

MASLD & MASH

70% of people with type 2 diabetes have MASLD.

Risk Factors:

- Overweight or obesity
- Dyslipidemia
- Obstructive sleep apnea
- Steatosis
- Polyendocrine metabolic ovarian syndrome
- Family history of cirrhosis or liver disease

FIB-4: Validated Rule-Out Tool for Advanced Fibrosis.

FORMULA: $\text{FIB-4} = [\text{age (years)} \times \text{AST (U/L)}] \div [\text{platelets (10}^9\text{/L)} \times \sqrt{\text{ALT (U/L)}}]$

- | | |
|--------------------|--|
| 1. Identify risk | Adults with type 2 diabetes, metabolic risk factors. |
| 2. Calculate FIB-4 | Do not calculate during acute illness or hepatitis. |
| 3. Low risk | Age 35–64: FIB-4 <1.3. Age ≥65: FIB-4 <2.0. |
| 4. Needs 2nd test | Age 35–64: FIB-4 ≥1.3. Age ≥65: FIB-4 ≥2.0. |
| 5. Refer | When 2nd test indicates intermediate/high fibrosis risk. |

Management Approach

Weight loss

- 5% usually reduces steatosis and improves metabolic health.
- 7-10% more likely to improve MASH activity.

Nutrition

- Mediterranean-style pattern: vegetables, legumes, whole grains, nuts, seeds, fruit, fish, and olive oil; less refined carbohydrates.
- Limit processed foods and sugar-sweetened beverages.
- Limit alcohol consumption.

Physical Activity

- At least 150 minutes/week of moderate-intensity aerobic activity.
- At least 2 days/week of resistance training.
- Reduce prolonged sitting.



SOUTHEASTERN OHIO
REGIONAL QI HUB



OHIO COLLEGES OF MEDICINE
GOVERNMENT
RESOURCE CENTER



THE DIABETES INSTITUTE
Heritage College of Osteopathic Medicine