

21 ways to save your liver!

Dan Aykroyd made his way into the annals of comedy fame with his hilarious impression of chef Julia Child in a now-legendary skit on *Saturday Night Live*. "Save the liver!" he trilled while demonstrating how to cook a chicken, managing to cut off his thumb in the process.

But saving your liver is NO laughing matter. Each year more than 100,000 patients are discharged from U.S. hospitals with a diagnosis of chronic liver disease or cirrhosis. Thirty-four thousand die annually, making liver disorders the 12th leading cause of death in America. But even that statistic may be an underestimate; among adults age 45 to 64 it is No. 4 in mortality, close behind cancer and heart disease.



While alcoholism and viral hepatitis were traditionally thought to be the major causes of liver failure, it is actually *the consequences of obesity and metabolic syndrome* that have now surpassed these older risk factors. A condition called fatty liver has reached epidemic proportions, by some estimates affecting from 10-20 percent of the population. A recent study showed that up to 45 percent of Hispanics have some form of liver compromise. Unheard-of in pediatric patients until recently, fatty liver is even beginning to make inroads among our kids.

What is fatty liver? A normal liver is dark brown and uniform. A fatty liver, by contrast, is enlarged and streaked with yellow fat. If the condition persists it will lead to fibrosis (scarring), or even cirrhosis, a prelude to liver failure that necessitates liver transplantation.

How would you know if you have it? Typically, liver function tests (AST and ALT) are elevated on routine blood screenings. An ultrasound or CT scan of the liver shows characteristic changes. If you have triglycerides (a measurement of fat in the blood) greater than 250 on a standard lipid profile, chances are you are on well on your way to fatty liver.

Here are 21 things you can do to save your liver:

1. Lose weight: Pate de foie gras (literally, "pate of fatty liver") is deliberately induced in geese by force-feeding them with a funnel. Foes of animal cruelty have sought to ban it. But when it comes to people, we routinely put on the feedbag and cram excess calories into our bodies.

2. Eat less carbs: It's not an accident that makers of pate de foie gras put white

bread into the funnels. It turns out that, while overall excess food intake is a risk factor for fatty liver, carbohydrates in particular generate fat deposits in the liver. The worst culprit by far is high fructose corn syrup, which is used to sweeten just about everything these days, especially soda drinks.

3. Take probiotics: A strong link has been discovered between disordered intestinal microbial balance (“dysbiosis”) and fatty liver. Some studies suggest that a bad intestinal environment fosters “leaky gut syndrome,” which allows GI toxins to flood the liver via the portal circulation. Probiotics help to normalize intestinal flora.

4. Drink coffee: Coffee drinking has been shown to protect the liver by optimizing the flow of bile. It’s not clear whether it’s the dark polyphenolic compounds in coffee or the caffeine that helps liver function—even decaf may help, though opt for Swiss water-processed premium decaf to avoid the decaffeinating agent methylene chloride, which is harsh on the liver.

5. Detox! The liver is responsible for rendering harmless numerous toxic chemicals that we ingest in our food, water and air. It has enormous capacity to protect our bodies from harm, but it, too, can become overwhelmed. Help lighten your liver’s toxic load by using natural cosmetics and household products and avoiding processed foods with unpronounceable ingredients. Additionally, opt for organic produce and animal products, which are less laden with manmade chemicals.

6. Avoid alcohol: Adding booze to pre-existing fatty liver will accelerate liver deterioration. Since alcohol requires a healthy liver to be properly metabolized, I recommend zero tolerance for drinks.

7. Avoid certain supplements: Excess iron, niacin, and vitamin A (the retinol form, not beta carotene) tend to stress an unhealthy liver. Check your multi and B-complex for these ingredients.

8. Avoid exotic-sounding bodybuilding ingredients and shoddily manufactured herbal products: A recent study in the journal *Hepatology* claims that liver injury due to supplements and herbs is on the rise. I feel these claims are exaggerated and belie the excellent safety profile of the vast majority of supplements made by mainstream, responsible manufacturers.

However, bad players exist on the fringes of the supplement industry—the recent banning of certain sports supplements that contain significant amounts of anabolic steroids underscores the risk to unwary consumers. Herbal remedies with “proprietary formulas” that do not properly disclose their ingredients should be avoided. If in doubt, consult reliable sources such as the Emerson Quality Program.

9. Avoid oral hormones: Anabolic steroids taken for bodybuilding, the birth control pill and drugs such as Premarin taken for menopause place stress on the liver. The alternative for menopausal women is to use bioidentical hormones that are applied transdermally to the skin—this avoids a first-pass through the liver.

10. Avoid these drugs: Many drugs can be harmful to the liver. A particular concern are over-the-counter Tylenol, and cold and pain remedies that contain acetaminophen. Commonly prescribed medications including statins, acid-blockers, psychiatric drugs, certain antibiotics and anti-fungals are notorious for causing liver problems.

11. Take NAC: N-acetylcysteine is so protective to the liver that it is commonly administered to save patients who have overdosed on Tylenol from liver failure—it's the only known antidote. NAC is a potent precursor of glutathione, a powerful antioxidant.

12. Take milk thistle: Silymarin, derived from the milk thistle plant, *Silybum marianum*, has been used for centuries as a natural remedy for diseases of the liver and biliary tract.

13. Take SAME: S-adenosylmethionine (SAME) acts in a variety of ways to protect the liver from injury. Consider taking 400 mg twice daily to promote detoxification.

14. Take PC: A concentrated extract of lecithin, Phosphatidylcholine has been shown to protect the liver from insults including excessive alcohol.

15. Take alpha lipoic acid: Dr. Burt Berkson discovered the hepatic-protective benefits of alpha lipoic acid while a medical intern tasked with caring for patients with deadly Amanita mushroom poisoning. When patients with terminal liver failure unexpectedly recovered fully with ALA, he knew he was on to something.

16. Take vitamin E: Patients with fatty liver disease found significant improvements in the appearance of liver tissue on biopsies after taking 800 IU of vitamin E over a period of months.

17. Take vitamin C: When teamed with vitamin E, 500 mg/day of vitamin C slowed progression of fatty liver.

18. Take curcumin: Since fatty liver disease is at least in part an inflammatory

disorder, harnessing curcumin's potent anti-inflammatory effects is advisable.

19. Drink dandelion tea: A traditional remedy for liver disorders, dandelion is a cholagogue, which means it promotes mobilization of stagnant bile from the liver.

20. Avoid constipation: Lack of adequate bowel elimination allows intestinal toxins to accumulate, whereupon they directly circulate to the liver. Consider magnesium citrate capsules (two to six daily) as a gentle, non-habit forming promoter of regularity.

21. Get moving: According to recent studies, regular aerobic exercise helps optimize liver function. It may do so by curbing insulin resistance, a key promoter of fatty deposits in the liver.

Remember, often it is easier to prevent disease than to treat it, so take good care of your liver now. Don't wait until liver damage has set in to take advantage of these liver-saving tips and tricks.