

Anti Aging: Regenerative Medicine, Age Management: What's the Bottom Line?

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These terms are all the rage these days. Professional medical organizations have incorporated these terms into their name and truckloads of books have been penned in their honor. Age management isn't about the wrinkle count or the latest dose of Botox or Juvederm; it's about what's inside that counts and the place that counts the most is your Liver.

Your liver is the largest of your internal organs and plays a decisive role in keeping you above ground and functioning at your best. It performs numerous functions that are critical to the proper synthesis of proteins. After your stomach acid and pancreatic enzymes have disassembled the proteins that you ate into their component amino acids, they are absorbed and circulate through your blood stream and arrive at your liver. There, a battalion of enzymes, along with key co-factors like the B vitamins and Magnesium, re-engineer the amino acids into many of the key proteins needed by your body. Magnesium is essential in the production of energy and performs a critical role in the activation of four of the nine enzymes in the **Krebs Cycle**. This cycle is at the very center of all cellular metabolism involving protein, fat and carbohydrate metabolism and is critical for helping with a fatty liver. Magnesium that is amino chelated, works better than Magnesium oxide to help in these functions. **A strong liver is the key for repairing damage that has accumulated over time and for maintaining youthful energy and stamina. The flip side of liver function is that of detoxification.**

Your liver is a large cleansing organ and it filters out different harmful chemicals – pesticides, drugs and hormones, and all other things that your blood cannot use. It also breaks down the toxic substances that are a by-product of metabolism. After a considerable period of time there is an accumulation of junk. Whether it's due to less-than-optimal bile flow or an overload of environmental pollutants and free radicals, suboptimal liver function can be a drag on your entire system, leaving you tired, in need of detoxification, overweight and oversensitive to any number of dietary or chemical insults. The body then tries to deal with the accumulation of toxins secondarily through an immune response of inflammation. This can lead to eczema and predisposes to all sorts of allergic reactions that, too, are inflammatory. Like begets like.

Allergies are often the result of an overloaded toxic state within the liver. If the quantity of a substance entering the bloodstream is too great for the liver to process quickly, the immune system recognizes the molecules as being foreign and produces antibodies against them in an effort to destroy what wasn't eliminated through detoxification. Through the filtering process, the liver plays a substantial role in reducing the effect an established or potential allergen will have on the body.

There are many ways to help the liver detoxify itself. First, and perhaps foremost, is diet. Avoiding artificial coloring, flavoring, preservatives, acetaminophen and pesticides is a no-brainer. Foods that tend to increase the production of mucus also tend to put a big stress on the liver. They'll also increase the risk of secondary respiratory tract infections by triggering the over production of mucus in the lungs and sinuses. Dairy products and wheat are on the top of the list and may be followed by eggs, soy and corn. Avoiding these foods, or at least rotating through them, is helpful for most people. To help the liver deal with the toxins more efficiently you MUST first make sure that you are well hydrated. In general, drinking ½ oz of water per pound of body weight per day is a good starting point. Next, there is a derivative of the amino acid Cysteine, called N-acetylcysteine or N-acetyl-L-cysteine (abbreviated NAC), which is a very good mucus liquefier and is a wonderful liver detoxifier. Taken in sufficient quantity three times per day it goes a long way in reducing liver toxicity and the manifestation of food and respiratory tract allergies.

Research shows that, the botanical, Milk Thistle's (Silymarin) hepatoprotective effects occur by its affect on the liver cell membrane so as to physically block the entrance of toxins into the cells. It also has potent anti-oxidant properties by combining with and neutralizing free radicals and increasing the intracellular concentration of glutathione. Milk thistle offers the additional benefit of stimulating the production of bile, which plays an essential role in emulsifying and solubilizing certain chemicals allowing for efficient excretion. Artichoke plays a similar role, with a number of studies demonstrating this botanical's ability to support ample bile flow. Other nutrients that assist with bile production, such as dandelion root, beet root, phosphatidylcholine, taurine, betaine, inositol, pancreatic lipase, alphalipoic acid and vitamin C, in addition to silymarin, can also help to ease the burden shouldered by an overworked liver.

Supporting your liver's ability to repair damage to your body, while detoxifying you from western civilization, is a wise investment in your quality and quantity of life.