## What is Non-Alcoholic Fatty Liver Disease?

**Michael Murray, ND** 



**Rebekah Kelley:** Welcome to the Humanized podcast, all about personalizing your health. I am your host, Rebekah Kelley and today we'll be discussing What is Non-Alcoholic Fatty Liver Disease, with Dr. Michael Murray. Before I introduce Dr. Murray, I want to remind everyone to subscribe and get all of our other variety of casts in audio, video and transcription at HumanizedHealth.com. I'd also like to thank our lead sponsor, Village Green Apothecary, at MyVillageGreen.com.

A little bit about Dr. Murray. He is one of the world's leading authorities on natural medicine. He has dedicated his life to educating physicians, patients and the general public on the tremendous healing power of nature. Dr. Murray has published over 30 books, written numerous articles for major publications and has appeared on hundreds of radio and television programs. Dr. Murray is a graduate, former faculty member, and serves on the board of regents of Bastyr University in Seattle, Washington.

Dr. Murray, thank you so much for being here with us.

Michael Murray: It's my pleasure, Rebekah.

**Rebekah Kelley:** So on the topic of, what is non-alcoholic fatty liver disease, first off, what causes this?

**Michael Murray:** Non-alcoholic fatty liver disease is liver disease caused by things that aren't related to alcohol. And non-alcoholic fatty liver disease is the most common liver disease in America. And what causes it, well, it's caused by obesity, is the primary cause. And we see fatty liver disease in virtually everyone who is obese. So the true number is actually probably closer to 40% and climbing. This is a major epidemic and it's not given enough attention because medicine doesn't have much to offer, but in natural medicine we have a lot to offer. And that's what we want to get to today.

Rebekah Kelley: So, what are some of the consequences of non-alcohol fatty liver disease?

**Michael Murray:** It plays a big role in the metabolic syndrome, and metabolic syndrome we know is related to insulin resistance. So we get an increased risk for type 2 diabetes, we get increased risk for cardiovascular disease and virtually all metabolic disease. So our liver, this is so important to our overall health. The liver performs over 500 separate jobs and it's critical to every aspect of our physiology. It's involved in our immune function, our detoxification, our hormonal system, our digestion. So when we have impaired liver function, we have impaired health and we have an impaired life.

Rebekah Kelley: That's a huge hit.

Michael Murray: Yeah.

Rebekah Kelley: What are some natural approaches to non-alcohol fatty liver?

**Michael Murray:** The first thing is trying to lose weight. Weight loss is curative for most people. It's that simple. And one of the things that I've found to be quite helpful in helping people achieve their weight goals is using a soluble fiber matrix called PGX. And I think that's really kind of the first step, is utilizing PGX. You take five grams before meals. It can promote satiety, reduce the amount of calories consumed, and it has an ability to improve the action of insulin. Getting insulin working better helps the liver and helps lose weight and control the appetite, as well.

There's a lot of dietary factors that we can utilize as well to help with the liver. Sulfur-containing foods like garlic, legumes, onions, and even eggs. Good sources of soluble fiber, not just oat bran, but also pears, apples, legumes. Cabbage family vegetables, especially broccoli, Brussel sprouts and cabbage, and then things like artichokes, beets, carrots and dandelion can be very helpful.

There's a lot of nutritional supplements that we should be using in non-alcoholic fatty liver disease. These include what are called lipotopics. These are compounds that promote the flow of bile and fat from the liver. This includes things like SAMe, betaine, choline, n-acetylcysteine (critical), B6, folic acid and vitamin B12. These are some of the key things that we need to use.

And as far as plant medicines go, there are a long list of plants that can be helpful. Basically, we're utilizing many of the same plants that we use to help improve insulin sensitivity, help insulin work better, and that helps blood sugar control, and that takes a great stress off the liver. And that can allow that liver to kind of recuperate and flourish. As far as a specific herb, I like milk thistle. Milk thistle extract, silymarin, is well known for its ability to improve liver function. There's a special form called silybin phytosome. This is an enhanced form of milk thistle and it has shown particular benefit in non-alcohol fatty liver disease. The best studies used a dose of about 150 to 200 milligrams, three times a day. That's of the regular silymarin. With the silybin phytosome, we can use basically half that dose, 75 to 150 milligrams twice daily has been shown to be very effective.

So those are my recommendations as far as some supplements. To kind of kickstart people, I do like a 3-day juice fast. It just kind of gives that liver a vacation. And we should be taking some liver-supportive agents while we're going through that 3-day juice fast – vitamin C, take the fiber matrix that I mentioned, PGX, take a lipotropic formula with something like n-acetylcysteine or SAMe in it, and that can help keep things flowing.

Rebekah Kelley: Is there anything else that you would suggest that one take as an approach?

Michael Murray: Well again, anything that's going to be supportive for the liver is going to be helpful. I think n-acetylcysteine is something that can benefit people beyond supporting the

liver. N-acetylcysteine is an active form of cystine, which is an amino acid and the body utilizes that to make a compound called glutathione. And glutathione is our main detoxifying compound. When the liver becomes deficient in glutathione, it leads to significant damage and fatty infiltration. People may know that can happen with Tylenol, with acetaminophen, especially if alcohol is consumed. Well, n-acetylcysteine is a medical treatment for liver damage caused by acetaminophen. If you go to the emergency room and you have Tylenol toxicity, they're going to give you n-acetylcysteine because it can rescue your liver. And it can rescue our liver in patients with non-alcohol fatty liver disease, as well. Typically, the dose is 600 milligrams twice a day. I think that is something that is really helpful for boosting those glutathione levels and protecting the liver and resolving this fatty infiltration.

## Rebekah Kelley: Is there anything else that we should know?

Michael Murray: Well, I think we call it non-alcohol fatty liver disease because it occurs in people that don't drink alcohol. But if you have this non-alcohol fatty liver disease and you drink alcohol, you're adding fuel to the fire. So, think about it. People are overweight, people are obese, they have fatty livers and they drink alcohol. It's just worsening this. And it is a very serious condition. Nonalcoholic fatty liver disease can progress to another liver disease called non-alcohol steatohepatosis. NASH is the abbreviation. And NASH is associated with cirrhosis, and you don't want to get cirrhosis because if you get cirrhosis of the liver, you're going to be in liver failure and your health is just, it's terrible. And it's terrible to see people progress with cirrhosis. We see this with not only alcoholics, but also with people with fatty liver disease that don't get it under control. So get that liver under control, get rid of that congestion, get rid of that sluggish liver, lose weight if you have to, and then support your liver with these nutritional approaches.

## Rebekah Kelley: And are there any foods that specifically one should avoid?

**Michael Murray:** Anything that's a potentially harmful for the liver. High sugar, too much fat in the diet, particularly fried foods – fried foods are very hard on the liver – and then foods that are full of toxins, whether it be pesticides and other environmental toxins, or excessively cooked meat. Charred meat is really harmful. So eat organic, reduce your meat intake, and if you are going to eat meat, make sure you eat organic forms because, we focus a lot on organic produce, but the real problem is animals concentrate those pesticides even more. So we have to eat organic produce, but even more important is making sure we're eating organic eggs, free range, and making sure that we're avoiding dairy products that are non-organic. And then eating free range beef and non-antibiotic-treated livestock.

So, those are some big things to avoid. But again, the key thing for non-alcohol fatty liver disease is to get your weight under control. PGX is, I think the magic bullet in helping people achieve and maintain their ideal body weight.

**Rebekah Kelley:** Wonderful. Thanks so much, Dr. Murray, those are really valuable insights.

Michael Murray: Thank you, it's my pleasure.

**Rebekah Kelley:** Dr. Murray can be found at www.DoctorMurray.com. Let me you remind you to subscribe and get access to all Humanized videos, podcasts and transcriptions from all of our thought leaders on personalized health at HumanizedHealth.com. Thank you so much.