#### February 2015

### New York Attorney General DNA Testing Prompts Retailers Ordered To Stop Selling "Herbal" Supplements

In a <u>bombshell announcement</u>, the New York Attorney General has ordered nutritional supplement sellers; GNC, Target, Walgreens and Walmart to stop selling certain "herbal supplements". The attorney general ordered 390 DNA tests on 78 herbal supplements sold at these large stores. Overall, 79% of all DNA tests <u>could not verify the DNA</u> of the herb listed on the products' labels. And in many cases, cheap fillers (and houseplants!) were the only plant material found in the bottle.

ATTORNEY GENERAL TEST RESULTS SUMMARY

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	Store	Brand	Ginko Found	Also Found
	GNC	Herbal Plus	None Found	Garlic, rice, spruce, asparagus
Ginko	Target	Up & Up	None Found	Garlic, rice, mung/french bean
Biloba	Walgreens	Finest Nutrition	None Found	Rice
	Walmart	Spring Valley	None Found	Rice, houseplants, mustard, wheat
	Store	Brand	St. John's Found	Also Found
	GNC	Herbal Plus	None Found	Garlic, rice, house plants
St. John's	Target	Up & Up	None Found	Garlic, rice, house plants
Wort	Walgreens	Finest Nutrition	None Found	Garlic, rice, house plants
	Walmart	Spring Valley	None Found	Garlic, rice, cassava
	Store	Brand	<b>Ginseng Found</b>	Also Found
Ginseng	GNC	Herbal Plus	None Found	Rice, house plants, pine, wheat/grass
	Walgreens	Finest Nutrition	None Found	Garlic, rice
	Walmart	Spring Valley	None Found	Rice, house plants, pine, wheat/grass
	Store	Brand	Garlic Found	Also Found
	GNC	Herbal Plus	Yes	Garlic, rice, spruce, asparagus
Garlic	Target	Up & Up	Yes	Garlic, rice, mung/french bean
	Walgreens	Finest Nutrition	None Found	Palm, house plants, wheat, rice
	Walmart	Spring Valley	Small Amt.	Palm, house plants, wheat, rice
	Store	Brand	Echin. Found	Also Found
	GNC	Herbal Plus	None Found	Rice
Echinacea	Target	Up & Up	Yes	Rice
	Walgreens	Finest Nutrition	None Found	Rice, garlic, daisy
	Walmart	Spring Valley	None Found	No plant material found
	Store	Brand	Saw P. Found	Also Found
Saw Palmetto	GNC	Herbal Plus	Small Amt.	Asparagus, rice, primrose
	Target	Up & Up	Yes	Some had no plant DNA
	Walgreens	Finest Nutrition	Yes	Rice
	Walmart	Spring Valley	Small Amt.	Rice, garlic



# **Eight Little Known Reasons**

I am sure you weren't surprised by the results of the New York State investigation of Walmart, GNC, Target and Walgreens. While we don't want to act as judge and jury, we have believed for years that you cannot sell products that cost so little and have sufficient quality control. In order to test the presence and activity of botanicals you need to have a lot of very sophisticated lab equipment. That requires a lot of time and costs a lot of money. Although DNA barcoding has not been a standard for quality control for finished products, the fact that some companies have manufactured products that do pass the DNA barcoding standards indicates problems for those that don't.

#### **Biotics Research goes far beyond mere identification**

of botanicals in their manufacturing process. Currently Biotics Research has over 300 products. While they may not have every product you need in your practice, what they do have is biologically active ingredients that are tested for environmental contaminants. Their products are labeled correctly and have consistent biological activity batch to batch. Here are some examples of ways to help your patients understand why Biotics Research is one of your major suppliers.

## BRC advanced testing verifies the exact plant, species, and growing area of every botanical raw material sent to them.

BRC uses state-of-the-art analytical equipment in their laboratory such as: high performance liquid chromatog-

raphy, 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 <u>species</u> of a plant and the active nutrient. This testing assures that their supplements will deliver effective results.

BIOTICS

## BRC tests each individual ingredient for its "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 BRC 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 finger print 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. Because of this, BRC's quality control goes way beyond any other manufacturer in the industry.

#### BRC tests raw materials for solvent residues.

Solvents are needed to extract phytochemicals from plants. Knowing the biochemistry of botanical extracts

#### **Biotics Research Corporation, A Label You Can Trust**

## **Eight Little Known Reasons**

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 limit. Obviously the material was rejected. As you can see, Biotics' standards are far above the highly touted GMP (Good Manufacturing Practice) guidelines.

#### BRC tests all raw materials for heavy metals.

BRC has found mercury, lead and other toxic metals in some of the bulk materials that have been shipped to them from "trusted" suppliers. Obviously, BRC rejects all such materials. Sadly, many supplement companies, will buy these rejected con-

taminated materials in good faith and put them into their own supplements never knowing that they contain heavy metals, because they don't do their own testing. Sadly some companies only use the most basic quality control. They rely on suppliers Certificate of Analysis because they can't afford the in-house professional staff or equipment to do the testing themselves. These standards would be woefully inadequate for Biotics Research.

#### BRC emulsifies its oils.

Processed oils must be emulsified before they can be used by the body. The gallbladder does this job in the human body. Knowing that many people have digestion problems, BRC makes its supplements with emulsified oils, reducing the stress on the body, and dramatically increasing the nutrient absorption by the user. In fact, emulsified oils can increase absorption (uptake) by 300%!

## BRC uses phytochemically rich plants as a tableting base.

Their base, unlike the sugar, starch and inert materials used by other supplement companies, is loaded with antioxidants! Gram for gram, the BRC tableting base has some of the highest levels of antioxidants of any known botanical agent.

#### BRC uses phytochemically bound trace minerals.

Trace minerals such as lithium, rubidium and molybdenum are now being actively researched for their healing and health properties. For twenty years, BRC has been using a revolutionary technique to naturally bind these trace minerals to the plants used in their supplements. These trace minerals can then be naturally recognized by the body when ingested.

### BRC glandular products supply neonatal glands from animals one to three days old.

This is extremely significant because the glands at this development stage are highly anabolic, which means they have all the genetic material to reproduce healthy tissue. The glands of older animals can be much more toxic if they have been subjected to years of hormones, antibiotics, pesticides and herbicides, and their organs have undergone many more years of use.