

Chylothorax: Fat free diet

What is a chylothorax?

A chylothorax (KY-low-THOR-ax) is a buildup of fluid in the space around the lungs in the chest cavity. The fluid is called chyle (kyle).

Chyle is a milky-looking fluid made in the small intestine when the body digests fat. Chyle contains fat particles and other nutrients. The chyle is carried around the body by the lymphatic vessels, just like blood is carried around the body by blood vessels. The lymphatic system delivers chyle to the blood stream. The chyle nourishes the body and fights infection.

The buildup of the chyle occurs as a result of a leak in the lymphatic vessels or when the body makes more chyle than the lymph vessels can reabsorb. The leak can occur after surgery, trauma, or even as a result of a congenital (before birth) condition.

How is a chylothorax treated?

When the chyle collects around the lungs in the chest cavity it can put pressure on the lungs and make breathing more difficult. Your child will need medications such as diuretics. Diuretics help the body to get rid of the extra fluid and breathing easier. Your child may also need a chest tube to drain the extra fluid from around the lungs with a chest tube.

There are times when the body keeps making more chyle than it can absorb. This is measured by the amount of fluid that is draining to the chest tube. To help lower the amount of chyle the body is making, your child will have to restrict the amount of fat in his/her diet. This is known as a fat free diet.

What is a fat free fat diet?

A fat free diet is one where your child will avoid eating foods that contain fats. A "fat-free diet" is less than 0.5 grams of fat per serving. Total fat intake is limited to 9 grams per day. The dietitian will help you with the details of your child's fat free diet and work with you to optimize their nutrition. They will also monitor your child's weight gain and growth.

How can I tell how much fat is in food?

It is important to read the labels on all the foods you plan to give your child. This will help you decide which foods are low fat and good to eat while on the diet. We will teach you how to read the "Nutrition Facts" label to find out how much fat is in the food.

Look at the "Fat" section of the nutrition facts. If the label says that the food has less than 0.5 grams of fat per serving or less, then this food is allowed. Check the label to be sure. A total sum of 9 grams of fat per day is allowed.

Nutrition Facts

Serving Size
1 cup, chopped (128.0 g)

Amount Per Serving
Calories 52 **Calories from Fat** 3

% Daily Value*

Total Fat 0.3g ▲	0%
Saturated Fat 0.0g	0%
Trans Fat 0.0g	
Polyunsaturated Fat 0.1g	
Monounsaturated Fat 0.0g	
Cholesterol 0mg	0%
Sodium 88mg	4%
Total Carbohydrates 12.3g	4%
Dietary Fiber 3.6g	14%
Sugars 6.1g	
Protein 1.2g	

Vitamin A 428%	•	Vitamin C 13%
Calcium 4%	•	Iron 2%

* Based on a [2000 calorie diet](#)

The good food!
Less than 0.5 g of fat



Nutrition Facts

Serving Size 1/2 cup dry (40 g)
Servings Per container: 13

Amount Per Serving

Calories 150 **Calories from Fat** 25

% Daily Value*

Total Fat 3 g ▲	4%
Saturated Fat 0.5 g	2%
Trans Fat 0 g	0%
Cholesterol 0 mg	0%
Sodium 0 mg	0%
Total Carbohydrate 27 g	9%
Dietary Fiber 4 g	15%
Sugars 1 g	
Protein 5 g	

Vitamin A	0%
Vitamin C	0%
Calcium	0%
Iron	10%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

	Calories:	2,000	2,500
Total Fat	Less than	65 g	80 g
Sat Fat	Less than	20 g	25 g
Cholesterol	Less than	300 mg	300 mg
Sodium	Less than	2,400 mg	2,400 mg
Total Carbohydrate		300 g	375 g
Dietary Fiber		25 g	30 g

Too much fat!
More than 0.5 g



Avoid this food!

Food Group	Foods Allowed	Foods to Avoid
Fruits	<ul style="list-style-type: none"> • Fresh fruit • Most frozen or canned fruit • Raisins or fat free dried fruit • Fruit juice • Jelly/fruit spreads 	<ul style="list-style-type: none"> • Canned fruit pie filling • Coconut
Vegetables	<ul style="list-style-type: none"> • Plain fresh, frozen or canned vegetables • Vegetable or tomato juice • Fat free tomato paste • Pickles 	<ul style="list-style-type: none"> • Avocado • Olives • Vegetables in butter, cream sauce, cheese sauce or with other toppings • Vegetables canned in oil • Fried vegetables • French fries, curly fries, tater tots, fried onion rings
Milk and dairy products	<ul style="list-style-type: none"> • Nonfat or Fat free milk (skim milk) • Nonfat or fat free yogurt • Fat free hot chocolate • Fat free cottage cheese • Fat free cheese • Fat free sour cream • Fat free ice cream or frozen yogurt • Fat free Carnation®Breakfast Essentials™ 	<ul style="list-style-type: none"> • Milk – 1%, 2%, or whole • Ice cream • Hot chocolate • Regular Chocolate milk • Rice milk • Soy milk • Regular yogurt • Fat containing creamers • Cheese or cottage cheese • Eggnog
Desserts	<ul style="list-style-type: none"> • Fat free pudding • Fat free whipped cream • Gumdrops • Hard candy • Jelly beans • Jell-O • Marshmallows • Popsicles • Sorbet • Frozen fruit bars 	<ul style="list-style-type: none"> • Cake • Chocolate • Cookies • Danish pastries • Doughnuts • Ice cream • Milkshakes • Pie • Pudding
Meats and alternatives	<ul style="list-style-type: none"> • Fat free luncheon meat • Fat free hotdogs • Fat free fish (light meat tuna in water, cod fillet) • Skinless chicken breast • Fat free veggie burger • Beans prepared without added fat (limit ½ cup/day) – black, pinto, kidney, white, lima, lentils • Fat free refried beans • Egg substitutes – fat free • Egg whites (if the child is older than 1 year of age) 	<ul style="list-style-type: none"> • Whole eggs or egg yolks • Regular hotdogs or luncheon meat • Dark meat – chicken or turkey, beef, or pork • Fried and battered meats and poultry • Fatty fish (salmon) • Seafood: shrimp, scallops, & lobster • Shellfish: clams, mussels, & oysters • Soy beans/edamame • Peanut butter, other nut butters • Nuts or seeds

Food Group	Foods Allowed	Foods to Avoid
Breads, cereals, and starches	<ul style="list-style-type: none"> • Fat free breads • Fat free breakfast cereals: • Fat free crackers • Plain rice cakes • Rice • Fat free pasta • Fat free air popped popcorn • Fat free potatoes, sweet potatoes, yams • Fat free muffins or cookies 	<ul style="list-style-type: none"> • Breads or cereals containing fat • Bagels • Hotdog and hamburger buns • Dinner or hard rolls • English muffins • French toast • Granola • Instant oatmeal, cream of wheat, and other cereals • Packaged noodle or rice dishes • Packaged stuffing • Pasta, or pasta stuffed with meat or cheese • Packaged pasta • Pita bread • Corn or flour tortillas • Waffles or pancakes • Cornbread • Corn chips, cheese puffs, potato chips, pretzels • Cereal with nuts (granola) • Breads or cereal topped with butter or margarine • Microwave popcorn
Fats, condiments, and miscellaneous	<ul style="list-style-type: none"> • Fat free salad dressing • Fat free mayonnaise • Salt, pepper, herbs, and spices • Jams, jellies, honey, syrup • Fat free broths and soups • Ketchup, fat free mustard • Pickle relish • Salsa – no oil • sugar 	<ul style="list-style-type: none"> • Regular salad dressings • Low fat or regular mayonnaise • Butter or margarine • Lard • Gravy • Dips • Sandwich spreads • Vegetable oils • Olive oil, grape seed oil • Cream sauces • Cheese sauces
Supplements (ask the doctor or Dietitian)	<ul style="list-style-type: none"> • Multivitamins or mineral supplements • Boost® Fruit beverage or Breeze • Ensure Clear (apple or mixed berry) • Medium-chain triglyceride (MCT) oils • Fat free protein supplements • Carnation®Breakfast Essentials™ 	<ul style="list-style-type: none"> • Ensure • Glucerna • Boost® • Carnation® instant breakfast® powder (chocolate) • Ready-to-drink Carnation® breakfast

Fat free meal ideas

Breakfast ideas

- Fat free cereals with skim milk
- Top the cereal with fresh fruit
- Toast (fat free bread) with jam/jelly
- Chopped fruit mixed in fat free yogurt
- Egg white omelet – use non-stick pan and beat liquid egg whites with fat free ham and minced vegetables such as tomatoes, peppers, or spinach.
- Use a blender to make a fat free smoothie:
 - 1 cup of frozen fresh fruit
 - 1 small banana (optional)
 - ½ cup fat free yogurt
 - ½ cup skim milk, or juice
 - You may choose to add a tablespoon of honey (child older than 1 year of age) or sugar for sweetness.
 - You can try adding skim milk powder or protein powder to make this a high-protein smoothie.
 - Add cinnamon, nutmeg, cloves, ginger, or vanilla extract for extra flavor.

Lunch ideas

- Deli sandwich – use fat free bread and fat free luncheon meat, vegetables (lettuce, tomatoes, and cucumber), fat free cheese, and fat free condiments (mustard).
- Salad with fat free dressing – use ½ cup of chickpeas or beans with vegetables.
- Add fresh berries or dried fruit to the salad for more variety
- Drink skim milk, or fat free chocolate milk for extra protein.

Dinner ideas

- Boil or bake a potato, yam, or sweet potato. Add fat free sour cream or fat free cheese on top.
- Cook vegetables with lemon juice, garlic or ginger for flavor.
- Get extra protein with egg whites, fat free luncheon meats, beans, and fat free milk.

Cooking methods

- Steaming
- Broiling
- Baking
- Barbecuing

Dietitian recommendations:

1. _____
2. _____
3. _____

Notes:

Questions?

If you have any questions, call your clinic. For more reading material about this and other health topics, please call or visit the Family Resource Center library, or visit www.childrensmn.org/A-Z.