# Non-Alcoholic Fatty Liver Disease

by Margy Squires



Your liver performs more than 500 different processes with its more than 300 billion specialized cells, making this organ critically important to your health. If as little as 10% of liver cells are glutted with fat, you could be diagnosed with non-alcoholic fatty liver disease or NAFLD. Intervention is required to preserve this vital organ!

The incidence of NAFLD has increased markedly over the past two decades, affecting an estimated 30% of Americans. Stats indicate that 75% of overweight and diabetic, and 90% of obese Americans have it. Early NAFLD has no symptoms and progresses silently but since it is a lifestyle related disease, you can learn how to prevent it with a few simple changes. If you already have NAFLD, learn what to do to stop the damage and destructive progression.

#### What is NAFLD?

It's a disorder of the liver when too much fat accumulates in liver cells and compromises their function in people who consume little or no alcohol. Ironically, NAFLD goes through similar changes as alcoholic liver disease. Untreated, NAFLD progresses, causing inflammation, tissue scarring (fibrosis) and cirrhosis which could require liver transplant.

## How is NAFLD diagnosed?

With no warning symptoms, usually the first clue is elevated liver enzymes AST and AGT that show up when an annual exam is done. Often, elevated triglycerides, cholesterol and blood sugars are part of the NAFLD profile, as well as being overweight/obese. If fibrosis is suspected, a special elastograph MRI may be done.

## What is the typical treatment plan?

The most recommended therapy is to lose 5-10% of your body weight as excess weight is the biggest contributing factor to fat in liver cells. Decrease sugar, especially fructose. There are no drugs approved for NAFLD to date.

## What does the liver do anyway?

The liver plays a critical role in human health as an organ and gland. Digestion and nutrient absorption. Metabolic functions. Sugar and cholesterol regulation. Hormone, protein and bile production. Every breath you take, food, drug and drink ingested, and anything you touch is filtered through the liver. The liver filters about 27 gallons of blood an hour to remove toxic substances. It is also a storage unit for blood, glycogen, fat and nutrients (and makes some nutrients for you). This is just the simple list that barely explains the complex job of this hardworking organ.

## How does NAFLD happen?

Like many disorders, the cause is unknown. Overworking mitochondria (the energy factories of cell) create free radicals. Possible oxidative stress compromises the cell function, especially if antioxidant levels are low, leaving the cell unprotected. Dietary consumption of too much sugar stored in the liver. If the stored sugar (glycogen) is not used for energy needs, it is converted to fat. Lack of exercise thus adds to the fat equation. As organs age,

efficiency typically declines but the numbers in the 15-29 year old group are also increasing.

## Why are probiotics recommended?

One of the two portals the liver receives blood from is the hepatic vein from the small intestines. Since filtering blood is one of its "jobs", whatever is in the blood from the GI tract must be filtered to glean valuable nutrients and to eliminate toxic substances. Keep your GI tract optimal with probiotics so the liver receives less toxic blood and does less work and gets healthier blood with more nutrients.

### Are there other options?

Many disease/disorders have known nutrient deficiencies. Along with diet and exercise to reduce the fat load, the next step is adding nutrients to support liver function and protect the cells. For example, antioxidant power with vitamins E, alpha lipoic acid (ALA) and coenzyme Q10. A combination of E (700 IU) and ALA (300 mg) taken for 6 months improved all markers of NAFLD. Other studies used ALA 600 mg twice a day since it is both an antioxidant and helps sugar regulation. Dr. John Goff of the American Liver Foundation recommends Vit E up to 800 IUs daily as part of the therapy for NAFLD. CoQ10 at 100 mg/day reduced elevated liver enzymes AST and AGT in another study. Remember that antioxidant also work well as a network team. To reduce inflammation, curcumin was given in doses up to 3000 mg (if taking bioavailable Meriva® Curcumin, use 1500 mg) for 8-12 weeks.

Remember that NAFLD cannot be changed overnight and studies with the longer time frames showed the best results. **Intervention is the best strategy to slow and** 

reverse the progression of NAFLD. The good news is the liver is one organ that can regenerate and help itself heal so help yours do just that!

©TyH Publications (M. Squires) For informational purposes only.

For information on TyH and its health products, visit e-tyh.com. Request a free catalog by emailing <a href="mailto:customerservice@e-tyh.com">customerservice@e-tyh.com</a> or calling 480-837-7590.