

# Food Insecure Teens Face Higher Risk of Liver Disease

Adolescents who utilized food assistance programs had better protection against liver disease.

November 13, 2023 By Laura Schmidt

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Food insecurity in adolescents is “very tightly associated” with metabolic dysfunction–associated steatotic liver disease (MASLD, [formerly known as](#) non-alcoholic fatty liver disease, or NAFLD), according to recent study findings.

[The findings](#) were presented at The Liver Meeting, an annual conference held by the American Association for the Study of Liver Diseases.

“The association between food insecurity and MASLD is most likely the result of not being able to eat a balanced meal and more likely having to purchase low-cost food,” said lead study author Zobair Younossi, MD, MPH, professor and chairman of the Beatty Liver and Obesity Research Program at Inova Health, during [The Liver Meeting media briefing](#). “Together, these factors may lead to a cycle of overeating along with the overconsumption of ultra-processed foods and sugar-sweetened food and beverages.”

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.

For the study, Younossi and colleagues examined demographic, nutrition, physical activity and food insecurity data from more than 700 children ages 12 to 18 years, according to [a news release](#). Researchers found that about 19% of adolescents identified as food insecure had MASLD, about double the rate for those not experiencing food insecurity.

What’s more, teens facing food insecurity had higher rates of advanced liver disease compared with teens without food insecurity, 2.8% and 0.3%, respectively.

Adolescents with MASLD were more likely to live in low-income, food-insecure household in which the head of the household had not completed high school, noted Younossi. “Obviously MASLD patients have more metabolic diseases, are more obese and more have type 2 diabetes,” he

added.

Researchers noted that young people involved in the food assistance program Supplemental Nutrition Assistance Program (SNAP) were better protected against liver disease.

“Our findings suggest that more needs to be done to make sure all those who qualify and are eligible for SNAP are obtaining their benefits,” Younossi said. “SNAP may be an interventional tool to help improve the diets of adolescents. However, work must continue to remove the systemic and structural barriers to allow better accessibility to the SNAP program as well as to provide more physical activity in school and in after-school programs.”

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