

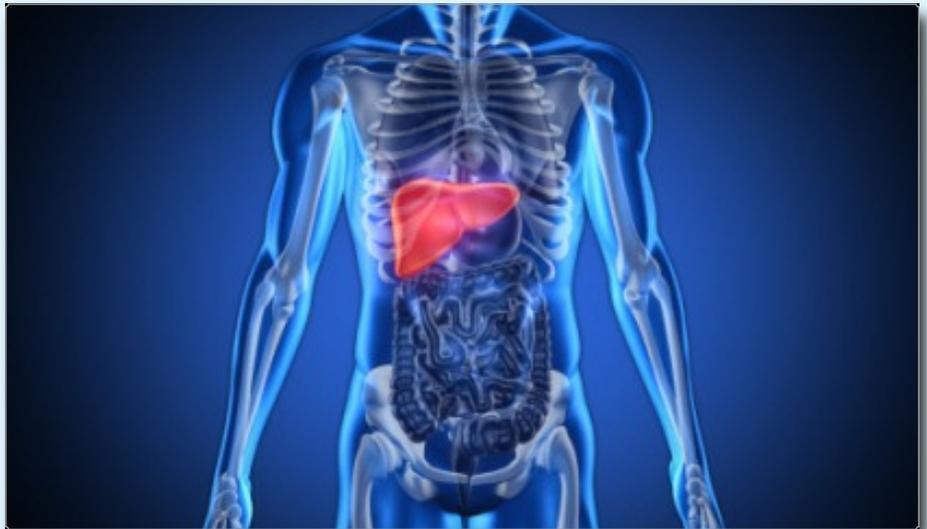
Non-Alcoholic Fatty Liver

"Not only do 1 out of 4 people have the silent disease non-alcoholic fatty liver disease but an estimated 20% of that statistic are children."

If potentially one out of four of my patients has a silent disease that can have life threatening consequences, why don't I know about it? You would be surprised as I was if you read the Scientific America article on non-alcoholic fatty liver disease. The good news, it's an easy fix. The bad news is that sometimes people don't know about it until it is too late.

You see, the liver is so adaptable that it can function with non-alcoholic fatty liver disease or NAFLD without breaking down for 5-10 years. Kind of like the bald tires I used to drive on. The tires held up just fine but at some point the stresses of the road took its toll on them and they just blew out.

The author of the article, Dr. Hyder Jamal, MD, who is board certified in both gastroenterology and internal medicine says that "not only do 1 out of 4 people have the silent disease NAFLD but an estimated 20% of that statistic are children who



have never had a drop of alcohol."

He states "NAFLD describes the accumulation of fat in hepatocytes, or liver cells, in excessive amounts. These fats are typically triglycerides which the body naturally stores and creates from calories that it doesn't need right away. Normally these fats are burned off for energy; but if the body is overwhelmed with calories and a lack of exercise, then the triglycerides are simply never released. They instead accumulate in the liver and cause NAFLD which can lead to inflamma-

tion, scarring, liver dysfunction and even liver cancer."

The reason for this accumulation of fat is a result of the way the liver processes simple carbohydrates most notably fructose. Fructose is similar to alcohol in the damage that it can do to your liver. Unlike glucose, which can be used by virtually every cell in your body, fructose can only be metabolized by your liver. Since nearly all fructose gets shuttled to your liver, fructose ends up taxing and damaging your liver in the same way alcohol and other toxins do.

In another Tuesday Minute, which you can see below, we discussed the dangers of fructose based on Dr. Johnson's work, author of "The Sugar Fix". Dr. Johnson emphasizes that increased levels of fructose have been associated with increases in uric acid. He says increased uric acid is also a precursor for hypertension. He believes serum uric acid should be 3.0 - 5.5. If levels exceed that threshold, there is an increased risk for diabetes, obesity, hypertension, and kidney disease.

Dr. Lustig, Professor of Pediatrics in the Division of Endocrinology at the University of California goes a step further by saying, "fructose is a chronic, dose-dependent liver toxin." And just like alcohol, fructose is metabolized directly into fat - not cellular energy like glucose". So excess sugar, particularly fructose, will have a deleterious effect on our liver.

Knowing that alcohol, caffeine, trans fats, pain relievers like acetaminophen, pesticides, herbicides and heavy metals also take a toll on the liver, it behooves us as wellness clinicians to look for early warning signs to determine when the liver needs a vacation: i.e. some foods and nutrients to help flush or release collected toxins.

Let's discuss some lab tests and why they can be helpful. We want to treat the liver when non-alcoholic fatty liver disease is developing as opposed to waiting for inflammation, scarring and severe liver dysfunction.

I've included a longer list of functional signs that indicate if the physiology of the liver is compromised as well as nutrients to support the weaknesses; but for now, if you see: elevated triglycerides over 50% of the cho-

lesterol, reduced albumin below 4.0, decreased SGPT levels below 10 or increased SGPT levels above 30, you can be pretty sure trouble is brewing.

The three major nutrients to support a fatty liver are: a rice based Inositol at 3 grams per day, a mixture of organic beets and ox bile as Beta Plus at 2 with each meal and a source of choline as Phosphatidylcholine 3 with each meal.

Dr. Carl Pfeiffer and others have found Inositol to reduce total lipids and cholesterol. Organic beets provide methyl groups for liver detox as well as help to thin sluggish bile, allowing the liver to release toxins via bile into the gallbladder. Choline and betaine from beets are lipotropic factors.

Methylation factors like 5-MTHF and enough B6 until patients remember their dreams should also be considered, see notes below.

I hope you can understand how important functional tests like this can be. Dr. Abbas Qutab teaches how to utilize these and other basic laboratory tests to predict and prevent disease long before it becomes unmanageable. Watch for dates and try to attend one of his seminars at a city near you.

If the statistics quoted by the Scientific America article are true and there is no reason to think they are not, "One out of four of your current patients can be helped by some very simple "wellness modifications".

Thanks for reading this week's edition. I'll see you next Tuesday.