Sugary Drinks and Trans Fats Increase Risk of Death From Fatty Liver Disease

A Mediterranean diet could help reduce the risk of non-alcoholic fatty liver disease and non-alcoholic steatohepatitis.

January 8, 2021 By Sukanya Charuchandra

Diets that are rich in sugary beverages and trans fatty acids but lack the more healthful components of a Mediterranean diet drive up the risk of death from non-alcoholic fatty liver disease (NAFLD), according to findings presented at The Liver Meeting Digital Experience.

“In addition to known metabolic risks, dietary risks can independently drive the global burden of NAFLD,” wrote James M. Paik, PhD, of the Inova Health System in Virginia, and colleagues.

Arising from the accumulation of fat in the liver, NAFLD and its more severe form, non-alcoholic steatohepatitis (NASH), are responsible for a growing proportion of advanced liver disease worldwide. As a result of inflammation, NAFLD can lead to the buildup of scar tissue (fibrosis), cirrhosis (advanced scarring) and even liver cancer. With no effective approved medical therapies, disease management is dependent on lifestyle changes such as weight loss and exercise.

The researchers set out to determine the connection between metabolic and diet-related risk factors and death from liver disease. Using data from the Global Burden of Disease study for the year 2017, the team calculated age-standardized rates of death from cirrhosis or liver cancer due to NAFLD across more than 195 countries.

The team focused on dietary risks, including diets lacking in fruits and vegetables, legumes, whole grains, nuts and seeds, milk, fiber and healthy fats (such as omega-3 in seafood) as well as diets with an abundance of red meat, processed meat, sugar-containing drinks, trans fatty acids and salt. They also took into account metabolic risk factors such as glucose and LDL cholesterol levels, blood pressure, body mass index, low bone mineral density and impaired kidney function.

Globally, there were 184,905 liver-related deaths due to NAFLD in 2017, accounting for 8.6% of liver deaths due to all chronic liver diseases combined.

Dietary and metabolic risks accounted for 19.5% and 31.4% of all-cause mortality, representing about 10.9 million and 17.6 million deaths, respectively.

The age-standardized rate of liver deaths due to NAFLD was 2.32 per 100,000 deaths, while the rates for deaths connected with dietary risk and metabolic risk were 140.24 per 100,000 deaths and 228.99 per 100,000 deaths, respectively.

NAFLD-related liver deaths were most strongly linked to sugar-sweetened drinks and diets low in components of a Mediterranean diet, such as nuts and seeds, as well as impaired kidney function. High consumption of trans fats led to an almost 3% rise in such deaths even after adjusting for metabolic risk factors.

“These data could inform policy makers to determine appropriate policies guiding awareness on how best to manage one’s diet to decrease the risk of NAFLD liver deaths,” wrote the researchers.

Click here to read the study abstract from The Liver Meeting Digital Experience. Click here to learn about the latest nutrition recommendations.
