

## **“TOXINS”**

### **“Detox Mythology”**

Countless times doctors have asked me to comment on “detoxification” products and protocols that have not a trace of objective evidence supporting their use. Doctors can often provide pages and pages of promotional literature on the product, yet the literature is so lacking in substance I can’t imagine why a doctor would even consider falling for it.

It seems to come down to doctors --- or at least alternative healthcare doctors --- wanting to believe in anything purported to be “natural.” Indeed, it seems that many doctors have such a need to believe, rational thought is suspended completely. Remember ...

**“THE PURSUIT OF TRUTH REQUIRES  
THE FREE PLAY OF ONE’S MIND,  
NOT SLAVISH OBEDIENCE  
TO DOGMATIC BELIEF SYSTEMS.”**

Every time doctors come to me with the latest and greatest “detox” protocol, I have to begin by asking them, exactly what part of the body do they think is “toxic”?

And explicitly, how do they define the term “toxin”?

Exactly what “toxins” are they talking about? ----- Can they give me a list of 20 of these toxins?

Can they name maybe a dozen? Can they give me five?

How about just three toxins that need to be cleansed from whatever part of the body it is they think is toxic? ----- The only reply I get is a blank stare --- followed by an exasperated, “Everyone KNOWS detox is important!”.

None of the doctors with questions on detox really have a clear picture of what they expect to achieve by “detoxification.”

One of the most common questions I get on this topic comes from doctors who think their patients need to be “cleaned out” before beginning NUTRI-SPEC. Again, I must ask specifically what is meant.

Cleaned out? Are your patients dirty?

Where is this dirt that needs to be “cleaned out?”

Often, the product a doctor would use to achieve this end is actually promoted as a “colon cleanser.” So, is the intent to get patients “cleansed” by nothing more than forcing their bowels to move? If that is the case, any garden-variety laxative would do the job of “detoxification.”

There are often products brought to my attention purported to be “blood cleansers.” Again, my obvious question is, “What is the nature of this dirt that must be cleansed from the blood?”

Their reply usually comes back, “You know --- (pause) --- toxins!”

No, I do not know “toxins”. Can you name a few? Furthermore, can you show me any objective evidence that the ingredients in this “blood cleanser” remove those toxins from the body?

Then, of course, there are the products purported to aid in liver detoxification. Nowhere in the promotional literature is liver detoxification defined, but it is often implied that it has something to do with the activity of the liver enzyme cytochrome P450. Absent, however, is any objective evidence indicating that cytochrome P450 activity is influenced one iota by any ingredients in the product. (And believe me if they had such evidence it would be broadcast loud and clear all over the page.)

Take the initiative to do a Pub Med search on the ingredients of any “liver cleanser” and you should not be surprised to find that there is nothing magical in any of the herbal extracts that will “clean” a dirty liver. Silymarin is the only herbal drug that may have evidence in the literature that it does something --- but just what is vaguely defined --- and is pathetically impotent compared to the ADAPTOGENS in your Nutri-Spec supplements (such as Taurine, Lipoic Acid, and many others).

How companies can claim these products are “liver cleansers” and get away with it for years, I have no idea. How they avoid FDA scrutiny is a mystery; how they continue to convince gullible doctors is no mystery at all --- faithful nature cure lovers need to believe.

I am definitely not saying that toxins are unimportant to the health of your patients. There are harmful substances everywhere --- and it is essential to minimize them. The sources of toxins include ...

1. Environmental exposure to both organic and inorganic toxins (air, water, or skin contact).
2. Toxic substances ingested in “food”.
3. Toxic substances taken as drugs.

4. Fungal and bacterial toxins produced by an unhealthy intestinal microbiota.
5. Toxic substances produced by normal/healthy metabolism.
6. Toxins produced by an unbalanced/inefficient metabolism.

I could come up with a list of a dozen or more toxins in each of the above 6 categories. ----- It is in the last 3 categories of toxins where your NUTRI-SPEC system shines. We could say that NUTRI-SPEC “doesn’t do detox” --- or --- we could say that everything NUTRI-SPEC does improves detox.

The solution to the first 3 categories of toxins is primarily avoidance. Be careful what you touch, be careful what you breathe, and be careful what you drink. Also, clean the toxic garbage out of your eating plan ( --- poly-unsaturated oils, sugar, overcooked meat, canned meat, microwaved food, goitrogens, estrogenic foods). ----- And --- (as was obvious once upon a time) strive to minimize the use of medications.

Mold remediation of the home and work environment is critical for some patients.

Most of the “detox” procedures employed by alternative healthcare practitioners are a joke --- and many of them are actually harmful. Some of them are toxic themselves --- but the big problem with some of them is that they do chelate and mobilize certain organic and inorganic toxins from where the body has dumped them into connective tissue (“swept them under the rug”) --- mobilizing them into the blood stream, thus exposing the brain and other vital tissues to these toxins that until “stirred up” were mostly benign.

The problem is as these “natural” detoxifiers (n-acetyl cysteine has been one of the most popular) penetrate connective tissue enough to bind and mobilize a toxin. The toxin, once released into the blood, floats around looking for a new home --- and that home is likely to be the last place you want this toxin to be dumped.

Why is the chelate not eliminated? Simply --- the kidneys have no capacity to eliminate them in the urine, and the liver has no enzyme to handle them. Get it? All you will do with these “detox” procedures is to mobilize toxins from connective tissues where they are comparatively harmless, and transfer them to metabolically active tissues.

The only detoxification procedures that I endorse are ...

--- cholestyramine to eliminate yeast/mold/fungal toxins. But this must be used according to the protocol we can give you --- to avoid side effects.

--- heavy metal chelators such as DMSA to eliminate heavy metals (mercury, lead, aluminum, cadmium, etc). But again, that process must be done very carefully according to protocol we can give you. These procedures are often and grossly misused. And --- they have the same potential problem of mobilizing toxic metals that have been dumped in the connective tissue, then exposing brain tissue to them unnecessarily.

--- there are certain adsorbents that bind toxins dumped into the gut by the liver so they can be carried out for elimination --- rather than being recycled through the enterohepatic circulation. These include hormone binders such as calcium D-glucarate, certain charcoal products, and even to a certain extent certain high fiber foods (such as raw carrots).

[One further comment needs to be made regarding sources of fiber that are claimed to be an important part of many “detox” products. Even a “good” source of fiber that does not severely irritate the intestines and does not bind important nutrients should be used on a very limited, short-term basis only. The problem with fiber supplements is they deplete the body of sex hormones, particularly testosterone. Using a high fiber products for more than two weeks will weaken most anyone to some degree and cause severe problems in some people.]

The remaining garbage bag of “detox” procedures is nothing more than nature cure mythology.