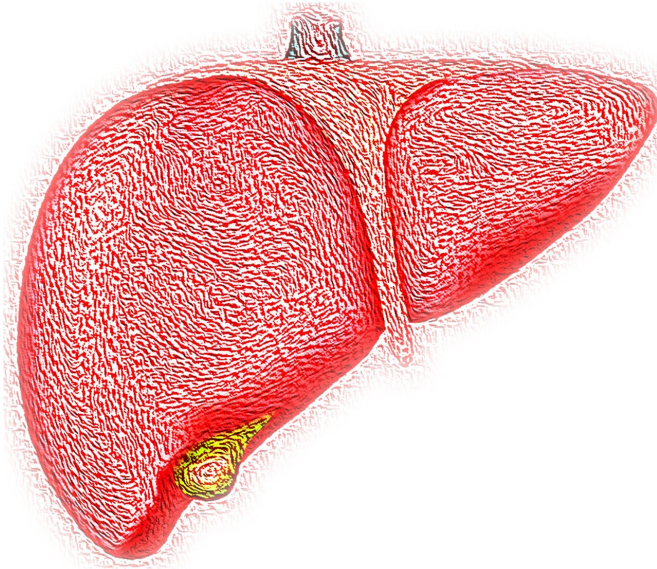


# Growth hormone improves liver health in people with nonalcoholic fatty liver disease

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Growth hormone improves liver health in patients with nonalcoholic fatty liver disease (NAFLD) by reducing liver fat and inflammation, according to a new study presented Tuesday, June 14 at ENDO 2022, the Endocrine Society's annual meeting in Atlanta, Ga.

"Two risk factors for NAFLD, obesity and diabetes, are becoming more prevalent," said lead researcher Laura Dichtel, M.D., M.H.S., of Massachusetts General Hospital and Harvard Medical School in Boston, Mass. "We currently do not have any FDA-approved treatments for NAFLD, and [weight loss](#) is the only effective treatment. Understanding how [growth hormone](#) improves [liver fat](#) and inflammation in people with NAFLD could lead to the development of novel targeted treatments."

NAFLD is present in 25% of people worldwide, and up to 80% of those with obesity in the United States. Nonalcoholic steatohepatitis (NASH) is the progressive form of NAFLD. NASH is characterized by liver inflammation and liver cell damage and is often accompanied by liver fibrosis. NASH with severe fibrosis can lead to cirrhosis, or [liver failure](#). NASH-cirrhosis is one of the leading causes of liver transplant in the United States.

The researchers chose to study growth hormone in NAFLD because administering growth hormone is known to reduce body fat and inflammation. "We know that higher body weight is associated with relatively lower growth hormone levels and higher rates of NAFLD and NASH," Dichtel said. "We wanted to find out whether growth hormone administration in otherwise healthy adults with overweight/obesity and NAFLD would improve liver fat, inflammation and fibrosis."

The researchers studied 41 participants who were given either growth hormone or a placebo for 6 months in a randomized, double-blind study. They found liver fat and a combined measure of liver inflammation and fibrosis, both measured by MRI, improved in the growth hormone group compared with the placebo group.

Liver function tests and markers of inflammation also improved. Growth hormone was well tolerated and there were no safety concerns. "This research brings us a step closer to understanding how our own hormones impact NAFLD," Dichtel said. "These results are very exciting, as they show that increasing the body's growth hormone level can improve liver health in patients with NAFLD."

**More information:** Conference: [endo2022.endocrine.org/](https://endo2022.endocrine.org/)

Provided by The Endocrine Society

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