

A recent study of over 2,000 adults in Finland has shown that adults eating the highest levels of fructose in the diet were less likely to experience non-alcoholic fatty liver disease than those who consumed the least amount of fructose.

High dietary fructose intake in Finnish adults does not increase risk of non-alcoholic fatty liver disease

It has been suggested by some experts that high fructose intake is a major contributor to non-alcoholic fatty liver disease (NAFLD), but supporting evidence from large population based studies is lacking or inconclusive.

In a new study published in the *American Journal of Clinical Nutrition*, researchers examined the potential association between dietary fructose intake and NAFLD by using two measures known as the Fatty Liver Index (FLI) and the NAFLD liver fat score.

The study subjects included 2,003 Finnish men and women who participated in a clinical health examination during the years 2001-2004. Weight, height, waist circumference, and body mass index were assessed by trained nurses. Laboratory measurements of triglycerides and gamma-glutamyltransferase (GGT) were used to calculate fatty liver scores (FLI and NAFLD). Food frequency questionnaires and statistical software were used to determine habitual fructose and other dietary intake over the previous year.

After adjusting for age, sex and energy intake, the subjects in the highest 25% of fructose intake (range 29.2-88.0 grams/day) had a 44% lower risk of NAFLD assessed by Fatty Liver Index score, and a 28% lower risk of NAFLD using the NAFLD liver fat score. The association remained even after adjusting for education, smoking, physical activity and other dietary variables.

In this study of Finnish adults, the results do not support the idea that high dietary fructose intake is associated with a higher incidence of nonalcoholic fatty liver disease.

Noora Kanerva et al. Higher fructose intake is inversely associated with risk of nonalcoholic fatty liver disease in older Finnish adults. *Am J Clin Nutr* October 2014 vol. 100 no. 4 1133-1138.