

Chemical Overload

Get the Chemicals out of your life — How to make home made toiletries and other reasons to reduce your chemical exposure.

Part 2 of 2

In Part 2 we are going to look at Plastics and Pesticides; two problematic chemicals in our environment.

Before we get into it; I would like to share some general symptoms that can help you identify if you have been exposed to a chemical or toxin overload. While the end result of accumulated over exposures over time can be auto-immune diseases and/or cancer — before they develop you will have symptoms — you can prevent the disease by eliminating your exposures (the best you can!) and learning how to support your body in detoxing.

These tips come from Aviad Elgez, ND. He was on the Functional Forum (April 2017) with these tips.

#1 & 2 Problematic exposures are indoor air toxins such as Solvents (as in cleaning products — both residential and commercial) and Mold.

Both solvents and mold will present with brain fog, balance problems, neuropathy (nerve pain).

Mold includes the above symptoms AND also you may be constantly congested or repeatedly get Upper Respiratory Infections.

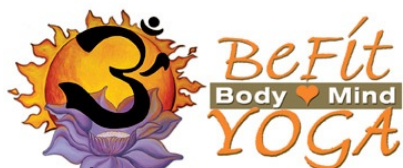
A tip to know if your problems are from Solvents or Mold is to go away for a week or two — these symptoms are not persistent and will clear up if you go on vacation — unless you are exposed there too, for example some mattresses contain solvents.

And a food note :) Cabbage foods help us pee out pollution, you will actually process more pollution and put it out in your urine.

#3 Problematic exposure is to Mercury

Mercury toxicity will present with irritability and anxiety, and muscle aches and pains. These will be problematic — constantly underlying and interfering with your day to day life.

EWG'S GOOD SEAFOOD GUIDE <small>Eat healthy fish and shellfish that are high in Omega-3 fatty acids and low in mercury. EWG's Best Bets are also from sustainable sources.</small>		
 EWG'S BEST BETS! <small>Very High Omega-3, Low Mercury Sustainable</small>	 GOOD CHOICES <small>High Omega-3, Low Mercury</small>	 AVOID <small>Mercury Levels Too High To Eat Regularly</small>
SALMON	OYSTERS	KING MACKEREL
SARDINES	POLLOCK	MARLIN
MUSSELS	HERRING	ORANGE ROUGHY
RAINBOW TROUT		SHARK
ATLANTIC MACKEREL		SWORDFISH
		TILEFISH



They are persistent and will not go away even if you go on vacation since the mercury is stored inside your body . . . it goes with you . . .

If you suspect mercury overload there are foods and supplements that help you detox it, and most importantly remove your exposures. Check what fish you are eating (tuna and swordfish are some of the highest in mercury), avoid vaccines, check your mouth for amalgam fillings and most importantly check you dentist office. And do the best you can to get clean air ... Since we live in a coal mining area we are predisposed to mercury in our air — and if you happened to grow up in a house that used a coal stove for heat (I did on and off) you had an even higher exposure.

If you are interested in genetic testing the infamous MTHFR test will tell you if you have a genetic SNP or two that interferes with detoxing. This SNP interferes with your glutathione pathways — which is your body's potent detoxifier. Heavy metals are particularly hard to detox with this SNP and will accumulate in your body over time leading to increasingly worse symptoms.

ॐ MTHFR mutations reduce your ability to clear heavy metals

ॐ Heavy metal toxicity is often a root cause of autoimmune disease, especially Hashimoto's, Scleroderma, and Rheumatoid Arthritis (according to FMx Dr. Amy Myers)

If you have this genetic SNP remember you have tremendous control over how your genes will express this — diet and lifestyle play a huge role on how your genes effect your health.

#4 Top exposure is to Pesticides (more on these below!)

Symptoms of chronic pesticide exposure are hard to pinpoint as it may take years of exposure until you start feeling symptoms. Here are some signs to watch for along the way:

- o frequent headaches, fatigue, weakness, dizziness, restlessness, nervousness, perspiration an/or nausea (your body trying to detox), diarrhea, loss of appetite, loss of weight, thirst, moodiness, soreness in joints, skin irritation, eye irritation, irritation of the nose and throat.

These tend to be chronic since we carry these around in our body too; and are especially problematic during pregnancy.

Chronic Pesticide exposures lead to depression, Parkinson's, Autism, ADHD, and other learning disabilities. Farmers especially. Common afflictions include tremors, Parkinson's and dementia.

If you struggle with mood, focus or learning, or are told you have ADHD ... this may be a sign you need to have less pesticides in your life.

#5 Toxic exposures are to PCBs (plastics) and pthathlates. More on this following.



If you have a high exposure to endocrine disruptors you may notice symptoms like sleep disorders, weaker immune system (frequent colds and illness), reproductive problems, depression, neurological problems and increased heart disease risk factors.

These carry the greatest risk for cancer and endocrine disruption —
These will persist since the toxins accumulate in our bodies. You can test for exposure levels.

Note; one of the most toxic burdens mentioned above as #1 is indoor air pollution — both home and work. We can control to a certain extent some of our indoor air pollution especially in our houses. For more detailed information on true green cleaning and how to avoid fragrance chemicals in your house follow this [link](#) and scroll down to “**True Green Cleaning**”, and save yourself a dose of air pollution in your own home.

Other ways to clean your indoor air:

Diffuse essential oils :)

Look into an air filter — at the very least for your bedroom.

Salt lamps

Bees was candles

Bamboo charcoal bags — a brand called moso bags is what I am experimenting with.

Plastics

I want to look at plastics; they are ubiquitous. Plastics are in our water, in our blood, in food, in our fish, in our cosmetics ... plastics are pretty much everywhere and this is leading to harm.

The effects of plastics have gotten to me. My second son was born with hypospadias — the main cause of hypospadias is plastic exposure ... back in the 80s and into the early 90s before I knew better, I took food to work with me and microwaved it in plastic containers . . . I happened to work at a day job though my pregnancy with my second son eating food from microwaved plastics frequently :(Now I know better — not only do I avoid all plastics as much as I can in my life I also avoid microwaves (they do molecularly change food more so than other cooking methods. Other cooking methods only change the surface molecules, microwaving changes the molecules all the way through — <http://www.collective-evolution.com/2016/01/20/science-sheds-light-why-heating-your-food-with-microwave-radiation-might-be-a-bad-idea/> & <http://articles.mercola.com/sites/articles/archive/2010/05/18/microwave-hazards.aspx>).

PLASTICS

The real problem with plastics and other chemicals? **ENDOCRINE DISRUPTION**

Both are a known endocrine disruptor. An endocrine disruptor is defined as “an exogenous chemical, or mixture of chemicals, that interferes with any aspect of hormone action.”



Hormone means to send out a message (as in from one cell to another). **Hormonal** comes from the greek word horman, which means to set in motion. So hormones send out a message, causing a hormonal response that sets something in motion.

Think of hormones in our body as little messengers that carry messages from one cell or organ to another to tell our body what the cell needs or what it needs to do. Anything that would interfere with this signaling will interfere with your endocrine or hormonal system therefore disrupting health.

One of our most common endocrine disruptors? Plastics. Especially for women.

One of the most prevalent way plastics interfere with our hormones communicating their messages are through estrogen. Plastics especially BPA can mimic effects of estrogen and interfere with cellular signaling. Plastic molecules are similar enough to estrogen molecules to be able to attach themselves to estrogen receptors on the cells. What happens then? **The plastic molecule does not “tell” the cell what it needs to do there fore interrupting the bodies processes of growth, repair, regeneration, and detoxifying. The cells become sick and diseased.** Since women have more estrogen than men women have to be especially careful with plastics and all known endocrine disruptors.

Plastics — phthalate — have most recently been discovered to also interfere with insulin receptors. They can attach to insulin receptors and thereby prevent insulin from getting into the cell ... so what does your body do? Release more insulin which raises insulin levels causing ... Insulin Resistance. A diagnosis many have received.

They noted that exposure to BPA suppresses the release of adiponectin, a hormone that increases insulin sensitivity. BPA could lead to insulin resistance and increased susceptibility to obesity and metabolic syndromes. BPA has also been shown to affect the pancreas, thyroid hormone pathways, and brain functions.”

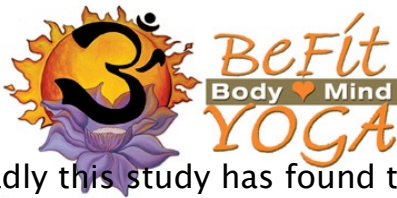
There have also been some evidence pointing to another issue about how plastics (and other toxins) are increasing obesity — **Your body tries to hide it by tucking it away in fat so it can not circulate in your bloodstream where it causes damage.** You will store extra fat to carry this chemical if you get a lot of it in your blood stream.

This fact makes it harder for obese people to lose weight, as they shed fat the toxins get put back into the blood stream where they make you feel worse until your liver and kidneys are able to detox it. This is one of the reasons s-l-o-w weight loss is better.

More than 90% of people tested in US have measurable BPA in their bodies. Children and women are the most susceptible.

ॐ Scientists have discovered people with the increased levels of BPA in their urine had twice the risk of having a high body weight — those with even higher levels had 5x the risk of being obese.

ॐ Higher levels of urinary excretion of BPA linked to heart disease, diabetes, liver inflammation, cancer, thyroid disorders, obesity, infertility.



Sadly this study has found that plastics effect girls more than boys. Boys in the study did not run the same risks. How does BPA promote obesity? Through endocrine disruption.

"The authors theorized that BPA could both accelerate girls' pubertal development and weight gain during their pre-puberty years. They noted that exposure to BPA suppresses the release of adiponectin, a hormone that increases insulin sensitivity. BPA could lead to insulin resistance and increased susceptibility to obesity and metabolic syndromes. BPA has also been shown to affect the pancreas, thyroid hormone pathways, and brain functions."

<http://www.greenmedinfo.com/blog/bpa-behind-global-obesity-epidemic>

Endocrine disruptors are present in all chemical products, including and not limited to: Plastics, Pesticides, herbicides, Triclosan found in antibacterial soaps, many solvents and cleaning products, household items like bath mats, fire retardants, stain resistant coatings and products like Gore-Tex, automotive products, bleach, paints, detergents, spermicides, cosmetics, soaps, surfactants, lubricating oils, nail polish, mercury amalgams, teflon coatings, personal care products with parabens in them, and SLS used to make soaps bubbly, it's found in all currency throughout the world (thats money!), as well as cash register receipts and anything printed on thermal paper.

- o Unfiltered tap water can also be a hormone disruptor because our water supply can contain estrogen from excreted medically prescribed hormones, pesticides, and multiple other endocrine disruptors.

The two worse offenders:

BPA – Bisphenol A – Makes plastic hard. Found in plastics and lining of canned goods, dental sealants, plastic containers, plastic silverware, etc. Used in epoxies, shellacs, polycarbonates, etc. BPA has been linked to an increase in breast and prostate type cancers due to their endocrine disruption. BPA has also been linked to brain development in the womb.

As we have become more aware about the dangers of BPA, manufacturers are mixing up even worse concoctions to replace BPA ... An alphabet soup of bisphenol are on its way ... we already have in use BP-AP, BPF, BPS, BPP, BPM, and many more ...

These other bisphenol may be even worse than the BPA they are replacing — they stay in your body longer and cause more DNA damage. **Bottom line avoid any bisphenol!**

Bisphenol have soaked into our food supply; the NY State Dept. of Health Researches latest reporting showed 75% of the foods they sampled contained an assortment of eight different bisphenols. Canned foods and processed foods being the worst offenders.

For example, macaroni and cheese was sampled and it turns out almost all of them had phthalates in them! Not because manufacturers are putting plastic in our food ... although they do sometimes ... but from the dairy in the cheese that was stored and shipped in plastic, and the hoses the milk runs through in the factories, inks on packaging materials, adhesives, sealants, and gaskets, and coatings ...

<https://www.ncbi.nlm.nih.gov/pubmed/23614805>



Phthalates make plastics pliable. ... and is used to coat medicines . . . found in hair spray, nail polish, plastic food containers, and vinyl.

Phthalates are linked to cancer, obesity, allergies, and asthma as well as ADHD, and birth defects like hypospadias.

First a little education about plastics – we can identify them thanks to recycle numbers :)

Since they are so ubiquitous and we may not be able to eliminate all our plastics initially we can start by reducing the worst offenders.

Notes from eartheasy.com on plastics and their corresponding recycle numbers:

#1 – PET (Polyethylene Terephthalate) – 1x use drinking bottles, thin plastic. If used more than once they leak chemicals, may be a safer option for one time use. Which one time use plastics causes a huge environmental concern.

#2 – HDPE (High-Density Polyethylene) – Think milk jug, detergent and oil bottles, toys . . .

#3 – PVC (Polyvinyl Chloride) & Phthalates — Plastic wrap type of plastics, blister packaging, floaties, etc. — PVC is dubbed the “poison plastic” because it contains numerous toxins which it can leach throughout its entire life cycle.

#4 – LDPE (Low-Density Polyethylene) — Squeezable bottles and shrink wraps

#5 – PP (Polypropylene) — Has heat resistant qualities, think plastic mugs, yogurt containers, lids, wrappers inside of boxes like cereal, etc. This one is less harmful, and may be ok for occasional use.

#6 – PS (Polystyrene) – Styrofoam — **AVOID STYROFOAM!** Because polystyrene is structurally weak and ultra-lightweight, it breaks up easily and is dispersed readily throughout the natural environment. Beaches all over the world have bits of polystyrene lapping at the shores, and an untold number of marine species have ingested this plastic with immeasurable consequences to their health.

Polystyrene may leach styrene, a possible human carcinogen, into food products (especially when heated in a microwave). Chemicals present in polystyrene have been linked with human health and reproductive system dysfunction.

#7 – BPA, polycarbonate, and LEXAN — a catch-all category for all other plastics. Think baby bottles, teething rings, sippy cups, water cooler bottles, etc. Of primary concern with #7 plastics, however, is the potential for chemical leaching into food or drink products packaged in polycarbonate containers made using BPA (Bisphenol A). BPA is a xenoestrogen, a known endocrine disruptor.

- o A new generation of compostable plastics, made from bio-based polymers like corn starch, is being developed to replace polycarbonates. These are also included in





category #7, which can be confusing. These compostable plastics have the initials “PLA” on the bottom near the recycling symbol. Some may also say “Compostable.”

- o #7 plastics are not for reuse, unless they have the PLA compostable coding. When possible it is best to avoid #7 plastics, especially for children’s food. PLA coded plastics should be thrown in the compost and not the recycle bin since PLA compostable plastics are not recyclable.

Plastics with the recycling labels #2 and #4 on the bottom are safer choices and do not contain BPA. Although #1 plastics should NOT be re-used or they do leach chemicals, I don’t recommend single use plastics due to the burden they place on our trash and recycling systems.

Tips on how to avoid plastics

- ॐ Use glass instead of plastic for leftovers and foods.
- ॐ How do you jar a head of lettuce? wrap vegetables in a dishtowel first, then put in a plastic bag.
- ॐ Same with cheese. I’ve heard cheese is best stored in a glass jar, however all the glass jars don’t fit in my cheese drawer. My solution; wrap my cheeses first in parchment paper, then in plastic.
- ॐ Don’t drink anything hot through a plastic lid — take note when you get a hot beverage out!
- ॐ Don’t drink through straws. And they are a problem in our oceans as well.
- ॐ Avoid canned goods, better options may be BPA-free cans – –best options is to go glass and **MAKE IT YOURSELF.**
- ॐ Avoid polyesters. These are made from plastics.
- ॐ Buy food sold in glass or waxed cardboard cartons known as Tetra Paks.
- ॐ Don’t use plastic baby bottles, cups, dishes, or anything marked with a 7.
- ॐ Don’t microwave food in plastic containers! EVER! Better yet, don’t microwave anything.
- ॐ Don’t take receipts from stores — they are lined with plastic.
- ॐ Avoid anything anti-bacterial. Not only are these endocrine disruptors — they are contributing to the anti-biotic resistant problem!
- ॐ Use wood or bamboo cutting boards instead of plastic. Wood and bamboo are naturally anti-microbial. It is plastic that harbors pathogenic bacteria.

What Are the Safest Fabrics to Wear?

IN GENERAL, IT IS BEST TO AVOID:

POLYESTER ACETATE RAYON
TRIACETATE NYLON ACRYLIC

AND ANYTHING ELSE THAT IS STAIN RESISTANT,
PERMANENT PRESS, OR WRINKLE-FREE.

THE HEALTHIEST CHOICES ARE:

COTTON WOOL LINEN CASHMERE
BAMBOO CUPRO TENCEL HEMP SILK

— AS LONG AS THEY ARE ORGANIC AND YOU DON’T DRY CLEAN THEM.

DISCOVER WHAT TOXIC CHEMICALS COULD BE LURING IN YOUR CLOTHES:
WWW.THETRUTHABOUTCANCER.COM/TOXINS-SYNTHETIC-FABRICS



And remember Studies have shown kimchi helps us detox BPA and some pesticides ... so eat your kimchi ... and of course sweat everyday to help detoxify.

It is not just plastic that are the problem here, the problem is all the chemicals that interfere with our body's communication system — our hormones. These little messengers need to be able to attach to their receptors to communicate!

Here is an example of what chemicals will do to you. These are Bird of Paradise plants that live alongside the ohana I get to live in in Maui. The roof was painted two years ago, paint was splashed on some of the leaves of this very sturdy plant, take notice to how aged and beaten up the leaves look vs. the leaves of the plants that did not get splattered with paint — chemicals will do the same to you.



In Bloom :)





Food chemicals= pesticides and preservatives

This one can be really short, however I usually need more data to truly educate people that this statement is highly true; **Organics are worth the extra time and expense.** Period. You want organic produce.

You may think buying organic is more costly if you just compare prices at the grocery store between organic and non-organic produce ... this is not my idea of organic. Nature's Promise is not a very clean organic company in my opinion. And Perdue chicken manure is now allowed to be used on organic produce (Perdue feeds their chickens antibiotics and hormones) ... the government agencies that monitor this are so stupid they don't realize that what the chicken is fed ends up in their manure?

And hydroponics are soon going to be allowed into organic. Hydroponics is chemicals and water Need I say more?

There is no substitute for knowing your farmer!

If you want organic produce that is more affordable find a CSA or local farmer. If you need more information on this, contact me. Most of these farmers sell higher quality vegetables at better prices than the grocery stores. And if it is more, like these carrots it is because they are so much bigger and better

Compare the fresh vegetables you get from your local farmer to the same vegetable from the grocery store, like carrots. My experience is the carrots from your local farmers will be much bigger, brighter, in more colors, and fresher — and provide a lot more food than the grocery store produce. Your dollar more is well spent and will get you more food in the long run. And many CSA or local farmers will work with you and your budget, trying getting your grocery store to do that.

Here is some supporting education on why you want organic produce:

Did you know a lot of pesticides come from warfare? Here is the front page statement on poison.org:

Organophosphate insecticides, sometimes used in and around the home, are related to some chemical warfare agents, specifically nerve agents. That fact drives home the point that insecticides must be chosen, used, and stored safely.

This means that if you are eating foods that have been sprayed with organophosphate insecticides you are slowly poisoning yourself.

organic produce has about 180 times fewer pesticides on them than conventional produce.

Roundup VS DDT

Roundup is currently the most widely used herbicide/pesticide used today



DDT was used and promoted like roundup is today. We now know DDT is highly toxic and there are several studies indicating DDT has been connected to polio — and most likely the reason for the polio outbreak that now requires yet another vaccine.

kids used to play in the fog of DDT because they were told it was harmless just like monsanto claims with roundup. Mothers powdered their pantry shelves with DDT because they were told it would keep bugs out of foods.

And now we are doing the same with Round up. Monsanto makes roundup to spray on their GMO produce — meaning GMO foods are directly sprayed with these poisons because they are genetically modified to not die in the presence of these chemicals.

I am also going to sound an alarm bell : GMOs were never tested before they got FDA approval! Monsanto hired lawyers who know the system and managed to get GMO foods approved under the GRAS category which means Generally Recognized As Safe — a catch all category.

This category was meant for items such as baking soda, vinegar, etc. Products we have a long history with. (Testing is long, arduous, and expensive so corporations try to avoid it.) Initially there were only a few products in the GRAS category, but a handful of lawyers have figured out ways for companies to angle their additives into this GRAS category, and over the years the number of ingredients now considered GRAS is ten fold to what it used to be. This is also how Monsanto snuck GMO foods into our food supply . . . they got them recognized as GRAS in 1992! And this is also how trans fats snuck into our food supply! So clearly FDA approval means nothing for our food supply. LET ME MAKE THIS PERFECTLY CLEAR . . . GMO FOODS WERE NEVER TESTED BEFORE RELEASED INTO OUR FOOD SUPPLY. You are the test. The cancer epidemic is proof.

And one more alarm ... roundup kills milkweed which is what monarch butterflies need to survive. We are losing our butterflies ... and our bees, it is known that roundup makes the bees sick and dumb in that they cannot find their way back to their hives. If we continue spraying roundup as we are we are in risk of losing our pollinators ... do you know the impact that would have on our food supply? Remember how I started this topic? Since 1970 we have lost 57% of our wildlife . . .

Monsanto is also the evil company trying to hide the data that roundup is a known carcinogen. In March of 2015 the International Agency for Research on Cancer (IARC) a division of the World Health Organization (WHO) determined that roundup or glyphosate (among a few other chemicals) is a class 2A probably carcinogen. This is the second worst category – the top category being known carcinogen — and there are several lesser harmful categories.

http://www.i-sis.org.uk/Glyphosate_Probably_Carcinogenic_to_Humans.php

If you google this the top hits are Monsanto trying to disregard this data! Monsanto has a history of government trickery and many lies.

And Monsanto also makes these toxic products:



Agent Orange

PCBs! Those toxic plastic compounds I just spoke about.

Our Good Bacteria aka The Micro biome

One of the many problem with pesticide and herbicides is the microbial harm they cause to our body (they are also known endocrine disruptors). These chemicals got approved before we knew about the good bacteria in our gut. It has been a good several years now since we have discovered this, yet harm still continues between the spraying of our foods, chlorinated water, and many many medications that disrupt this balance; not only are antibiotics topping the list of harm, but many psychiatric meds including antidepressants harm our microbial balance learning in its a wake a wave of diseases that most can not pinpoint where they came from . . .

Monsanto still tries to fight the gut connection to their roundup.

Roundup literally turns bugs guts to liquid because it acts on their

“shikimate pathway” which humans don’t have — Monsanto holds tight to this position ... GUESS WHAT DOES HAVE A SHIKIMATE PATHWAY? OUR GOOD GUT BACTERIA.

Atrazine . . . next on the list and is still used on your food today. Atrazine is one of the most widely used herbicides since 1959. It is used heavily on corn, grain, sorghum, citrus fruits, and sugar cane.

Europe banned atrazine in 2005 due to groundwater contamination — today in the states we still use atrazine to the tune of 80 million pounds per year. Much of it contamination comes as much from groundwater as it does eating the produce it is sprayed on.

Atrazine is known to cause cancer — specifically breast, prostate, ovarian, thyroid, and uterine because it is an endocrine disruptor — even at low levels. Atrazine:

- ॐ Lowers testosterone — it is called the “chemical castrator”.
- ॐ Inhibits testosterone production
- ॐ Induces aromatase which increases estrogen
- ॐ Associated with decreased sperm & fertility in humans.

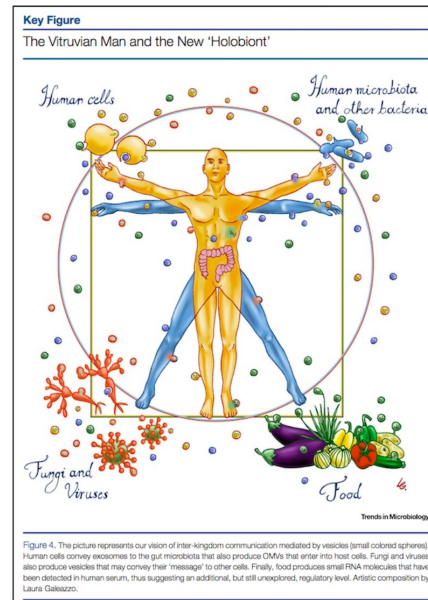
Atrazine is so harmful urine from one farm worker can castrate about 2000 frogs. Atrazine mutates frogs quickly. Atrazine makes males become more female, make

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less testosterone, and make some even lay eggs.

I am going to leave you with something to sit with on Atrazine. The chemical company Syngenta makes atrazine. As stated atrazine is known to cause cancers;

Syngenta is a pharmaceutical company . . ; They make chemotherapy drugs! Would you call this a conflict of interest?

Here is a little blip Dr. Mercola wrote on Atrazine:

Independent research⁴ shows atrazine causes hermaphroditism in frogs (turning males into egg-laying females) by inducing an enzyme called aromatase, which causes overproduction of estrogen. For this reason, atrazine is also suspected of contributing to breast cancer. Research has also shown atrazine:

- Blocks testosterone production
- Is a potent endocrine disruptor
- Chemically castrates wildlife and causes sexual reproductive problems in a wide range of animals, including mammals, birds, fish and amphibians
- Induces miscarriage in laboratory rodents
- Reduces immune function in animals

Studies looking at human cells and tissues suggest the chemical likely poses similar threats to human health. For example, one study linked atrazine exposure in utero to impaired sexual development in young boys, causing genital deformations, including microphallus (micropenis).

The evidence^{5,6} also suggests atrazine exposure may contribute to a number of different cancers, specifically [breast cancer](#), ovarian cancer, [non-Hodgkin's lymphoma](#), hairy-cell leukemia and thyroid cancer.

Elevated concentrations of atrazine in drinking water have also been associated with birth defects in the human population, including abdominal defects, gastroschisis (in which the baby's intestines stick outside of the baby's body) and others.

Again keep in mind not only will fermented foods help you detox these pesticides — especially fermented cabbage foods; in addition the antioxidant lycopene found in watermelon, tomatoes, red bell peppers, and other red vegetables will protect us against some of atrazine toxic effects

Arsenic

A new toxin is showing up in our water supply, arsenic, it is not sprayed on foods, it is a metal toxin.... We are now finding a lot of arsenic in our water ... why? Arsenic collects in rice from the soil But that would not necessarily put it in our water ... If you eat a lot of rice you may have higher levels of arsenic in you. This still does not explain why it is in our groundwater unless it's coming from the sewer plants.

Turns out chicken farmers add arsenic to chicken feed to make them fat! Remember how I told you we store toxins in fat? That's what happens in chicken too, they have to store more fat to keep the arsenic out of their bloodstream. Guess what happens when you eat the chicken fat? You eat the arsenic. **You are what you eat eats too.**





And the run off from the big CAFO chicken farms may be what is poisoning our water supply.

It has been said we can clear arsenic pretty quickly, but our chemical burden is so high right now that we can not clear all the chemicals we are exposed to in a day.

By the way ... RO (Reverse Osmosis) water gets out arsenic — most other filters do not. They are now making special filters to filter out arsenic — I noticed this as i finally ordered my Berkey water filter :)

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Michael D. LaGrega • Phillip L. Buckingham • Jeffrey C. Evans
and Environmental Resources Management

TABLE 5-2
Example of adverse effects caused by selected toxic substances

Carcinogenic chemical	Potential carcinogenic effects	Potential noncarcinogenic effects
Metals (by inhalation)		
Arsenic	Lung cancer	Liver damage, lung fibrosis, neurological damage
Cadmium	Lung cancer (in test animals)	Kidney damage, osteoporosis, anemia
Chromium ⁺⁶	Lung cancer	Bronchitis, liver and kidney damage
Organophosphorus pesticides		Neurotoxicity, systemic poisoning
Chlorinated organic compounds	Liver cancer (in test animals)	Liver damage, neurological effects
Polycyclic aromatic hydrocarbons	Lung cancer, stomach cancer (ingested), skin cancer (dermal contact)	Liver damage, dermatitis

Pesticides and Herbicides

Pesticides and herbicides are chemical compounds used to control insects (insecticide), rodents (rodenticide), parasites (nematicide), fungi (fungicide), and undesirable plants (herbicide) (see Table 3-2). Both organic and inorganic compounds have been used as pesticides and herbicides. Organic pesticides can be generally grouped as chlorinated pesticides and organophosphate pesticides.

Chlorinated pesticides have been widely used as insecticides and fungicides. These pesticides have been found to have harmful side effects as they do not readily degrade in nature and tend to accumulate in the fatty tissues of most mammals.³ Perhaps the most infamous of all chlorinated pesticides is **DDT** (see Table 3-2). Other chlorinated pesticides include lindane, dieldrin, chlordane, toxaphene, heptachlor, DDD, and DDE. Virtually all chlorinated pesticides have been scrutinized because of known or suspected hazards to human health.

Organophosphate pesticides are generally toxic to both humans and animals. One important organophosphate pesticide is parathion (see Table 3-2). Other organophosphate pesticides include malathion, systox, chlordion, disyston, dicapthion, and metasytox.

Organic herbicides typically function by inhibiting photosynthesis, inhibiting plant chloroplast development, disrupting other phytochemical cycles, or by growth regulation. Photosynthetic disruptors include triazines such as atrazine and simazine, hydroxybenzonitriles such as bromoxynil, and carbamates such as propanil and chlorpropanil. Others include paraquat and diquat. Growth regulators include 2,4-D; 2,4,5-T; MCPA; and glyphosphate. 2,4,5-T is noteworthy because it contains significant amounts of dioxin as an impurity from its manufacture. Dioxin, also known as 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD), has been shown to be teratogenic and can cause the skin disease chloracne in humans.⁴

Chinese and Ayurvedic medicines are based on 2 principals:

****Nutrients In & Toxins Out****

Chemically spraying food reduces their nutrients and increases their toxicants. They go against health.



Nutrients In and Toxins Out

What can we do about these chemical assaults? We do have a course of action that can protect us. It is called Herbs and Spices, and real food.

I spoke earlier in this topic about keeping your antioxidants higher than your free radicals, recommendations for the rest of your life along these lines? Reducing your free radical exposures from chemicals is half of the work of keeping antioxidants higher than free radicals. The other side of this advice; Vegetables, every day and Organic foods as much as possible.

Vegetables have nutrients called phytochemicals — phyto means plants, phytochemical = plant chemicals — these are good chemicals, they are defensive molecules.

Plants manufacture these chemicals to protect themselves. Plants can't run from the sun and go put on sunscreen. They can't filter their water or put on bug spray or shoo away an insect or a rabbit ... Instead they have to sit in the same spot and change their chemistry. They start producing defensive molecules that repel bugs and some animals, protect them from the sun, kill viruses and pathogenic bacteria, among many other functions performed by these defensive molecules. They are the immune system of the plant. When we eat plants we are eating these defensive molecules and getting their immunity.

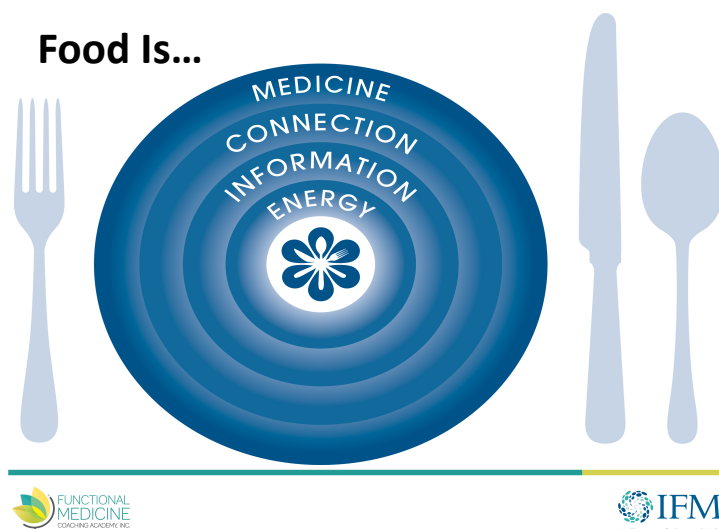
It is these defensive molecules that protect us from harmful chemicals and the processes of living and digestion. In addition we have recently learned these phytochemicals or defensive mechanisms are important for turning on genes in us humans.

We now know that food is information, not just energy. (Food is also medicine; and food is connection with our family and our communities. We commune with food. More on this to come.)

RNA and DNA

These same plant chemicals also talk to our DNA and program it for health. With the new emerging data on genetic testing we have learned that our DNA is only 20% responsible for our health. The other 80% of our health is determined by our foods and lifestyle.

What we used to call junk DNA are actually programmable micro RNA that communicate to our DNA. Plants talk to our microRNA and tell it to program our DNA for health. The defensive





molecules in the plant program us to resist viruses, bacteria, cancers, etc. You want this communication from plants!

If you are eating organic vegetables or even better wild plants — every time you take a bite you will light up genes in your body that will assist with digestion, detoxification, and antioxidant formation.

Furthermore the fresher and more organically grown the food — and the healthier the soils the more of these phytochemicals are present. Science is proving what hippies and alternative doctors have spoken about for years — light in food. Don't eat dead food . . .

When a plant is outside in the soil and the sun it is collecting the sun's rays and storing it as little particles of light in the plant. These little particles of light have been given a name : **BioPhotons**. And some people now are able to measure the biophotons — or light — in foods. The sooner the plant goes from the soil and sun to our plate the more biophotons. The longer the plant sits in trucks, stores, and fridges the dimmer the light gets.

These biophotons have been shown to improve how our cells communicate with each other — they make the process of communication quicker almost like wifi between the cells vs. something having to enter a cell. People who consume more foods in cleaner and fresher states have more vitality due to higher nutrient content and biophotons in their food. This is why processed foods, canned foods, foods picked unripe, shipped across the world, and then left to sit in stores is called dead food. The light is no longer in this food.

Furthermore if someone tells you you need to supplement because our soil is so bad, you can tell them if you know your farmer and their growing methods this is not necessary. Supplements behave very different in the body than the same nutrients from food. This is a well documented fact. And many supplements don't even have in them what they say, nor are they in the appropriate quantities, and there are fillers and coatings (many times made with plastics!) to further add toxic burden to our body. Most pills are a toxic burden to your body.

The recipe for health?

Try to eat 9–12 servings per day of vegetables. This is vegetables at every meal — make each meal over half vegetables.

Another one of my favorite FMx doctors, Dr. Terri Wahls, in her MS protocol wants everyone to eat 9 cups of vegetables per day — 3 cups cabbage foods, 3 cups leafy greens, and 3 cups NON-STARCHY vegetables each day.

ॐ We have data showing those who consume more cruciferous vegetables can pee out more pollution. We process it better and get it out of our body via urine.

In treating her own disease, she did not cross over the threshold from stopping the progression of MS to recovering and healing from it until she started eating 9–12 cups of vegetables per day.



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[Bobbi Misiti](#), FMCHC is founder of [BeFit Body & Mind](#), she has worked independently

since 1990 educating and motivating folks in the world of yoga and movement of body, fresh whole foods, plants and herbs, and lifestyle & food as medicine.



In 2001 she opened BeFit Body & Mind YOGA, a yoga studio dedicated to individualizing the framework of

ashtanga yoga to fit any body, in 2009 she started traveling and teaching [workshops worldwide](#) spreading the joy of yoga, food, and movement.

She currently resides in Central PA over the summer months and Maui, HI October through April.