Not just for the holidays, mistletoe could fight obesity-related liver disease

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Mistletoe hanging in doorways announces that the holidays are just around the corner. For some people, however, the symbolic plant might one day represent more than a kiss at Christmas time: It may mean better liver health. Researchers have found that a compound produced by a particular variety of the plant can help fight obesity-related liver disease in mice. Their study appears in ACS' *Journal of Agricultural and Food Chemistry*.

Jungkee Kwon and colleagues note that, according to recent research, Korean mistletoe produces a number of biologically active compounds. These include familiar ones such as steroids and flavonoids. Also, extracts from the plant have shown anti-obesity effects, but no one had confirmed which specific molecules were involved. Kwon's team wanted to investigate the matter and see if the key ingredient could also help fight fatty liver disease, which is associated with obesity and can progress to liver failure in some cases.

The researchers identified viscothionin as the compound in Korean mistletoe that affects fat metabolism in the liver. When they treated *obese mice* with it, their body and liver weights dropped. The scientists conclude that viscothionin could be explored as a potential therapeutic agent for the treatment of nonalcoholic fatty liver disease.

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