



Detox: Herbalism's Four (Well, 5) Letter Word

toxicity and detoxification are real phenomena, but the contemporary understanding of what they mean and how they occur are limited and often erroneously applied. a vitalist approach to detoxification works to enhance the body's innate capacity to rejuvenate itself, supporting this with diet, movement, sleep, and stress reduction – with herbs playing a variety of supporting roles at every step along the way.

toxicity

modern concepts

toxicity as accumulation of molecular poisons.

causes are external pernicious influences: chemicals (PCBs, BPA), EMF, pesticides, heavy metals, yeast/mold/parasites. invisible. confirmed by lab test or other indirect method. attributed to any set of symptoms.

detoxification means fast, cleanse, purge, colonic, chelation.

some contemporary protocols:

- Master Cleanse aka "lemonade diet": a 10-day lemon juice/water/maple/cayenne drink all day. nightly laxative herbal tea (primarily senna) or tablets or salt water. optional raw->soup/broth->juices lead-in and reverse for lead-out.
- liver/gallbladder flush: olive oil & lemon juice [& garlic] + laxative herbal tea. expression of green saponified oil "stones" taken as indicator of success.
- a live-in program featuring classes, treatments, yoga, affirmations, meditation, etc. raw vegan diet, wheatgrass juice, juice fasting, "food combining", "enzymes", dehydrated foods, enemas, colonics, etc. (\$1300-\$2000/week.)

. . . all these usually presented with "alkalizing diet" as a component or complementary recommendation.

some contemporary products:

- a colon cleanse kit: "digestive stimulator" (aloe leaf, cascara sagrada, rhubarb, fringe tree, etc), "toxin absorber" (ginger or peppermint + psyllium husk, Bentonite clay). to be used as a 5-day liquid-only fast. advocates raw juice diet.
- a fasting/cleanse kit: laxative (cascara sagrada, psyllium, acacia, lactobacillus, etc), fiber (psyllium, marshmallow, elm, etc), cholagogue (beet, artichoke, cayenne, turmeric, milk thistle, celandine, dandelion, etc), appetite suppressant (magnesium, potassium, garcinia, cascara sagrada, etc), nutrient replacement (algae, chlorella, spirulina, wheatgrass, kelp, sea buckthorn, etc). lots of soy, mag stearate, binders & fillers.

most such products have stopped using the term "mucoid plaque" in their marketing materials but keep it in their "user guides"; others have substitute language for the same idea.

traditional concepts

toxicity as bad blood, Thomson's "canker", rheum, *ama*.

cause is constitutional imbalance: an accumulation of dampness due to impaired digestion and/or incompatible foods, which obstructs flow of vital force and generates heat. damp heat as the classic energetic signature of bad blood / toxicity. (this is not necessarily today's only



or even dominant presentation of toxicity. the 1800s were the heyday of this syndrome and of the classic alterative herbs as primary interventions.)

detoxification means improving nutrition, assimilation, and elimination. remove foods which can't be digested; choose easily-digested foods (soup, stew, etc) and nutritive herbs; use herbs to build digestive fire, heal the gut, drain dampness, cool excess / inflammatory heat, and release obstructions (especially in the "greater liver" – gut / portal system / liver). alterative treatments focused on motivating and cleansing the "greater blood" – blood, lymph, extracellular fluids.

terrain theory of toxicity

start with: **the visible influences in our lives are more important than the invisible ones.** these associations (malnutrition/intolerance/impaired digestion/etc) are not only better proven than invisible pernicious influences, but the corrective actions they recommend are easier and less invasive to implement and track. distinguish visible from seen. focus our major efforts on those aspects of health which are within our direct control. even when invisible factors are a cause of illness, the best strategies for resolution are still centered in supporting the body's innate healing methods. the invisible may exist; the visible is sufficient.

common concept of toxicity asserts *invisible influences slowly accumulated* as the problem, and *drastic purgative interventions* as the solution – these are mismatched, conflict with a simple principle: what is accumulated over time must be corrected over time, and what is acute in origin must be treated acutely.

toxins

what is a toxin? Paul Bergner: "any substance which destroys cellular life, alters physiological function beyond the ability of the organism to maintain homeostasis, or exhausts/depletes a homeostatic mechanism to the point of disturbed physiological function." e.g. bleach, sugar, caffeine. the dose makes the poison (usually).

general categories:

- endogenous waste products: normal metabolic substances – e.g. hormones, metabolic wastes, immune/pathogen detritus – in abnormally heightened levels. may build up due to poor liver and/or lymphatic clearance.
- endotoxin: substances from digestive tract – e.g. commensals, food proteins, etc – outside normal bounds. may be due to leaky gut, constipation.
- food allergies: immunogenic proteins in contact with lymphatic tissues in gut lining can trigger inflammation there, or migrate elsewhere. leaky gut / leaky brain. can lead to autoimmunity.
- exogenous toxins: the major loads in this category are: *prescription drugs* and their secondary metabolites, and unnatural substances in *processed food products* (aspartame, sucralose, MSG, trans fats, rancid oils).
- pesticides, industrial chemicals, heavy metals, etc: barring occupational exposure, this is uncommon. do not justify heroic interventions.

pathways of elimination

body's methods for getting toxins out of the system. if one is clogged the others have to compensate, e.g. if bowel is clogged, lung mucous generated. also, if toxins aren't eliminated, they may be stored in organ tissue, soft tissue, bone, or fat.



note that these are also pathways of *absorption*. many problems arise when you attempt to absorb things that are actually toxic.

re: the “liver flush” or “colon cleanse” approach (even if they were legit): don’t block the exits when you yell fire. clear the pathways before attempting that, else may induce greater discomfort than began with – especially chemical chelation or pharmaceutical fat loss, freeing toxins from lipid prisons without hepatic or lymphatic capacity to flush them out entirely. even somewhat less drastic, nominally natural approaches (coffee enema, olive oil & grapefruit juice “gallbladder flush”) – even if they did in fact work as claimed – would be forcing along a process of excretion via hyperstimulation. by design, that’s overruling the efforts of the organizing principles of life, favoring mechanistic extraction – but we are organisms, not mechanisms.

skin

sweat generated from physical exertion expresses waste products. get adequate sunlight – vit D synthesis + nitrous oxide generation. don’t put anything on your skin you wouldn’t put in your mouth. sores, boils, pimples, etc are classic signs of bad blood. the gut-skin axis. alteratives as primary therapy for skin conditions.

lungs

breathel! stop smoking. movement, deep breathing exercises. respiratory motion of diaphragm as “heart” of the portal venous system; chest expansion also motivates flow in major lymphatic channels. pulmonary tonics, relaxants, bronchodilators.

bowel

stay regular: slow transit time means toxins (from bile and feces) drain into the portal blood, where they can be recycled / overwhelm the liver’s detox mechanisms. don’t eat glue. heal leaky gut. recognize high prevalence of lymphatic tissue around intestines. cholagogues/choleretics, *gentle* laxatives, carminatives, bitters, lymphatics, vulneraries.

kidneys

stay hydrated. provide water with adequate mineral content. obtain sufficient high-quality fats for normal water retention / cellular hydration. don’t fear protein. nutritives, diuretics (herbs don’t just stimulate the kidneys; they can drain dampness out of the extracellular spaces).

liver

the great detoxifier. metabolic, endocrine, digestive, & detox functions. two phases of biotransformation. phase I: oxidation, cytochrome oxidase / P-450 – clears hormones, alcohol, caffeine; otherwise alters properties of toxin (excreable, inert, active, etc). phase II: conjugation – oxidized substances joined to other molecules (glutathione, amino acids, methyl groups, etc), properties altered, most pharmaceuticals cleared. NB: phase I overload with deficient phase II results in excess free radicals in the system. manage stagnation and inflammation. immune stimulants (for Kuppfer cells), hepatics, cholagogues.

an alterative compass

alterative therapy is not only herbs! anything that increases nutrition/absorption and gently/gradually stimulates waste clearance, improving the circulating fluids.



common problematic pattern of **sporadic extremism against a background of deficiency** is an echo of similar habits found in the relation people bear to food (stimulants and supersweets among nutrient-poor caloric products), emotions (seeking highs to compensate for normalized numbness), sleep (getting up early and taking stimulants, staying up late and taking sleeping pills), and thought (self-reflective capacity becomes abstraction of mind from body).

Earth nourishment

look for deficiency and excess, sensitivity and dulling. remove toxins / allergens, increase nutrients. most symptoms modernly attributed to toxicity (fatigue, dull mind, depression, anxiety) are traditionally regarded as deficiency symptoms – though today these may manifest concurrent with superficial excess. excesses – of sugars, of stimulants, of cleverly engineered supersaturated flavors – can also cause disruptions in normal function.

full-spectrum nutrition (protein, minerals, vitamins) required for detoxification systems to function at full capacity, therefore nourishment is *directly* detoxifying. key players are: abundant dietary protein, EFAs, Mg, B vitamins, C. nourish before purging, and you may not need to purge.

fat stimulates regular bile flow into intestines. *fiber* pulls toxin-filled bile out of the body into feces; this thins & reduces cholesterol content of bile (reducing likelihood of stone formation). eat *greens* (collards, kale, etc but also dandelion, nettle, plantain, lamb's quarters, garlic mustard), activated further by olive oil, garlic, lemon.

fasting: true fasts only for those with strong constitution, or during crisis (inflammatory, febrile, autoimmune, etc). modified fasts: fast from boxes/cans/processed foods, fast from [potential] food allergens (e.g. fish & vegetables diet), fast with support of minerals, aminos, etc – e.g. bone broth / nettle & friends.

herbally: nutritives – roots, mushrooms, seaweeds, berries. digestives – improve assimilation & elimination (build digestive fire & clear exits).

Water relationship & recovery

relationships: deepest sources of psychological nourishment. relationship to food of prime importance – mental health problems can arise from nutritional deficiencies – but vice versa, our state of mind influences both our choices about eating habits and our ability to assimilate what we do eat.

similar pattern in other forms of relationship – sustaining or draining, like gathers like. emotional limitation as a form of metabolic inflexibility. "bile-soluble" emotional toxins – learn constructive anger. overall, vary the palette of experience, balance the excesses, supply what is missing. **herbally:** bitters, sours – the taste teaches you the experience. flower essences to change emotional currents.

dreaming: emotional detox, poisons broken down or joined with other elements. herbs: mugwort work, kava & calamus, or your allies. most or least restful; don't force it every night.

sleep: detoxification functions primarily during parasympathetic state + more portal blood can flow in when you're lying down = get enough sleep. don't eat before bed. "liver time".



sleep debt heightens cortisol/insulin levels. immune recovery – couple w/ herbs: build immune system (remember some of our “toxins” are pathogens).

Fire movement & expression

metabolic, mitochondrial, mental, and metaphysical fires. accessible but contained – boiling water in a leather cauldron: too little fire and it doesn't boil, too much and it scorches. neither sedentary nor overtrained. integrated movement habits provide the baseline from which more intense activities can build. walking as primary primal physical activity; hunter-gatherers walked 6-9 miles per day (with long days and rest days). lift heavy things a few times a week, sprint occasionally. artful movement practices.

circulatory capacity beyond the heart: skeletal muscles are primary motivators for flow of blood, lymph, nerve signals = feed cells, take out trash, communicate. toxicity symptoms result when flow in any of these is deficient. movement also increases oxygen exchange, induces sweating (skin elimination). consider manual therapies: bodywork, manual lymphatic drainage.

herbally: adaptogens. judicious use of stimulants. lymphatics.

Air stress reduction

stress as arising from inappropriate response to the environment. stress reduces ability to deal with toxin load, and vice versa. stress heightens cortisol/insulin levels, shuts down blood flow to the liver (blood vessel sphincters close). (see also Gulf War syndrome.)

change how you think. meditation, affirmation, forgiveness, compassion practices – these begin self-directed. (tonglen and similar practices.)

think less, live more. attain presence; practice intuitive living skills (cf. intuitive eating exercises). recognize that people can't do this by fiat: making better choices starts not with self-control, but with self-care. and to care for the self you must know it. draw on the other elements to find this: nourishing, flavorful food engages our attention; fulfilling emotional entwinings hold us in now; artful movement practices teach us to fully inhabit our bodies.

herbally: bitters, wood betony (*Stachys betonica*) – grounding herbs to bring you out of the air, down into your center. yarrow in energetic dose for emotional armor; solomon's seal to teach flexibility on a base of stability. other flower essences, nervines, adaptogens, etc as appropriate for the individual.

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