



Millions in U.S. Take Supplements That May Harm the Liver

Researchers focused on supplements containing turmeric, green tea, ashwagandha and more.

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A new University of Michigan (UM) study found that millions of Americans consume [supplements](#) that contain potentially toxic ingredients that can damage the liver.

Published in [JAMA Network Open](#), the study, which utilized data from the National Health and Nutrition Examination Survey, found that about 4.7% of adults surveyed took herbal and dietary supplements containing at least one of the following botanicals: turmeric; green tea; ashwagandha; black cohosh; garcinia cambogia; and red yeast rice.

The study's researchers said they had seen cases of liver toxicity from herbal and dietary supplements but did not know how many people were using the supplements or why, according to a [UM news release](#).

Liver health is important to everyone—the organ is the body's filtration system—but it's especially vital to people already experiencing liver conditions, such as [hepatitis](#), metabolic dysfunction-associated steatohepatitis ([MASH](#)) and [alcoholic liver disease](#).

The survey found that 15 million American adults reported using these products on a regular basis. What's more, most users said they take these botanical supplements on their own—not on the advice of a health care professional.

How the supplements jeopardize liver health isn't well understood, in part because supplements are not strictly regulated and can be purchased over the counter and online.

In addition, they are insufficiently addressed during medical screenings and are frequently mislabeled, according to UM. In fact, a [previous study found](#) "a great deal of mislabeling of some

of these products,” said hepatologist and professor of medicine Robert Fontana, MD, the study’s senior author.

“We performed analytical chemistry and found about a 50% mismatch between stated ingredients on the label and what they actually contained, which is quite alarming,” Fontana said. “If you buy a supplement and it says it has a certain ingredient, it’s basically a coin flip if that’s true or not.”

A majority of surveyed adults reported consuming turmeric (3.46%), followed by green tea (1.01%), ashwagandha and black cohosh (0.38%), garcinia cambogia (0.27%), and red yeast rice products (0.19%). Most said they used them to maintain or improve health or energy levels or to lose weight.

While the study does not establish a causal relationship between consumption of the supplements and liver injury, researchers note that a previous study found a 70% increase in liver transplants due to injury caused by supplements from 2010 to 2020 compared with 1994 to 2009.

“We’re not trying to create alarm,” Fontana said. “We’re just trying to increase awareness that the over-the-counter supplements people are taking and buying have not been tested nor necessarily proven to be safe.”

To read more, click [#Herbal Supplements](#). There, you’ll find headlines such as “[Complementary Therapies](#),” “[Dietary Supplements Linked to More Cases of Severe Liver Damage](#)” and “[Mislabeled Dietary Supplements May Cause Liver Damage](#).”