Non-Alcoholic Fatty Liver Disease is Linked to Brain Shrinkage

Non-alcoholic fatty liver disease (NAFLD), where too much fat accumulates in the liver without alcohol, has now been linked to greater than normal age-related brain shrinkage by a study published in JAMA Neurology. In the study, people with NAFLD from age 60 to 70 saw a reduction of brain volume equivalent to 4.2 years of aging, and patients under 60 averaged a brain volume reduction equivalent to 7.3 years of aging. The connection was notable even after other factors related to brain aging like heart disease, diabetes, blood fat levels, smoking, alcohol consumption, overweight, lack of exercise and menopausal status were accounted for in the study.

The Liver Brain Connection

When the liver isn't able to properly filter the blood, toxins left behind can accumulate in the brain, causing memory loss, sleep disturbances, and trouble concentrating. The recently published study that found a link between a clearly unhealthy liver and higher levels of brain degeneration measured the overall brain volume of 766 middle-aged men and women with MRI scans and used abdominal CT scans to examine their livers. Nearly twenty percent of those examined had NAFLD. Even after other dementia risk factors were accounted for, research subjects of all ages experienced increased brain aging equivalent to at least a year. Lead author Galit Weinstein from School of Public Health at the University of Haifa concludes, "In turn, if one retains a healthy liver, his/her risk for other diseases, such as diabetes and heart diseases, is also reduced. In this study, we show that keeping a healthy liver may also be linked with a healthier brain."

How to Support Your Liver

Experts agree that the best way to manage NAFLD is through diet and lifestyle, but what does that mean? This is good news because this means you can do something about it. Not all diets and lifestyles are the same, and recent science has found that environmental factors can also play a role in the development of NAFLD. Yet there are some simple steps and changes you can implement immediately that will decrease your risk of NAFLD and elevate your overall level of health.

Related: ***How To Reverse Fatty Liver Disease (Diet Plan Included)***

Diet And…

First and foremost, when you have or are at risk of developing, NAFLD, sugar is not your friend. Sugar helps fat build up in the liver, and it aggravates a multitude of other problems in the body. It tastes really good. We're biologically programmed to crave it. It's probably one of the worst things you can have, especially if you're at risk for a serious health condition. Consume your sugar in fruit form as the fiber slows the absorption of the sugar, but too much of any one kind of fruit can still lead to issues.

Next, rally your beneficial bacteria. Produce is the best way to give those helpers the fuel they need. That bacteria can then focus on properly digesting fat in the gut, keeping large fat molecules from overwhelming the liver. The key word here is produce. Among other things, fresh, raw vegetables and fruits have fiber, reducing the absorption of harmful lipopolysaccharides and sugars. Organic is also important, as NAFLD and brain cancer have both been linked to glyphosate. While it's no longer possible to avoid the herbicide completely, organic produce gives you the least amount of exposure. Other liver boosting foods oily fish, avocado, olive

oil, and nuts.

Related: *Start Eating Like That and Start Eating Like This – Your Guide to Homeostasis Through Diet*

Up next? Vitamin c. The liver benefits greatly from vitamin c and its antioxidant properties. A dose as small as 500 mg of the vitamin can help prevent fatty buildup and other liver diseases, like cirrhosis. Turn that dose up to 5,000 mg and the vitamin c begins to flush fat from the liver. If you can get a nutrient from whole food sources, you should, and there are numerous fruits and vegetable rich in vitamin c. Load up on those, or if you prefer to drink your vitamins, check out this super simple lemonade with bonus cranberry action.

Exercise!

Finally, like any good healthy lifestyle advice article says, exercise. The good news here? It doesn't matter what kind of exercise you chose. Previous studies found that both aerobic and resistance training-based exercise regimens reduce fat in the liver effectively. They also suggest that the intensity and amount of exercise makes a difference, but the best exercise is the one you do and do regularly.

Connections Are Crucial

Everything in life is about connections, yet it can be difficult to fathom just how connected the body really is. Your brain health absolutely depends on your gut. Now we find that your brain health, especially as you age, depends on your liver. And the liver depends on the gut, and how well the microbes there are able to do their job. A healthy gut makes all the other organs and systems it connects to healthier. Fix your gut, fix your health.

Recommended Reading:

- Sugar Leads to Depression – World’s First Trial Proves Gut and Brain are Linked (Protocol Included)
- *Healthy Sugar Alternatives and More*
- *Sugar Industry Has Had Evidence Linking Sugar to Heart Disease for Nearly Half a Century*

Sources:

- *Fatty liver linked to a shrinking brain* – Reuters
- *Monsanto’s Glyphosate, Fatty Liver Disease Link Proven – Published, Peer-reviewed, Scrutinized Study* – Organic Lifestyle Magazine
- *How To Reverse Fatty Liver Disease (Diet Plan Included)* – Organic Lifestyle Magazine
- *15 Health Problems Linked to Monsanto’s Roundup* – EcoWatch
- *There must be FIFTEEN WAYS TO LOVE YOUR LIVER* – DoctorYourself
- *New Study Indicates that Exercise Improves Non-Alcoholic Fatty Liver Disease* – Elsevier