Greater Physical Activity Lowers Risk for Fatty Liver Disease

People doing more than 300 minutes of physical activity per week nearly halved their risk for NAFLD.

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Performing between 150 and 300 minutes of physical activity per week lowered the risk for non-alcoholic fatty liver disease (NAFLD) by 44%. Increasing activity levels beyond the recommended amount also decreased the risk for advanced fibrosis and cirrhosis. These findings were published in Clinical Gastroenterology and Hepatology.

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.

According to the 2018 Physical Activity Guidelines for Americans, adults need between 150 and 300 minutes of moderately intense cardiovascular exercise as well as muscle-building exercise twice a week. Previously, researchers found that inadequate physical activity was linked to all-cause mortality among people with NAFLD.

Donghee Kim, MD, PhD, of Stanford University School of Medicine, and colleagues assessed the impact of physical activity on NAFLD, fibrosis and cirrhosis of the liver. The researchers analyzed data from the 2017–2018 U.S. National Health and Nutrition Examination Survey, used transient elastography (FibroScan) to identify NAFLD, advanced fibrosis or cirrhosis, and administered questionnaires to track physical activity levels. Using the physical activity guidelines, the team categorized physical activity related to leisure, occupation or transportation.

Among the 4,304 participants, those who reported at least 150 minutes per week of leisure-related physical activity had a 44% lower risk of NAFLD.

More time spent performing any type of physical activity was linked with lower NAFLD risk. Individuals who spent between 150 and 299 minutes exercising every week were 40% less likely to develop NAFLD. Those who spent more than 300 minutes on physical activity every week nearly halved their risk of NAFLD (a 49% reduction).

On the other hand, more time spent sitting was associated with a greater risk of developing NAFLD. When researchers studied sitting time and leisure-related physical activity, those who spent eight hours sitting per week had a 44% higher risk for NAFLD.

Individuals who spent more than the recommended 300 minutes per week on leisure-related physical activity were 59% and 63% less likely to experience significant fibrosis and cirrhosis, respectively.

“Meeting [physical activity guidelines] for leisure-time [physical activity] has beneficial effects on NAFLD, and over two times the recommended amount of [physical activity guidelines] had lower risk for significant fibrosis or cirrhosis,” wrote the researchers.

Click here to read the abstract in Clinical Gastroenterology and Hepatology.
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