

## Tuesday Minute Transcript

This Week's Topic

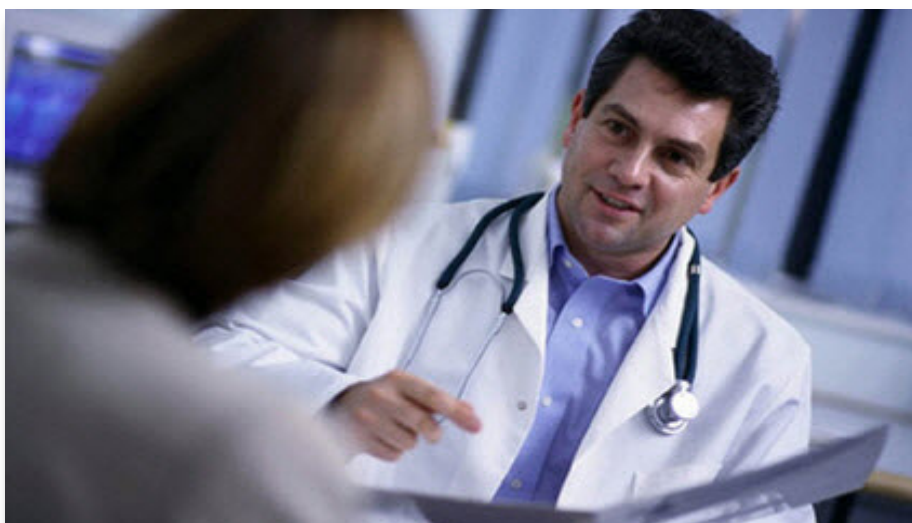
# Phosphatidylcholine



**"One of my nutritional mentors says, It's one of my favorite liver products, and I use it routinely with every liver condition."**

You can try to avoid chemical toxins, but sometimes they find you; for example, the gulf oil crisis. Consider what effects an oil spill can have on someone's health. With the sun and heat, crude oil emits Benzene as well as a plethora of other hydrocarbons. Exposure can cause nausea, dizziness, headaches, vomiting, and chest pains. When hydrocarbons sweep inland more people are at risk. For those with borderline sensitivities, chemicals can be the straw that breaks the camel's back and fuel existing patterns of inflammation.

If we think we are safe because we don't live near an area that is toxic, a new study showed arctic birds were laden with chemical toxins. Come on, arctic birds? Who lives in a more pristine area than an arctic bird? So it behooves all of us to be on constant vigil for foods and nutrients that can reduce chemical toxicity. The need



for all of us to be familiar with detoxifying agents is increasing every day.

A lot of the problems with toxins occur by altering cell membrane integrity. Here's a simple way to think of cell membranes, "Life happens on the membrane." If cell membranes are compromised, the cells will not function properly. If the cells don't function, the organs won't function properly either. That little bilipid layer that separates the cells from their environment is pretty important.

Of course for toxins, we want to support cell membrane health by supplying EFAs. However, anyone who has been in the field of complementary medicine is already thinking, what about the liver? Make sure the gallbladder is working properly and support liver function.

What if we could use a product that would support cell membrane health and has been shown to effectively support the liver especially the cell membrane function of the liver? What if this same product could act like soap via

the bile and help dissolve fats and soluble vitamins for digestion and absorption? Wouldn't that be a nice tool to have in our therapeutic tool box? That is the precise function of Phosphatidylcholine.

Phosphatidylcholine is a concentrated form of lecithin. In fact in scientific literature the terms are frequently interchanged. Food sources include soy beans, liver, cauliflower, egg yolks, and cabbage. Phosphatidylcholine, or purified PC, is such a big deal in Europe that there are several hundred use patents on Phosphatidylcholine in both pharmaceutical and nutraceutical applications. It has been an approved drug in Europe since the 1950's and has been used as a nutritional supplement throughout Asia for decades. In Europe the product is called "Essentiale forte" and is especially used as a liver protectant.

Phosphatidylcholine is one of those products where the intended treatment may be to enhance liver function and normalize liver enzymes; but gut and adrenal function may improve, and short term memory may be enhanced. Also, what I would call neurological quickness may be improved because Phosphatidylcholine is an essential precursor for acetylcholine, a neurotransmitter.

In terms of the gut, the mucosal lining of the stomach is very high in Phosphatidylcholine. In terms of adrenal function, I will never forget a chiropractic student told me she was living in a state of chronic brain fog until her chiropractor recommended Phosphatidylcholine for adrenal fatigue. Typically, I would never think Phosphatidylcholine for adrenals, but choline has many therapeutic uses. Her life changed so dramatically, that's what inspired her to start chiropractic school at age 40 to help others.

Another one of my nutritional mentors, who has helped hundreds of cancer patients stay alive

far beyond the '5 year mark, had this to say about Phosphatidylcholine. "It's my favorite liver product, and I use it routinely with every liver condition. I use it regularly to lower liver enzymes, treat all forms of hepatitis along with high doses of selenium and lipoic acid. Phosphatidylcholine, along with pantethine is excellent for treating non-alcoholic fatty liver, NAFL. Basically, all liver conditions can benefit.

Phosphatidylcholine is also important for brain and neurological function. It can be used for menstrual cramps. I add Inositol and L-Methionine to conjugate excess estrogen. I've had 80 to 90% results with this approach.

Standard lecithin capsules will yield about 12% Phosphatidylcholine; de-oiled lecithin will give you about 23%; but the form Biotics uses will supply about 55% or 420 mg per capsule. Other forms of 100% Phosphatidylcholine are available but are considerably more expensive and have refined out other important essential phospholipids.

All of the current Phosphatidylcholine on the market comes from soy. However, because the proteins have been removed, most people with soy sensitivities are not affected.

In this age of chemical toxicity, your patients may not be ready for a full blown detox; however, a variety of substances in capsule form can be added to nutritional programs with effective results. Phosphatidylcholine is one to remember. Since it is a major component of cell membranes, with Phosphatidylcholine, we can expect enhanced cellular function especially liver function.

Thanks for reading this week's edition. I'll see you next Tuesday.