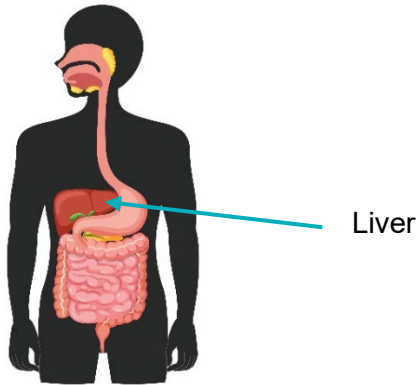


Nutrition for Fatty Liver Disease

What is fatty liver disease?

Fatty liver disease is when extra fat builds up in the liver. A small amount of fat is normal. Too much fat can make it harder for your liver to work well. Over time, this can damage your liver.



Fatty liver can affect both children and adults. When there is too much fat in your liver, it's called metabolic dysfunction-associated steatotic liver disease (MASLD).

Some people with MASLD may develop a more serious condition. This is called metabolic dysfunction-associated steatohepatitis (MASH).

MASH is when the fat buildup leads to inflammation (swelling) and liver damage.

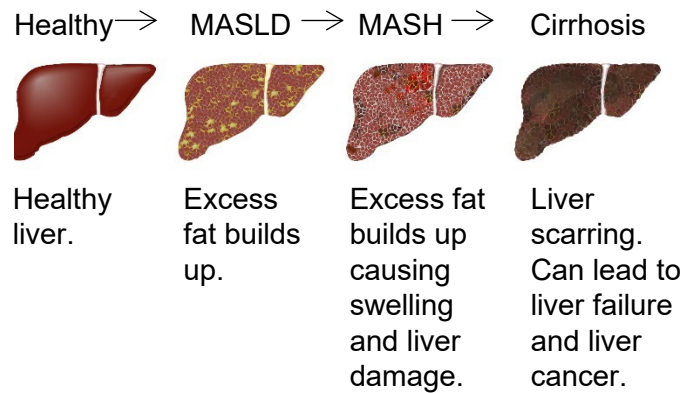
What may cause fat to build up?

Fat buildup in the liver is often from health conditions, like:

- extra body fat, mainly around the waist
- high blood pressure
- high blood sugar
- high cholesterol
- insulin resistance

Without treatment, fatty liver disease can lead to liver scarring (cirrhosis), liver failure, or liver cancer. It can also raise your risk of heart disease, stroke, and diabetes.

Stages of liver disease



Improving fatty liver

Reducing fat in your liver can improve liver health. This may reverse MASLD or MASH. But once cirrhosis develops, the scarring cannot be reversed.

Healthy habits need to be part of your daily life to help your liver get better and stay healthy.

Small changes to these habits can improve liver health:

- choose foods from the Mediterranean-style eating patterns
- be active most days
- limit or avoid alcohol
- avoid smoking and tobacco products

It may be helpful to review medications with your healthcare team. Some affect liver health.

Weight and liver health

While extra body fat is a risk factor, people of all body sizes and ages can have fatty liver disease.

Weight loss may be helpful if you are overweight or have obesity, but it is not recommended for everyone.

To learn more, talk to your healthcare team and visit Nutrition Education (ahs.ca/NutritionHandouts).

- For children, search, “healthy growth”
- For adults, search, “weight and health”

Foods to choose most often

Try the tips below to help improve your liver health.

Follow Canada's food guide plate



The [Canada's food guide plate](#) can help you plan balanced meals:

- half ($\frac{1}{2}$) plate of vegetables and fruits
- quarter ($\frac{1}{4}$) plate of protein foods
- quarter ($\frac{1}{4}$) plate of whole grain foods
- make water your drink of choice

Choose a Mediterranean-style eating pattern

A Mediterranean-style eating pattern is one way to put Canada's food guide plate into practice.

This eating pattern includes foods with:

- fibre
- healthy fat
- lean protein

While limiting:

- alcohol
- added sugars
- highly processed foods
- red and processed meats
- salt (sodium)

This eating pattern can help with heart health, manage blood sugar levels, and support a healthy body weight.

Many tips in this handout come from the Mediterranean-style eating pattern.

Choose foods with fibre

Fibre is found in plant foods. Your body cannot fully digest (breakdown) fibre. Fibre can help you feel full longer, keep blood sugar levels stable, and improve cholesterol levels.

Choose higher fibre foods each time you eat. Try:

- legumes (beans, lentils, and split peas)
- nuts and seeds
- vegetables and fruits (fresh, canned, or frozen)
- whole grain foods, like oatmeal, quinoa, and whole grain breads and pastas

Eat a variety of colourful vegetables and fruits daily. Different colours have different nutrients, like fibre, that support overall health.

Choose foods with healthy fats

Foods with healthy fats may help lower liver swelling and support your liver and heart health.

Healthy fats include monounsaturated fats and omega-3 fats.

Choose foods with healthy fats often. These include:

Monounsaturated fats

- almonds
- avocados
- cashews
- oils like olive and avocado
- olives
- pecans
- pumpkin seeds

Omega-3 fats

- fatty fish, like herring, salmon, sardines, and trout
- chia seeds, hemp seeds, walnuts, and ground flaxseeds
- omega-3 eggs
- seafood and shellfish, like mussels and shrimp

Some fish, seafood, and shellfish can be packed in brine, which is high in salt (sodium). Choose fresh, frozen, or canned products packed in water.

Choose lean protein foods

Protein is a nutrient that helps your body:

- heal and repair
- maintain and prevent muscle loss
- support your immune system

Try having protein foods every time you eat to help you get enough daily.

Choose lean protein foods, like:

- chicken and turkey (skinless)
- dairy foods, like milk, cheese, and yogurt
- eggs
- fish
- legumes (beans, lentils, and split peas)
- soy foods, like tofu and tempeh
- unsalted nuts and seeds

Foods to limit or avoid

Some food and drinks can make fatty liver worse.

Avoid alcohol

Drinking less alcohol is better for your liver and overall health. Alcohol includes:

- beer
- coolers
- wine
- ciders
- spirits

Talk to your healthcare provider if you have questions about alcohol and health. For more information, [visit ccsa.ca/alcohol](https://www.ccsa.ca/alcohol).

Limit added sugars

Limiting sugary foods and drinks can help reduce fat in the liver and improve liver health. These include:

- sugar-sweetened drinks, like regular pop, iced tea, flavored coffee drinks, and energy drinks
- juice
- desserts, candy, jam, honey, and syrups
- foods with “high-fructose corn syrup” and “glucose-fructose” on the ingredient list

Choose instead:

- water, sparkling water, and sugar-free drinks
- whole fruit

Limit highly processed foods

These are packaged foods that can be high in sugar, salt, or unhealthy fats (saturated fats). Saturated fats are solid at room temperature and increase your risk of disease.

These include:

- store bought baked goods, like cakes, cookies, and muffins
- deep-fried foods, like French fries and donuts
- salty snacks, like chips and pretzels

Limit red and processed meats

Some red and processed meats can be higher in unhealthy fat. Examples include:

- beef, lamb, pork
- bacon, sausage, wieners
- deli meats like ham and bologna

Choose lean cuts of meat when possible.

- Trim any visible fat.
- Choose options like tenderloin, sirloin, pork loin, or extra-lean ground meat.

Limit salt

Too much salt (sodium) can make fatty liver and related health concerns worse. Try to eat less salt by limiting salt and salty foods:

- Use little or no salt in cooking and when eating.
- Choose fresh foods and canned foods with no salt added.
 - Rinse canned vegetables and beans with water to lower the salt.
- Read food labels to choose foods that are lower in sodium.
- Make food at home more often with low sodium ingredients.
- Choose less processed meats in place of deli meats.
- Eat fewer salty snacks like chips and jerky. Try unsalted nuts.
- Make baked goods, like muffins or cakes, at home to help limit the salt added.
- Add garlic, onion, herbs, spices, lemon juice, vinegar, or salt-free seasonings instead of salt.

Herbal products, and vitamin & mineral supplements

Healthy eating and lifestyle changes are the main treatments for fatty liver disease.

No vitamin, mineral, or herbal product is recommended to treat fatty liver.



Before taking any supplement (vitamin, mineral, or herbal product) talk to your healthcare team. Some supplements can hurt your liver.

Special diets

Some diets are often promoted to help with fatty liver. But there is not enough proof to recommend them to everyone. These include:

- gluten-free diet (unless you have celiac disease)
- low-carbohydrate (low-carb) diets

Diets that cut out many foods can make it hard to get all the nutrients your body needs. They can also be costly and hard to follow for a long time. They may not be good for children and youth.

Talk with your healthcare team **before** starting a diet that limits food. They can help you decide if it is safe and right for you.

Did you know?

Coffee may help some people with fatty liver disease.

- If you drink coffee, 2–3 cups daily may help.
 - Regular or decaf coffee are both okay.
- If you don't drink coffee, you don't need to start.

Too much coffee can cause side effects in some people.

More research is needed to know who may benefit and if it is helpful over time.

Tips to help you be active

Being active can help keep your liver healthy. It can also improve your overall health and help manage other concerns.

The Canadian Society for Exercise Physiology recommends:

- Children and youth, 2–17 years: At least 60 minutes (1 hour) of physical activity 3 or more days each week.
- Adults, 18 years and older: At least 150 minutes (2.5 hours) of moderate to vigorous physical activity each week.

They also suggest people of all ages to:

- limit sedentary (time spent being still or inactive) and screen time
- get enough good-quality sleep

To learn more, go to: csepguidelines.ca

If you are new to being active or have health concerns, talk to your healthcare team. They can help you choose activities that are safe and right for you.

More information

- To learn more about nutrition for health conditions related to fatty liver, visit Nutrition Education (ahs.ca/NutritionHandouts).
- For recipes, visit Liver Canada (liver.ca/recipes).

For more support



- Talk to your healthcare team
- Call Health Link at 811, and ask to talk to a dietitian or complete a [self-referral form](https://ahs.ca/811) on ahs.ca/811
- Visit ahs.ca/Nutrition

