How To Reverse Fatty Liver Disease (Diet Plan Included)

The combination of too much fat, too much sugar, and too little exercise is the best way become obese – in the liver. Fat buildup in the liver that is not due to alcohol consumption, also known as non-alcoholic fatty liver disease, affects 20-30% of adult populations in developed countries.

At first, this disease looks like another major issue to worry about, but it is simple and easy to reverse. In fact, it is intimately linked with other reversible conditions like type 2 diabetes, heart disease, hyperlipidemia, metabolic syndrome, and obesity because they all share a similar cause.

Related: ***How To Heal Your Gut***

The Vicious Cycle of Fatty Liver Disease

Think of fatty liver disease like obesity and diabetes of the liver. When we eat an excess of calories and sugar, insulin is released from the pancreas to let our cells that we have plenty of energy. Our cells take what they need from the fat and sugar that is circulating in the blood.

Problems arise when we eat too many calories and too much sugar. The cells already have enough energy, so they stop listening to insulin – a biological process called insulin resistance. As a result, fat and sugar build up in the blood, contributing to type 2 diabetes, heart disease, hyperlipidemia, metabolic syndrome, and obesity.

The liver cells are also negatively influenced by the influx of calories and sugar. They become insulin resistant and start making fat from the excess sugar (fructose causes the most

liver fat gain). Eventually, fat builds up in the liver to the point that it becomes toxic and creates inflammation.

The combination of obesity in the body and the liver causes inflammatory cytokines and reactive oxygen species to accumulate. This leads to more inflammation and oxidative stress that damages the liver.

Meanwhile, in the gut, a lifestyle that promotes fatty liver disease changes the microbiome and increases candida growth. This increases inflammation, oxidative stress, and endotoxin absorption, which causes more liver damage.

Recommended Reading: *Lower Cholesterol and Prevent Heart Disease Without Drugs*

Don’t worry – there is a silver lining to this vicious cycle. It is possible to reverse nonalcoholic fatty liver disease and liver damage naturally.

How To Reverse Nonalcoholic Fatty Liver Disease

The key to disrupting the vicious cycle of fatty liver disease before it damages the liver is exercise and diet.

That’s right – Treating obesity of the liver is similar to treating obesity of the body. In fact, many scientific papers agree that the treatment of nonalcoholic fatty liver disease should be focused on controlling diabetes, obesity, insulin resistance, and hyperlipidemia.

This means that the best way to reverse nonalcoholic fatty liver disease and prevent liver damage is with the same lifestyle that has been proven to control diabetes, obesity, insulin resistance, and hyperlipidemia.

The Fatty Liver Disease Lifestyle Cure

In a review of studies on nonalcoholic fatty liver disease treatments, the researchers found that weight loss leads to a substantial improvement in this condition. Weight loss of 3-5 % reduces liver fat, but a weight loss of 10% may be needed to reverse liver damage. To accomplish this, researchers used the most well-known ways to promote weight loss: caloric restriction and exercise.

Let’s start with exercise. Physical activity alone improves insulin sensitivity and reduces fat in the liver. In fact, one study kept the body weight of their subjects constant while they implemented an exercise training program. They found that exercise alone leads to a substantial decrease in liver fat.

Related: ***If You Drink Soda, It’s Probably The Worst Thing You Do To Yourself (even worse than smoking!)***

In studies that combine caloric restriction with exercise, the results are even more promising. For example, one study took twenty-five obese patients with fatty liver and put fifteen of them on a calorie restricted diet and exercise program for 3 months. The calorie restricted diet was based on a daily calorie intake of the patient’s ideal weight in kilograms multiplied by 25 calories, and the exercise program is described as “walking or jogging”.

The researchers found that the treatment group’s “weight, blood biochemical data such as aminotransferase, albumin, cholinesterase, total cholesterol and fasting blood glucose values, and steatosis (fatty liver) were significantly decreased after the trial. In the control group, there were no significant differences in the clinical and histological findings before and after the trial.”

It’s that simple. Eat less and move more, and you can reverse

fatty liver disease. Many other review articles on the treatments for nonalcoholic fatty liver disease also agree on this simple principle.

The jury is still out, however, on the best diet for nonalcoholic fatty liver disease. We know for certain that restricting your calories helps, but there is an even better way to reverse disease and improve liver health.

The Best Fatty Liver Diet

Restricting calories works, but the studies tend to ignore the importance of food quality. For example, diets that consist of mainly refined and processed food have been found to promote the growth an obesity-causing microbiome. On the other hand, eating a high-fiber plant-based diet favors a microbiome that reducing inflammation and improves health. This is one of the reasons why it is best to stop counting calories and count on these guidelines instead:

1. Limit Your Added Sugar Intake

By doing this, you will greatly reduce the likelihood of fat build up in the body and the liver. You will also reduce insulin resistance, blood sugar, inflammation, and gut health issues as well.

Related: ***Signs You Have Too Much Candida***

2. Eat High-Fiber Foods With Every Meal

The healthiest way to get more fiber is by consuming plenty of low-carbohydrate vegetables. They will improve gut health, reduce the absorption of harmful lipopolysaccharides, and improve the health of the cells throughout your body.

Try the salad recipe in this article for the best results: *Detox Cheap and Easy Without Fasting – Recipes*

Included

3. Eat Liver Healing Foods

You can also add these four scientifically-proven liver healing foods to your diet to help reverse fatty liver disease:

Oily Fish

Two or more servings of oily fish per week can have a beneficial effect on blood lipids and may reduce liver fat. Wild-caught salmon is one of the healthiest oily fish.

Nuts

A handful of nuts per day improves liver function tests. Walnuts, in particular, have been found to be one of the healthiest nuts for your liver.

Avocado

Avocado consumption is associated with weight loss and improved liver tests. This is mainly because avocados have a substantial amount of monounsaturated fat, fiber, and antioxidants.

Olive Oil

This popular oil improves liver function tests and helps with weight loss because it is loaded with antioxidants and oleic acid.

Related: *Best Cooking Oils Health Benefits Smoke Point Which to Use and Avoid*

4. Use Liver Healing Supplements

When you search the internet for liver supplements, you are inundated by supplements that seem promising, yet have no shred of evidence that backs of their claims. To save you some

time and experimentation, here are three supplements that have been found to improve liver health:

Spirulina

Spirulina is a natural algae powder that is incredibly high in protein and a good source of antioxidants, B-vitamins, and other nutrients. A dose of 4.5 grams (about a teaspoon) per day of spirulina has been shown to help reverse fatty liver disease.

Betaine

Betaine is a compound that is naturally found in beets and spinach. It is essential for the normal function of the blood, bones, eyes, heart, nerves, and the brain, and it reduces build up of fat in the liver.

The best way to supplement with betaine is by eating raw beets or taking a TMG supplement. TMG stands for Trimethylglycine, and it is the form of betaine that is found in beets.

Milk Thistle

Milk thistle contains a compound called silybin. Silybin can reduce fat build up in the liver, and it may even reverse liver damage.

Probiotics

In a meta-analysis on the effects of probiotics on nonalcoholic fatty liver disease, the researchers found that probiotic therapy can help reverse insulin resistance, improve liver function, and reduce inflammation. However, not just any probiotic will do.

Product Recommendation: Syntol AMD – Arthur Andrew Medical

Bifidobacterium longum, for example, was found to be the most effective probiotic strain at reducing liver fat, inflammation, and endotoxin levels. The best way to add this

strain to your diet is by taking a stomach-acid resistant probiotic that contains it. FloraMend by Thorne Research is one of the best probiotics in this regard.

Recommended Reading: *Probiotics, Bacteria, and Our Health*

5. Limit Alcohol Consumption

Although no alcohol consumption is best for reversing nonalcoholic fatty liver disease, some alcohol consumption may be beneficial as well. In fact, one nonalcoholic fatty liver disease treatment review found that limiting alcohol consumption to less than one drink per day may actually have a beneficial effect on liver health.

6. Exercise Everyday

The kind of exercise that is best for reversing fatty liver disease is not yet known, but almost any type of exercise will help. It is probably best to go for brisk walks throughout the day and do resistance training at least 3 times a week.

But don’t get caught up in finding the perfect workout plan. Any exercise is better than no exercise for all aspects of health. Start by doing what you enjoy doing.

What About Using Drugs for Fatty Liver Disease?

For a typical nonalcoholic fatty liver disease patient, pharmaceutical drugs are not usually recommended. However, when the disease progresses to liver-damaging nonalcoholic steatohepatitis (NASH), drug therapy may be necessary.

Related: *The Gallbladder, Bile, and Gallstones*

A drug called thiazolidinedione has been shown to be effective for improving diabetes, liver function, and fibrosis of the liver. However, there is one problem – patients relapse when

they aren’t on it.

In a study that tested thiazolidinedione in the treatment of nonalcoholic steatohepatitis, researchers found that diet and exercise were essential in maintaining the results achieved by drug therapy. When patients in the study followed up after 37 months, the patients who had sustained exercise programs and reduced their body mass index, also had normal liver enzyme levels, fibrosis improvement, and were free from diabetes. Conversely, patients who made no lifestyle changes had gotten worse after discontinuing the drug.

What are we suppose to take away from this study? That, even in the worst case scenario, pharmaceutical drugs cannot replace diet and exercise.

Putting It All Together

You can reverse fatty liver disease by following these six simple steps:

1. Limit sugar intake
2. Eat low-carbohydrate vegetables with every meal
3. Exercise every day
4. Take scientifically-proven liver healing supplements like spirulina, betaine, milk thistle, and probiotics
5. Include liver healing foods in your diet like avocado, nuts, oily fish, and olive oil
6. Limit alcohol intake

Related: *Sugar Leads to Depression – World’s First Trial Proves Gut and Brain are Linked (Protocol Included)*

Sources:

- *The diagnosis and management of non-alcoholic fatty liver disease: Practice Guideline by the American Association for the Study of Liver Diseases, American College of Gastroenterology, and the American*

Gastroenterological Association – Wiley Online Library
- *Treatment of non-alcoholic fatty liver disease* – BMJ Journals
- *Non-alcoholic fatty liver disease: an overview of prevalence, diagnosis, pathogenesis and treatment considerations* – Clincial Science
- *New-found link between microbiota and obesity* – NCBI
- *Association between composition of the human gastrointestinal microbiome and development of fatty liver with choline deficiency.* – NCBI
- *Eubiosis and dysbiosis: the two sides of the microbiota.* – NCBI
- *A meta-analysis of randomized trials for the treatment of nonalcoholic fatty liver disease.* – NCBI
- *Effects of exercise training on intrahepatic lipid content in humans* – Springer Link
- *The effects of low carbohydrate diets on liver function tests in nonalcoholic fatty liver disease: A systematic review and meta-analysis of clinical trials* – NCBI
- *Therapeutic effects of restricted diet and exercise in obese patients with fatty liver* – Science Direct
- *A Low-Carbohydrate as Compared with a Low-Fat Diet in Severe Obesity* – The New England Journal of Medicine
- *Effect of Vitamin E or Metformin for Treatment of Nonalcoholic Fatty Liver Disease in Children and Adolescents: The TONIC Randomized Controlled Trial* – The JAMA Network
- *A Randomized Controlled Trial of Metformin versus Vitamin E or Prescriptive Diet in Nonalcoholic Fatty Liver Disease* – ProQuest
- *Insoluble Dietary Fiber from Pear Pomace Can Prevent High-Fat Diet-Induced Obesity in Rats Mainly by Improving the Structure of the Gut Microbiota* – JMB
- *Hepatoprotective effects of Spirulina maxima in patients with non-alcoholic fatty liver disease: a case series* – BioMed Central
- *Spirulina improves non-alcoholic steatohepatitis,*

visceral fat macrophage aggregation, and serum leptin in a mouse model of metabolic syndrome – Science Direct
- *Spirulina* – Examine
- *Sitting for just a couple hours has measurable (and negative) health impact* – PLOS
- *Oily fish, coffee and walnuts: Dietary treatment for nonalcoholic fatty liver disease* – NCBI
- *Avocados Contain Potent Liver Protectants* – Science Daily
- *Non alcoholic fatty liver disease and metabolic syndrome* – NCBI
- *Metabolic Endotoxemia Initiates Obesity and Insulin Resistance* – Diabetes Journals
- *Physical activity as a treatment of non-alcoholic fatty liver disease: A systematic review* – NCBI
- *Prebiotic fiber modulation of the gut microbiota improves risk factors for obesity and the metabolic syndrome* – NCBI
- *Milk Thistle* – Examine
- *Thiazolidinediones for the treatment in NASH: sustained benefit after drug discontinuation?* – NCBI
- *Effects of probiotics on nonalcoholic fatty liver disease: A meta-analysis* – NCBI