



Fatty Liver Disease Is Affecting Children at an Alarming Rate

Cases of pediatric MASLD, formerly known as non-alcoholic fatty liver disease, are almost as common as asthma now.

December 11, 2023 By Laura Schmidt

In the past, metabolic dysfunction-associated steatotic liver disease (MASLD, formerly known as non-alcoholic fatty liver disease, or NAFLD) mostly affected adults. But children and teens are increasingly being diagnosed with MASLD, according to [The Washington Post](#).

Often referred to as “[silent diseases](#),” MASLD and metabolic dysfunction-associated steatohepatitis (MASH, formerly known as non-alcoholic steatohepatitis, or NASH) are responsible for a growing proportion of advanced [liver disease](#), mirroring a global rise in [obesity](#). MASLD can lead to liver fibrosis, cirrhosis and even [liver cancer](#). With no effective approved medical therapies, management depends on lifestyle changes such as weight loss and exercise.

Millions of children are affected by MASLD today, according to the Post. In fact, writing in the journal [Clinical Liver Disease](#), researchers estimate that 5% to 10% of all children in the United States have MASLD, making it [about as common as asthma](#).

Other conditions previously viewed as almost exclusively adult diseases are on the rise among young people, including high blood pressure, high cholesterol, diabetes and even gallstones, according to the Post.

Children can develop MASLD for several reasons. Research suggests that modern lifestyle changes in diet, exercise and environmental exposures may contribute to rising pediatric MASLD cases.

Researchers note that the American diet has changed drastically in the last 200 years. A diet that previously consisted of animal fats, whole dairy and fresh produce has been replaced by unhealthy processed food with little nutritional value. Indeed, a paper published in [Nutritional Epidemiology](#) found a correlation between the increase in processed foods in American diets and noncommunicable diseases such as heart disease, diabetes, respiratory disease and more.

“It’s the worst disease you’ve never heard of,” said Samir Softic, MD, a pediatric gastroenterologist at Kentucky Children’s Hospital who specializes in fatty liver disease.

Softic said liver transplants in children with MASLD are rare but still do occur. In fact, liver transplants in children ages 11 to 17 have increased by 25% over the past decade. What's more, transplants in young adults ages 18 to 34 have more than doubled.

"It goes unnoticed and unrecognized, and over time, it catches up," Softic said. "For a good number of these young transplant patients, the disease process started in childhood."

According to the [Liver Foundation](#), children may be at a higher risk for MASLD if they:

- Have overweight or obesity
- Have insulin resistance
- Have type 2 diabetes
- Follow a poor diet and do little to no exercise
- Have dyslipidemia (irregular level of blood lipids)
- Carry certain variations in their genes or
- Have sleep apnea.

Common symptoms include:

- Abdominal pain
- Fatigue
- Irritability
- Headaches
- Difficulty concentrating
- Low mood and anxiety
- Changes in skin color near joints and the back of the neck/upper back.

Experts recommend that children between ages 9 and 11 who have overweight or obesity or other risk factors should be screened for MASLD.

For more on [#Prevention](#), click Hep's Health Basics of [Fatty Liver Disease Prevention](#). It reads in part:

Lifestyle factors often contribute to the buildup of fat in the liver, and making some changes can help prevent the development of MASLD and its more severe form MASH.

Maintain a healthy weight. Overweight and obesity are leading risk factors for fatty liver disease. [Body mass index \(BMI\)](#) is a commonly used indicator of healthy weight. A BMI over 25 is considered overweight and a BMI over 30 is considered obesity. However, some experts think waist circumference and other indicators may be more informative.

Eat a healthy diet. A healthy diet includes all the basic food groups, with a focus on plant-based foods, such as fruits, vegetables and whole grains. Keep processed meats, saturated fats and added sugar and salt to a minimum.

Exercise regularly. The federal government's [Physical Activity Guidelines for Adults](#) recommend at least 150 minutes of moderate-intensity aerobic activity (e.g., brisk walking) every week and weight training/muscle-strengthening activities that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders and arms) on two or more days a week. Recent research shows that exercising in short intervals is as effective as exercising for larger stretches of time.

Use medications and supplements exactly as prescribed. Many prescription and over-the-counter medications, dietary supplements and herbal remedies have the potential to harm the liver if not used correctly. Tell your health care providers about all medications, supplements and herbs you use.

Get regular, good-quality sleep. Our bodies need adequate sleep to function. Insufficient sleep is associated with overeating and weight gain. What's more, adequate sleep improves mood and overall quality of life. The [American Academy of Sleep Medicine](#) recommends that adults should get at least seven hours of sleep a night.