THE TUESDAY MINUTE

IT'S TIME TO FEEL GOOD AGAIN

THIS WEEK'S TOPIC

Supplement Industry "Shocker"

"Approximately 4 out of 5 of the nutritional products from Walmart, Target, Walgreens & GNC contained NONE of the herbs listed on the labels."

Here's an evidence based answer for patients who ask, "Can I get my supplements at Walmart, they're so much cheaper?" The attorney general's office bought 78 bottles of the leading brands of herbal supplements from a dozen Walmart, Target, Walgreens and GNC locations across New York State. Then they analyzed the products using DNA bar coding, a new type of genetic fingerprinting that the agency has used to root out labeling fraud in the seafood industry. Approximately four out of five of the nutritional products from Walmart, Target, Walgreens and GNC contained NONE of the herbs listed on the labels.

None? Here are just some of their findings. A popular store brand of ginseng at Walgreens contained only powdered garlic and rice. At Walmart, the authorities found that their ginkgo biloba contained little more than powdered radish, houseplants and wheat, even though the label claimed it to be wheat and gluten-free. Three out of six herbal products at Target - ginkgo biloba, St. John's Wort and Valerian Root, tested negative for the herbs on their labels. Instead they contained powdered rice, beans, peas and wild carrots.

Of course, more facts may surface, so I don't want to act as judge or jury. And critics claim that the DNA technology was not an acceptable method to determine the presence of the herbs. They say that the manufacturing process itself may have disrupted the DNA bar codes. But here is what makes the 4 "big box stores" cringe. Using the same

DNA testing methods, a 2013 Canadian study testing 44 products from 12 companies found 2 of the 12 companies DID produce DNA sampling consistent with label claims.

Also, the DNA testing was sufficient to determine the cheap fillers. I am sure you are not surprised by the results of this investigation. We've believed for years that it's unlikely any company could sell products that inexpensive and still have sufficient quality. I DO think we were surprised just how bad the results were. Plus, if companies can't meet label claims with inexpensive ingredients like garlic or echinacea, what happens with expensive ingredients like curcumin or coenzyme Q10?

And don't think this problem exists just for the "discount" nutrition houses. Many of the so called professional lines are no more than marketing companies

that often do not manufacture their own products much less use extensive testing. If you don't base your practice on products that you can absolutely trust, you'll never know if poor results are because of the products, the protocol, or the patient.

I have created a summary page that you can use to discuss these results with your patients as well as a handout articulating why Biotics Research Corporation is an industry leader in quality control.

Biotics may not have every product you need in your practice, although they do have over 300 products, but what they do have are biologically active ingredients that are tested for environmental contaminants. Their products are consistent batch to batch. Let me share just a few reasons why Biotics Research is a leader in the field of nutrition.

Biotics Research Corporation uses state of the art analytical equipment in their laboratory such as: high performance liquid chromatography, thin layer chromatography as well as FTIR spectroscopy, IPC-MS, GC-MS and gel electrophoresis to identify the exact plant, nutrient species and biochemical properties.

Many powdered botanical agents can look the same and sometimes different parts of the same plant can be named the same. Biotics' raw material testing can identify the exact species of a plant and the active nutrient. This testing assures that their supplements will deliver effective results.

Biotics tests each individual ingredient for active properties. For example, nutrients grown in poor soil or harvested at the wrong time of the year may not contain the active properties that Biotics is looking for in their supplements. Each single ingredient may undergo 4-7 different tests to be sure biological activity is present.

Using these tests and the sophisticated laboratory equipment Biotics has created bio-prints for the botanicals they use. A bio-print is like a fingerprint for plants. It identifies the plant, the part of the plant, and often even the part of the world where the plant originated! If the bio-print testing of a raw material doesn't match up, it's rejected. Solvents are needed to extract phytochemicals from plants. Knowing the biochemistry of botanical extracts and how they are concentrated, Biotics tests to assure residues of solvents are removed. For example, in curcumin extract a potentially carcinogenic solvent may be used, 1,2-dichloroethane. The maximum limit according to the USP is 5 ppm. When Biotics tested for the presence of this solvent from one supplier they found 139 ppm, nearly 30 times above the limit. Obviously the material was rejected.

Biotics' standards are far above the highly touted GMP (Good Manufacturing Practice) guidelines. Biotics tests all raw materials for heavy metals. Biotics identifies and rejects mercury, lead and other toxic metals in some of the bulk materials that are shipped to them from "trusted" suppliers.

Sadly, many supplement companies will buy these rejected contaminated materials in good faith and put them into their own supplements never knowing that they contain heavy metals. Some companies only use the most basic quality control. They rely on suppliers Certificate of Analysis because they won't spend the money for in-house professional staff or equipment to do the testing themselves.

The handouts I've provided discuss in more detail the uniqueness of Biotics Research products.

In light of this controversy, I wanted to make sure you can communicate with confidence to your patients that when you make a recommendation for a supplement you are doing it with "specific intention". You spend time, energy and money learning about nutrition and the companies that provide quality supplements.

Hopefully this discussion will inspire your patients to get nutrients that have real quality control behind them because that's when they will get the results.

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