



Diet Sodas May Boost Fatty Liver Disease Risk

A large-scale U.K. study challenges the perception that “diet” drinks are harmless to the liver.

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As little as one can of regular or “diet” soda per day may significantly increase the likelihood of developing [metabolic dysfunction-associated steatotic liver disease \(MASLD\)](#), according to an unpublished study, [reports CNN](#).

MASLD, and its more severe form, metabolic dysfunction-associated steatohepatitis (MASH), are responsible for a growing proportion of advanced [liver disease](#) worldwide. Over time, the buildup of fat in the liver can lead to serious complications, including fibrosis, [cirrhosis](#) and [liver cancer](#).

The study included nearly 124,000 people without liver disease participating in the U.K. Biobank, a large biomedical research study.

Presented at United European Gastroenterology Week 2025, the study found that individuals who drink more than 250 grams of either sugar-sweetened beverages (SSBs) or low- or no-sugar-sweetened beverages (LNSSBs) have a notably higher risk of developing MASLD.

“SSBs have long been under scrutiny, while their ‘diet’ alternatives are often seen as the healthier choice. Both, however, are widely consumed and their effects on liver health have not been well understood,” said lead study author Lihe Liu, a graduate student at the First Affiliated Hospital of Soochow University in Suzhou, China, in a [statement to Science Daily](#).

Individuals who drank more than 250 grams of LNSSBs per day had a 60% increased risk of developing MASLD. Those who drank the same amount of SSBs had a 50% increased likelihood. According to Liu, excess sugar can lead to weight gain and fat accumulation in the liver, while diet drinks can “interfere with feelings of fullness, increase preference for sweet foods and even stimulate insulin secretion.”

The study also found that participants who substituted water for SSBs and LNSSBs reduced their risk of MASLD by almost 13% and 15%, respectively.

"Our study shows that LNSSBs were actually linked to a higher risk of MASLD, even at modest intake levels, such as a single can per day," Liu said. "These findings challenge the common perception that these drinks are harmless and highlight the need to reconsider their role in diet and liver health, especially as MASLD emerges as a global health concern."

MASLD often occurs in people with obesity, type 2 diabetes and other metabolic conditions. With only two approved medications ([Rezdiffra](#) and [Wegovy](#)), management largely depends on lifestyle changes such as weight loss and exercise.

"The safest approach is to limit both sugar-sweetened and artificially sweetened drinks. Water remains the best choice as it removes the metabolic burden and prevents fat accumulation in the liver, whilst hydrating the body," Liu said.

To learn more, click [#MASLD](#). There, you'll see headlines such as "[Fatty Liver Disease Is Common Among Older Adults](#)," "[Men With Cirrhosis Have Higher Risk of Liver Complications Than Women](#)" and "[Low-Carb Diet Offers Benefits for People with Fatty Liver Disease](#)."