

# What Does Roundup Do to Your Liver?

#### Story at-a-glance

Daily exposure to ultra-low levels of glyphosate for two years led to non-alcoholic fatty liver disease (NAFLD) in rats

The study involved glyphosate exposures of 4 nanograms per kilogram of body weight per day, which is 75,000 and 437,500 times below EU and U.S. permitted levels, respectively

Past research has suggested the liver disease non-alcoholic steatohepatosis (NASH) may be primarily due to glyphosate disrupting gut metabolism of fructose

### **Reports are showing:**

As the results of increasing numbers of independent tests come in, it's becoming increasingly clear that glyphosate, the active ingredient in Monsanto's Roundup herbicide, is showing up virtually everywhere — in our food, water and even in baby food and women's breast milk. It's not altogether surprising glyphosate is the most heavily-used agricultural chemical in history — but it is incredibly concerning. And the health risks of glyphosate, though downplayed, are accumulating daily.

# How Glyphosate May Cause Liver Disease

The researchers noted that glyphosate may bring about toxic effects via different mechanisms, depending on the level of exposure, including possibly mimicking estrogen and interfering with mitochondrial and enzyme function. "Glyphosate is also a patented antibiotic (Patent No.: US 7771736)," the researchers said, "and can inhibit the growth of susceptible bacteria by inhibition of the shikimate pathway and could cause dysbiosis in the gastrointestinal tract. People may go on to develop cirrhosis of the liver, which in turn is linked to an increased risk of liver cancer which has been increasing over the last 2 decades.

## How Farmers Can Help Themselves and Their Consumers

Farming with more pesticides will just result in super weeds resistant to more pesticides. "We can't fight evolution — it's a losing strategy," Nathan Donley, Ph.D., a scientist with the Center for Biological Diversity, told EcoWatch.

The Huffington Post reported: "Time-tested agricultural practices such as crop rotation and a mix of other strategies are essential to combating resistance issues. (Monoculture) is bound to fail eventually"

## Did You Know You Can Find Out the Glyphosate Levels in Your Body?

Glyphosate is the active ingredient in Roundup, and is the most widely used weed-killing chemical on farms, lawns, schoolyards and other public spaces. It's also extensively applied to many crops before harvest. The World Health Organization (WHO) performed its own independent analysis in March 2015, and determined glyphosate is a probable carcinogen.

The Health Research Institute (HRI) in Iowa has developed a glyphosate test kit that will allow you to learn your personal glyphosate levels. There are a limited number of kits on offer at Mercola.com at cost, so no profit will be made on their sales. Ordering also allows you to participate in a worldwide study on environmental exposure to glyphosate. Test kits are extremely limited, so please order yours today.

# Soil Lovers say: Eat Organic, Invest In A Good Water Filtration System And In The Case Of Glyphosate, Avoid Desiccated Crops Like Wheat And Oats.