

The Tuesday Minute

Nutritional information.... one byte at a time

This Week's Topic

Summertime Antidotes You Will Want To Share

Are you a mosquito magnet? As odd as it sounds some people are more attractive to mosquitoes than others. You sit outside in the evening and the battle begins. Do you smother yourself with bug juice or begin the swatting game? So, why are some people always the lucky ones? Well, the answer might surprise you. Mosquitoes are attracted to mild acids, so that means CO₂ and lactic acid. We can't do much about the CO₂ we give off as we breathe, but we can do something about excess lactic acid.

People that are high in lactic acid typically have diets that are high in refined carbohydrates and hydrogenated fats. As you know a diet high in refined carbohydrates naturally depletes B vitamins and trace minerals. This promotes an increase of lactic acid. Since the blood can only handle so much, the body uses the skin as a source of elimination.

Think about it. You are sitting around the deck while everyone is laughing and attracting the little guys through the normal metabolism of CO₂ expulsion. But, ah ha! Someone in the crowd is a little sweeter due to the excess lactic acid. Who's the mosquito going to set up their drilling station on? It's not only mosquitoes that like lactic acid, fleas seem to favor the same people.

So how do we turn off the mosquito magnet? Obviously, we want to reduce refined carbs and

bad fats and supplement with a B complex that is high in thiamin. Perhaps, you remember the Krebs cycle from biology. If you follow the dreaded circle you find that B vitamins, magnesium, manganese, phosphorous, lipoic acid, and even Coenzyme Q are needed to get the maximum amount of ATP from glucose. But the rate limiting factors are generally B1 (Thiamine) or B2 (Riboflavin).

Maybe your biology is a little foggy, but the Glycolysis cycle yields 2 units of ATP. However, if you break down glucose completely through the Krebs cycle and the electron transport chain, you get 38 units of ATP. So by making sure that you have all the co-factors necessary for the body to do its job we will not only have less swatting on those summer nights, but you will have more energy all day long.

Other symptoms of B1 deficiencies are an increased anion gap of 14 or over, low CO₂, and or elevated blood sugar. People who are on high blood pressure medications and diuretics are almost always low in thiamin.

Here's another one. If someone has low blood pressure, chances are extremely high they are thiamin deficient. By the way when I see an elevated blood sugar, one of the first questions I ask is, "Are you on diuretics or medication for hypertension?" Of course we want to use the phosphorylated forms of B complex for maximum absorption. Use a formula that is

high in phosphoralated B1. The technical name is thiamine pyrophosphate or another name is cocarboxylase. I like to use Bio-Glycozyme Forte from Biotics as it has almost 3.5 mg per tablet. The beauty of Bio-Glycozyme is that it has all the other factors necessary for blood sugar regulation, particularly functional hypoglycemia and has some broad spectrum adrenal support as well. It has most of the factors necessary for healthy Krebs cycle function as well.

Isn't it nice to recommend a solution where the side effects will be more energy, not a caffeinated source of energy, but a healthy form of natural energy. Sometimes I will also use Bio-3B-G which is 1.5 mg per tablet. Have them take 2 per waking hour for 10 days, to saturate the tissues. For some crazy reason a low dose of phosphoralated B1 taken throughout the day seems to work better than a whopping dose of thiamin HCL or thiamin mononitrate once or twice a day.

What are some other nutritional tidbits for summer? Here's one: A patient who comes into your office and leaves their sunglasses on has a very strong chance of experiencing adrenal exhaustion. To assess further, go into a dimly light room and shine a pen light in their eyes from a 45 degree angle to see how long it takes for their pupils to dilate. Healthy people should hold the constriction from the direct light for a full 20 seconds. If you see the pupils constrict after a few second, pulse, then open before the 20 mark, think adrenals.

Here's another tip, one for people that sunburn easily. Obviously, increasing sunlight will increase vitamin D which will pull calcium out of tissues making them more susceptible to burning. When you know you will be getting a lot of sun especially early in the season, in-

crease supplemental calcium and essential fatty acids. Essential fatty acids or vitamin F pulls calcium into tissues; whereas, vitamin D pulls calcium into the blood and ultimately into bones. Also, too much sun will increase oxidation. So increasing antioxidants in food or supplemental form is suggested.

Keep in mind, the skin is a major absorptive organ. Don't put anything on your skin that you wouldn't be willing to drink because our skin is in effect drinking all the lotions and potions that we put on. Our liver will ultimately have to break down all those chemicals we layer on trying to get that summer tan. Be aware, many of the moisturizers designed for after tanning are also chemical based. Instead after a days' tanning, use a food grade EFA like the Mixed EFAs. Put it on after your shower instead of the chemical laden moisturizers. I also use it in the winter when the dry air from my furnace dries out my skin. It works great.

Here's another summertime fact I bet you didn't know. One double blind study showed proteolytic enzymes will significantly reduce skin temperatures. My experience shows that the length of recovery time after a burn is drastically reduced. So if you do get too much sun. Take a therapeutic dose of Intenzyme on an empty stomach and you will be surprised how much better you feel the next day. Since hearing about the study I have used it many times as I work on my competitive tan.

These summertime fun facts are great to share with your patients and are not only interesting but they can come in handy. Thanks for reading this week's edition and I'll see you next Tuesday.