"When everything seems to be going against you, remember that the airplane takes off against the wind, not with it."

- Henry Ford

As Mary Poppins would say, this quote is "practically perfect in every way". It's been a tough year and fortunately, it's almost over. My wish for you is that 2021 brings you all the happiness you deserve. This year has tested our faith and I for one am continuing to believe that there is light at the end of this very dark tunnel. Sometimes, we have to face adversity to not only grow, but to appreciate what is often right in front of us. Adversity can be just what we need to take a fresh step in a new direction. So let's fly against the wind and enjoy where we're taken. If you need some help, because I know how hard it can be, please be sure to contact me.

Yours in health,

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What the Heck is TUDCA?

Ok, I'll admit it. I thought I was pretty tuned into important supplements, but this was a new one to me. You all know that I'm deep into alternative medicine and am laser-focused on how get and stay well naturally. My mission is to share what I learn with all of you. I have this amazing doctor who helps me keep my hormones in balance and she told me about a supplement to help my liver and kidney function. Why did this even come up? Well, one of my super powers is making wine disappear. Does that impact my liver and even my kidneys? Probably, because a couple markers from my recent blood work indicated something was a bit amiss. So while I'm a firm believer in living a healthy lifestyle, life is much too short to not enjoy things you love. For me, that would involve a couple of glasses of wine with dinner or a Bailey's and coffee after a long hike on a cold day. Since these things I love aren't the healthiest things I consume, I need to offset their potential negative effects. She told me about TUDCA and I was intrigued. So I did what I like to do when something intrigues me: I research it.

So what this heck is TUDCA? It's short for Tauroursodeoxycholic acid, a component of your bile acid. It's a water-soluble bile salt used to help people who have problems with their liver. Your body only has a small amount of this nutrient and increasing it can help clear up liver issues. It's a pretty rare supplement that you can't get from food. You may recall a newsletter I sent back in March 2017 about NAC. Well NAC, along with taurine, are main competitors of TUDCA. NAC is an antioxidant that provides liver support and probably has more long-reaching benefits than TUDCA. But that doesn't mean it's better for you. TUDCA is actually much better at building overall liver strength and capacity. The best part is that you don't have to be reliant on it forever to see results. Some people think that's the case with NAC.

Here's an issue with TUDCA. My least favorite governmental agency hasn't backed it as a potential treatment for liver failure. The reason is because the research isn't quite there for it to be approved as a true "medication." Plus, they don't seem to like natural treatments that actually help you. But I digress. TUDCA seems to work better if you take it as a preventative measure, particularly if you practice unhealthy behaviors....such as drinking too much or taking steroids. Steroids destroy your liver....much

like too much alcohol over time. If you partake in too much of either, you have to ive your body the proper nutrients to offset the negative effects.

Research shows that TUDCA can help protect you from certain viruses like Hepatitis, which can damage your liver and stop it from functioning well. TUDCA can help block the virus from entering your cells by acting as a shield of armor. It also appears to help block Influenza A from entering your cells because it seems to stop the virus from replicating. TUDCA can not only increase your body's ability to fight the virus, but also help your immune cells kill the virus faster. TUDCA can also stop the RSV infection from spreading in your body. Many kids suffer from RSV.

Here are a couple of other ways TUDCA can help:

- 1. TUDCA Helps the Thyroid. It helps increase thyroid function by helping to upregulate energy in your cells. To simplify, our bodies have both brown and white adipose tissue. Brown is more active than white. One study showed that TUDCA can DOUBLE the amount of brown adipose tissue, which means it can increase the amount of energy you use and help you better use insulin.
- 2. TUDCA Helps the Heart. High levels of blood sugar don't just affect your weight. They also damage the cells in your organs and blood vessels, which increases your chances of developing cardiovascular disease. TUDCA can help protect the cells that line your heart and arteries by reducing oxidative stress and preventing cells from becoming dysfunctional from too much glucose. Just like TUDCA can prevent liver cell death, it can do the same for your heart. Heart muscle cells die during a heart attack and TUDCA sharply reduces that cell death. It can also help to heal cells damaged from a heart attack.
- 3. TUDCA Helps the Nervous System. This is potentially great news because this means it can help with brain and nervous system issues such as Alzheimer's, Parkinson's and Huntington's diseases as well as strokes. For Alzheimer's, TUDCA helps to stop DNA from breaking down and helps those cells live longer. It can help prevent memory loss and keep your cognitive function more active. TUDCA also helps reduce the toxic effects of amyloid plaque in your brain. Parkinson's is characterized by cell death and mitochondrial dysfunction. TUDCA can increase how long your brain cells live and help your mitochondria work better. It also can decrease the amount of dopamine you lose over time, which can increase your risk of Parkinson's. TUDCA benefits people with Huntington's in a similar manner to those with Alzheimer's. In addition to protecting your DNA and cognitive function, TUDCA may prevent swelling in the mitochondria. With regard to strokes, TUDCA can help protect your brain from the effects of a stroke. One study showed that TUDCA reduced brain damage by a whopping 50%. The bottom line is this: TUDCA seems to prevent brain cells from dying, for a multitude of reasons.

Does TUDCA have any side effects? It looks like most of the side effects are caused by the way it interacts with alcohol in your body. If you take TUDCA right before drinking it can cause serious damage. Personally, I'm a fan of taking supplements in the morning with my breakfast. But if you think you're going to be drinking heavily on a particular day, avoid taking TUDCA.

My alternative doctor tells me the ideal dose for <u>ME</u> is 250-500 mg per day. Since my liver and kidney function were little off in my latest bloodwork, she recommended I start this supplement to see if it helps. She'll order new bloodwork at the beginning of the year to see if it helped and I'll be sure to report back.

This has been a year in which we're probably all drinking a bit too much. So for every negative behavior, we must offset it with a positive one. I plan to add TUDCA to my daily supplement routine.

Have a wonderful month and HAPPY THANKSGIVING! As you give thanks, please be sure to make a list of things and people for which you are grateful.