



# Sleep Apnea May Worsen NAFLD in Adolescents

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Sleep apnea, or difficulties breathing at night, may trigger the progression of non-alcoholic fatty liver disease (NAFLD) and non-alcoholic steatohepatitis (NASH) in adolescents, according to [a new report](#) published in the Journal of Hepatology.

According to study authors, previous research has shown that sleep apnea is associated with the progression of liver disease in adults, however, this is the first time researchers have determined that oxidative stress may be triggering the disease in obese children as well.

For the report, researchers conducted a standard multichannel sleep study on 36 obese adolescents living with NAFLD, along with 14 lean controls to assess whether or not sleep apnea or low nighttime oxygen promoted the progression of the liver disease. Investigators found that kids with the most severe liver disease also experienced more severe breathing issues when sleeping and had significantly higher apnea scores than those with less severe NAFLD.

Though researchers said they were unsure what the mechanisms were behind this link, they theorized that low nighttime oxygen could cause an imbalance in the production of free radicals in the body, impeding the liver's ability to counteract their harmful effects and thereby causing more liver scarring than in subjects without sleep apnea.

The study concludes by calling for more trials investigating the links between sleep apnea and liver disease and new research to understand whether or not nocturnal continuous positive airway pressure (CPAP) treatment may help quell or reverse the progression of NAFLD.

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