## The Tuesday Minute Nutritional information.... one byte at a time

## This Week's Topic

## **Review Medications For Drug-Induced Nutrient Deficiencies**

During economic change there is always new momentum. As health care changes, are we willing to adapt, create new ideas, expand our vision? The world's economy is rapidly shifting and let's face it, it may not be business as usual. American consumers are rethinking their budgets so let's consider the challenges before us as health care providers.

Each week as I talk with doctors, one common report I hear is that the number of patient visits per week is down significantly compared to last year. Smarter marketing will always help but don't stop there. Let's look at a progressive strategy that maybe you haven't considered. If the number of patients we see is less, perhaps we can "bring a greater range of services to our existing patients."

It's like gas stations 30 years ago. Thirty years ago most service stations sold gas and did full service auto repairs. If you would have asked someone 30 years ago if you could buy cat food and buy gas, they would have laughed you out of the station. Yet someone realized that as long as people were stopping for gas, they had other needs; and if we could fill those needs, the profitability would increase. You know the rest of the story. Today, when we buy gas it's common to see food pantries, sandwich shops, and car washes attached to the station.

The same is true with our patients. Traditionally they have health care needs that go unnoticed

due to the limited time they spend with their doctor during an office visit. Here's the big idea, "Offer your fewer number of patients, a greater range of health care services."

One of the services that you can easily offer is to review the medications that the patient is on and supplement the nutritional factors that are being depleted by the pharmaceutical drug. As a clinician, it is pretty common knowledge that statin drugs deplete CoQ10; but most people are not aware that statin drugs also directly or indirectly deplete other nutrients like beta-carotene, B vitamins, magnesium, calcium, folic acid, phosphorous, vitamin A, B12, vitamin E, vitamin K, zinc and our old friend vitamin D.

Coenzyme Q10 is famous for its role in the mitochondria and energy production. But minerals and vitamins are necessary for energy production as well, especially magnesium which is deficient in most Americans and is a major influence on heart function. Think about it. We give statins to reduce cholesterol, and we deplete the nutrients that are needed for healthy muscle function. HMMMM...heart "muscle" function

Another group of nutrient depletions are caused by diuretics. It makes sense that diuretics as a group will deplete minerals like magnesium, potassium, and calcium as forced increased urination is the goal of the drug. Increase urination

## **Drug Nutrient Depletions**

and we will have a loss of minerals, probably all minerals

However, another one of the nutrients lost with diuretics is B1, and B1 is essential for healthy sugar metabolism. Many people are not aware that B1 is a huge deficiency and should be supplemented with anyone who is taking diuretics.

Let's look at another class of drugs. Nonsteroidal anti-inflammatories used for pain and inflammation can cause stomach bleeding. In fact over 16,000 people die every year from nonsteroidal anti-inflammatory use. Several gastroenterologists are aware of this phenomenon and routinely use a product by Biotics called Gastrazyme to heal the gut as long as patients are use nonsteroidal anti-inflammatories for pain.

Oral contraceptives are another class of drugs that deplete nutrients. It is very common for families to take oral contraceptives and plan a pregnancy only to find they can't conceive. I often wonder if it is the lack of depleted nutrients that causes the systemic or metabolic inflammatory problems that prevent conception. The deficiencies are beta-carotene, B1, B2, B3, B6, B12, folic acid, biotin, B5, vitamin C magnesium, zinc, tryptophan, and tyrosine.

SSRIs, a type of antidepressant medication, deplete the B vitamins - B6, B12, and folic acid. They also deplete vitamin D and sodium. Even if they don't deplete EFAs directly, we know that anyone who is depressed can benefit as EFAs' have been shown to reduce inflammation.

Anti-diabetic medication will also reduce coenzyme Q10, folic acid, and B12. Antibiotics will obviously call for a need for flora replacement, but do your patients know that antibiotic use will cause depletions in biotin, inositol, B1, B2, B3, B6, B12, and vitamin K? These and many more drugs are used commonly and cause nutrient depletions.

Almost all your patients are on one drug or another. This is an example of why every patient should be examined for factors that cause nutrient deficiencies. You need to be the one to alert them that there are dangers and that if they decide to take pharmaceuticals, especially long term, they should at least compensate by taking the nutrients that will be depleted by these drugs.

Obviously, that is one of the reasons why I feel it is almost malpractice when a clinician fails to recommend a quality multi-vitamin mineral, balanced essential fatty acids, and an active probiotic. I have a link below that will cover many of the common nutrient deficiencies due to prescription drugs.

Another resource is a book by Dr.'s James LaValle and Ross Pelton, both nutritionally based pharmacists, called "The Nutritional Cost of Drugs." Let me encourage you as you redefine your role providing health care in challenging economic times, "offer your patients a greater range of services" and believe me, evaluating their nutrient depletions that are caused by drug use is a great example.

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