soups (such as Lipton® Chicken Noodle™) and broths • fat-free chocolate syrup • Jell-O®, fruit gels, gummies, gum • popcorn (air-popped, no butter) • pretzels, plain • nutrition supplement drinks (Boost Fruit Flavored Beverage®, Boost Soothe®) • rice cakes without cheese, chocolate, or butter • salad-type sandwiches made with fat-free mayonnaise • sorbet, fat-free ice pops • sugar, sugar substitutes • sushi, vegetarian (no avocado, egg, or crab) 	<ul style="list-style-type: none"> • caramel, toffee • chocolate, hot chocolate, fudge • coffee whitener • cream soups • ice cream, frozen yogurt • pizza • popcorn (regular or flavored) • potato chips, puffed cheese snacks • salad-type sandwiches made with regular mayonnaise • sushi made with fish, meat, avocado, egg, or crab
Baby and toddler foods	
<ul style="list-style-type: none"> • Alfamino Junior®, Lipistart®, and Monogen® formulas • infant cereal, plain • infant puffs • rice husk crackers • store bought baby food vegetables and fruits • store bought vegetable and fruit pouches 	<ul style="list-style-type: none"> • all infant formula (except “allowed” formulas) • cookies (such as Arrowroot®) • infant cereal made with formula, milk, yogurt • store bought baby food custards and desserts • store bought baby food with meat or meat added



Check out some examples of meals and snacks that have minimal fat on the following page. Ask your dietitian if they have recipes they can share with you.

Sample meals

Day 1	Day 2	Day 3
Breakfast		
<ul style="list-style-type: none"> banana cold cereal, puffed rice fat-free Greek yogurt skim milk 	<ul style="list-style-type: none"> egg white omelet with spinach and tomatoes grape jelly toast, white 	<ul style="list-style-type: none"> creamy wheat cereal, made with water, brown sugar added frozen raspberries and blueberries skim milk
Lunch		
<ul style="list-style-type: none"> chicken meatballs fat-free tomato sauce pasta, white mixed vegetable salad with fat-free Italian dressing 	<ul style="list-style-type: none"> fat-free bun, white turkey soup, made with fat-free broth, mixed vegetables, and barley 	<ul style="list-style-type: none"> carrot sticks sandwich (white bread, lean chicken breast, lettuce, tomato, fat-free mayonnaise)
Supper		
<ul style="list-style-type: none"> beets and broccoli rice with soy sauce white fish, baked with lemon and dill 	<ul style="list-style-type: none"> butternut squash green beans mashed potato, made with skim milk (no butter) turkey breast, fat-free gravy 	<ul style="list-style-type: none"> chickpeas and lentils, mixed with steamed vegetables rice with fat-free teriyaki sauce strawberries with fat-free whipped topping
Drinks		Snacks
<ul style="list-style-type: none"> water coffee, tea skim milk 100% fruit or vegetable juice 		<ul style="list-style-type: none"> fruit or vegetables fat-free crackers with fat-free cream cheese rice cake (plain) or pretzels fat-free yogurt fat-free cottage cheese

Healthcare team

Dietitian's name:

Phone number:

Questions for your dietitian:

More support



- Talk to your healthcare team.
- Call Health Link at 811 and ask to talk to a dietitian.
- Visit ahs.ca/nutrition.