

# The relationship between body mass index and age at hepatocellular carcinoma onset

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A research team from Japan identified factors associated with the age at onset of hepatitis C virus (HCV)-related hepatocellular carcinoma (HCC). The results showed that increased body mass index (BMI) is associated with increased risk for early HCC development in HCV-infected patients. Achieving recommended BMI and reducing alcohol intake could help prevent hepatic carcinogenesis.

The incidence and mortality associated with hepatocellular carcinoma (HCC) have been increasing worldwide, and [hepatitis C](#) virus (HCV) infection plays an important role in the pathogenesis of HCC. Previous studies have suggested that host factors, such as sex, [alcohol consumption](#), smoking, diabetes mellitus, and obesity, are important risk factors for HCC. Meanwhile, it has been reported that HCV infection causes [insulin resistance](#) and leads to oxidative stress, potentiating fibrosis and hepatic carcinogenesis. However, the factors that influence the development of HCC in HCV-infected patients remain largely unknown.

A research article published on February 21, 2011 in the [World Journal of Gastroenterology](#) addresses this question. The authors hypothesized that obesity influences the time to onset of HCC related to HCV infection, which is reflected in the patient's age at onset. To test this hypothesis, they investigated the relationship between [body mass index](#) (BMI) and lifestyle factors and age at onset of HCC in HCV-infected patients.

The research showed that the underweight patients (BMI

The results suggest that achieving an adequate body weight along with a reduction of alcohol intake in patients with chronic hepatitis C could help prevent hepatic carcinogenesis.

**More information:** Akiyama T, Mizuta T, Kawazoe S, Eguchi Y, Kawaguchi Y, Takahashi H, Ozaki I, Fujimoto K. Body mass index is associated with age-at-onset of HCV-infected hepatocellular carcinoma patients. *World J Gastroenterol* 2011; 17(7): 914-921.

[www.wjgnet.com/1007-9327/full/v17/i7/914.htm](http://www.wjgnet.com/1007-9327/full/v17/i7/914.htm)

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