

## Metabolic Dysfunction-Associated Steatotic Liver Disease (MASLD)

### What is MASLD?

Metabolic Dysfunction-Associated Steatotic Liver Disease (MASLD), previously called "fatty liver disease," is a condition where extra fat builds up in your liver. This is the most common liver disease worldwide, affecting about 30-40% of adults. MASLD is closely linked to conditions like obesity, diabetes, high blood pressure, and high cholesterol.

MASLD can range from simple fat buildup (which may not cause problems) to a more serious form called MASH (Metabolic Dysfunction-Associated Steatohepatitis), where inflammation and scarring develop in the liver.

### Who Gets MASLD?

You are at higher risk for MASLD if you have:

- Overweight or obesity (especially around the waist)
- Type 2 diabetes or prediabetes (60-70% of people with diabetes have MASLD)
- High blood pressure
- High triglycerides (a type of fat in your blood)
- Low HDL cholesterol (the "good" cholesterol)
- Age 50 or older
- Family history of liver disease

### Why Does MASLD Matter?

While many people with MASLD feel fine, the condition can lead to serious health problems over time:

- **Liver complications:** Advanced scarring (cirrhosis), liver failure, and liver cancer
- **Heart disease:** The leading cause of death in people with MASLD
- **Diabetes:** MASLD increases your risk of developing type 2 diabetes
- **Kidney disease:** Higher risk of chronic kidney problems
- **Certain cancers:** Increased risk of some cancers outside the liver

The good news is that early detection and treatment can prevent these complications.

## How is MASLD Diagnosed?

Your doctor may diagnose MASLD through:

- Blood tests to check liver function
- Imaging tests like ultrasound to look for fat in the liver
- Special tests to measure liver stiffness, such as a Fibroscan, (to check for scarring)
- Sometimes a liver biopsy (taking a small tissue sample)

## What Can You Do About MASLD?

**Lifestyle changes are the most important treatment for MASLD.** Here's what helps:

### **Weight Loss**

- Losing 5-10% of your body weight can significantly improve liver health
- Greater weight loss (10% or more) may help reverse liver scarring
- Even modest weight loss helps reduce liver fat

### **Healthy Eating**

- Follow a Mediterranean-style diet rich in:

- Fruits and vegetables
- Whole grains
- Fish
- Olive oil and healthy fats
- Nuts and legumes

- Limit or avoid:

- Processed foods
- Sugary drinks and foods
- Foods high in saturated fat
- Fried foods
- High-fructose corn syrup

## **Physical Activity**

- Aim for at least 150 minutes of moderate exercise per week
- Both aerobic exercise (walking, swimming, cycling) and strength training help
- Any increase in physical activity is beneficial

## **Alcohol**

- Avoid alcohol or drink only in very small amounts
- Alcohol can worsen liver damage, even in small quantities

## **Manage Other Health Conditions**

- Control your blood sugar if you have diabetes
- Treat high blood pressure and high cholesterol
- Work with your doctor to optimize all your medications

## **Medical Treatments**

For people with more advanced MASLD (MASH with significant scarring), your doctor may recommend:

- Medications like semaglutide or resmetirom (FDA-approved for advanced cases)
- Weight loss medications
- In some cases, bariatric (weight loss) surgery may be considered

## **What to Expect**

With proper treatment and lifestyle changes:

- Many people can reduce or eliminate liver fat
- Inflammation can improve
- Early scarring may be reversible
- Risk of complications decreases significantly

However, MASLD requires long-term management. Regular follow-up with your healthcare team is essential to monitor your liver health and adjust your treatment plan as needed.

## References

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