A NATURAL LIVING GUIDE FOR THE

CHEMICALLY SENSITIVE

From bedding and cookware to clothing and body care, find helpful tips and products to detox your home and body, as well as foods and nutrients to boost your immune system

GREENOPEDIA

ABOUT THIS GUIDE

THE INEVITABLE LEGALESE

The information contained in this guide is intended to help you make more informed decisions regarding the products you bring into you home and the ingredients you put into and onto your body. It is in no way intended to provide medical advice, to replace the guidance of your healthcare professional, or to be used to diagnose, treat, cure, or prevent any disease or condition.

Please note that I am not a scientist, doctor, or healthcare provider in any capacity. I am a diligent research nerd, who has long been obsessed with removing toxins from my life, as well as with organizing, synthesizing, and simplifying chaotic and often difficult-to-digest information across the web to make it easier for readers to consume.

While I have worked hard to ensure the information in this guide is as accurate as possible, it is ultimately the reader's responsibility to take ownership of his/her health and to decide what is safe and healthy for their body and their family.

Neither Greenopedia nor I shall be held responsible for any decision made by the reader with regards to trying new products, foods, or practices, nor for any errors within, or omissions from, the guide's content.

Please consult your doctor or qualified healthcare professional before following any advice or recommendation from this guide.

- Sheryl Ryan

Author of this guide and founder of Greenopedia.com

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ABOUT THE

BRAND SPOTLIGHTS

THOUGHTFUL BRANDS

Each chapter spotlights at least one brand you may not have heard of. While most of them aren't easy to find with just a quick Google search, I really wish they were. These are thoughtful brands, who are really putting in the effort to do things right. You deserve their safer, healthier products and they deserve the recognition for going the extra mile to make sure you get them.

If there are any brands you feel shouldn't be here, please let me know why and I'll be more than happy to look into it further.

AFFORDABILITY

Not all these brands will be affordable for everyone. Some are. Some aren't. I'm aware of that and I wish the reality was different. But while chemicals are often manufactured cheaply, plant-based ingredients and materials require precious time and acres of land to grow, as well as people to nourish and harvest them.

There are plenty of natural alternatives outlined here that ARE more affordable than their synthetic counterparts. Home cleaning and deodorizing products are a great example. But do be prepared for some sticker shock when it comes to items, such as healthier rugs & mattresses. This can't be helped.

NEED VS. WANT

As someone who is as equally obsessed with a minimalistic lifestyle as with a toxin-free lifestyle, I recommend prioritizing any purchases based on your sensitivity triggers and discomfort. Make a list and be realistic about what you really need vs. what excites you.

As I was discovering these new brands, even my relentless need for minimalism was challenged. I wanted everything. Resist! Save up and chip away at your list as best you can over time. There's no law against treating yourself to something nice. Just be sure to focus on the real needs first.

REVIEWS

Every review you see on a Brand Spotlight is (I believe) real. I grabbed them either from the brand's website or their Amazon or Facebook reviews. That said, please note that I did edit most reviews for brevity, spelling, and/or grammar.

BRAND SPOTLIGHTS

BEDS & BEDDING

CLEAN & DEODORIZE

CLEAN DRINKING WATER

CLOTHING & ACCESSORIES

EMF PROTECTION

FOOD & CONDIMENTS

HAIR & BODY

IMMUNITY SUPPORT

PERSONAL CARE

POTS & PANS

RUGS & CARPET

TOPICS

INTRO-DUCTION

For most of us, walking into a public restroom that's just been cleaned with bleach, or even walking past someone who's overdone it with the perfume, can be unpleasant. That sudden waft of chemicals can knock you back for a quick second and you might even hold your breath until you're out of range.

But if "unpleasant" is all that happens, count yourself lucky, because these kinds of everyday nuances aren't a temporary or mildly uncomfortable experience for everyone.

There is a large and growing population suffering from a heightened sensitivity to chemicals, where the faintest synthetic smell, or even the odorless presence of chemicals, can bring about a debilitating headache, nausea, dizziness, itchiness, and irritating brain fog. And that's just the beginning.

An innocent whiff of common home cleaners, synthetic fragrances, or that quick off-gassing of nastiness that smacks you in the face when you excitedly open that package of whatever you ordered online... these common malodors can make anyone sick in large doses, but they can leave the chemically sensitive with lasting skin rashes, extreme joint pain, difficulty breathing, and deep fatigue with only a tiny amount of exposure.

The condition is known as Multiple Chemical Sensitivities (MCS) and the symptoms, as well as the degree of sensitivity, can vary greatly by person.

Diagnosis

While symptoms can sometimes look or feel like an allergy, the body is not 'exactly' having an allergic reaction. This can get confusing, because it's not uncommon for those with MCS to also have allergies. But in terms of treatment, there is a difference.

When you're allergic to something, your body releases immunoglobulin (IgE) antibodies to battle the offending substance. During an allergy test, this response helps your doctor to pinpoint your triggers. Depending on the allergy, she may prescribe pills, an inhaler, or other remedy to help manage your body's response.

But with a "sensitivity", your body is clearly reacting to something, yet it doesn't produce IgE in response. Traditional allergy tests often don't help for those who are sensitive, but not allergic. And unlike an allergy, it's not just one substance that triggers a particular reaction; there are multiple... ***Multiple*** Chemical Sensitivities (MCS).

Unfortunately, mainstream doctors are not always equipped to help. Many are convinced that MCS is purely a psychological reaction and recommend a therapist. Others can misdiagnose the condition entirely.

The good news is that there are several types of doctors who absolutely can help. Many MCS sufferers have been properly diagnosed by allergists, immunologists, environmental medicine doctors, holistic / integrative / functional medicine doctors, and yes, even some psychologists.

It can take a while to find the right help. And even when you do, MCS is a tricky bugger. What triggers a reaction for some folks, doesn't trigger others. Likewise, the remedies that help some, don't help others. Or they do help, but then they stop working after a while, which is frustrating.

So, what's going on?

When you suffer from an acute sensitivity to chemicals, your body is essentially overburdened with toxins and simply can't process them fast enough. You might think of it like a huge backlog of paperwork sitting on your desk that continues to grow faster than you can get through it.

But in today's industry-driven, chemical-filled, plastic-packed, and wifi-enabled world, toxins are nearly impossible to escape. If your body can't manage the constant influx, the contaminants accumulate and can really wear you down.

Life gets pretty tough at this point. Shopping at the supermarket, working in an office building, attending your kid's soccer game... basically all the things everyone else takes for granted become a burden, at best.

You'd think home was your safe haven, but if you live next door to an incessant smoker or two floors above your apartment building's laundry room vent or your neighbor is a big fan of spraying pesticides on his lawn, well, sorry Charlie.

Finding relief

If you or a loved one are hypersensitive to chemicals, you know the path to long-term MCS relief is long and filled with challenges.

1. It involves eliminating the chemicals in your personal environment in order to reduce or prevent symptoms.
2. You need to detoxify your body to reduce its chemical load.
3. And you need to boost your immune system to better handle the inevitable contaminants of the environments you cannot control.

Ultimately, managing your triggers requires knowing exactly what you bring into your home, what you put into and onto your body, and how to maintain your indoor air quality at all times.

MCS symptoms can be triggered by a myriad of contaminants and not everyone is affected equally. And, as mentioned, some solutions work well for some, but not at all for others.

While it would be impossible to hit on all the variables, this book will cover the broader spectrum of what to avoid, the natural alternatives you can choose in their place, and the product recommendations that aim to help.

IN THIS CHAPTER

HOUSEHOLD CLEANERS

HOUSEHOLD CLEANERS

NOTE: Anyone who has been chemically sensitive for some time is, most likely, already hip to the information in this short chapter, as well as the next chapter on home deodorizers. Both are written primarily for the newly sensitive and for those seeking to support a friend, family member, coworker, or neighbor.

Household cleaners are a common trigger for the chemically sensitive, but luckily they are one of the easier adjustments to make. This is because the natural alternatives are not only as effective as the synthetic sprays, but they're also less expensive, which is a nice win!

WHAT TO AVOID

The Environmental Working Group has a Skin Deep Database that lets you look up just about any ingredient out there, which is helpful. But just because they rate something as "safe", doesn't mean it won't trigger a response.

Nearly any cleaner you'd buy at a regular supermarket, or even a 'healthy' market, may contain ingredients that can trigger a response. Ammonia and bleach are the obvious villains, but beware of any hard-to-pronounce ingredient that makes you wish you'd paid more attention in chemistry class.

'Fragrance' is another obvious no-no. Behind this single word and innocent-sounding descriptor can lurk hundreds, even thousands, of chemicals. Fragrance is a huge trigger for the sensitive.

Not every cleaner lists its ingredients at all, which is a big red flag for me. Sure, you can sift through their website, if so inclined. But brands know that folks these days, sensitive or not, want healthier alternatives. They sometimes design labels that make their product appear safer and more natural than it is. But transparency is key and if the ingredients are not readily found, back on the shelf it goes. Period.

Call for ingredients? Yeah, right. Why not just list them?

And those are just the active ingredients. No thanks.

Sure, not as bad as the other two. Still, too many synthetics for my liking. Plus, it already has essential oils, so why also "fragrance"?

There are plenty of safer solutions that'll get the job done. Let's take a look.

NATURAL ALTERNATIVES

White vinegar and baking soda are, hands down, the favored cleansers for healthy lifestylists. They do an amazing job of cleaning your home naturally and can be a godsend for those suffering from extreme chemical sensitivities. Enzyme cleaners are a solid runner up and a good alternative if you prefer a premix solution.

Here's how they work.

White vinegar kills germs and bacteria nearly as effectively as bleach. It does produce strong fumes, but unlike bleach and other chemical cleaners, vinegar fumes are not harmful and they wear off quickly. Even at full strength, the chemically sensitive don't typically report issues. If you do find it bothersome, try diluting it down to a 50/50 mix of vinegar and water.

Baking soda is amazing as a non-abrasive scrub and is commonly used for tasks like removing film from the bathtub, getting the kitchen sink to shine, and helping to remove baked on foods from pots and pans. Baking soda has no odor whatsoever and it absorbs most odor-causing bacteria in the kitchen and bathroom.

Enzyme cleaners use "good" bacteria and natural enzymes to break down and essentially "eat" soils and stains. They can be used to effectively disinfect counter tops, bathrooms, carpet stains, and more. That said, please note that commercial enzyme cleaners often contain some amount of chemicals and fragrances, so you do need to check the label.

BRAND SPOTLIGHT

FORCE OF NATURE

Non-toxic cleaner as effective as bleach

Tap Water + Salt + Vinegar → Electrified

Force of Nature is a small, highly effective appliance that uses electricity to transform regular **tap water + salt + vinegar** into a powerful all-purpose cleaner that is as effective as bleach with zero toxic chemicals.

Beyond everyday cleaning around the kitchen and bathroom, this 'electrolyzed water' is also great for toothbrushes, makeup brushes, cloth diapers, toys, sippy cups, gym sneakers, yoga mats, litter boxes, humidifiers, washing machines, sports equipment, colorfast textiles (e.g., rugs & upholstery)... just about anything.

It's not only more cost efficient than commercial products, it also beats them in lab tests that compare their efficacy in both cleaning and deodorizing.

Check out the 3rd party test results and watch their YouTube video (The Science Behind Force of Nature) to see how it works.

Force of Nature Starter Kit

VIEW DETAILS

"I used it in my bathroom and I swear, even Lysol wipes never left the sink that clean."

FORCE of NATURE™

IN THIS CHAPTER

DEODORIZING YOUR HOME

DEODORIZING YOUR HOME

Unwanted chemicals can fill your home in either a lasting or fleeting way. Some can be prevented; others aren't so easy.

For instance, you can experience long-term off-gassing *(as in months or even years!!)* of malodorous VOCs (Volatile Organic Compounds) and other contaminants when you buy new furniture, rugs, carpet, shower curtains, building materials, or anything made from synthetic materials or that have been chemically treated during the manufacturing process.

By contrast, temporary air pollutants only last from a few moments to a few hours, but still pack a powerful punch. These include a quick whiff of styrofoam packing popcorn, nail polish remover, your guest's aftershave, your neighbor's cigarette smoke, a newly painted room, and newly paved roads outside your door.

AVOIDING THE POLLUTANTS

As mentioned, some air pollutants are easier to avoid than others. For example, you can choose untreated furniture and rugs made from 100% natural materials and that are dyed with natural colorants. Or find great vintage pieces that have off-gassed their chemicals years ago.

You can also ask guests to skip their usual fragrances before they arrive. And you can ask them to leave, if they chose not to heed your request. You can also skip things like VOC-free (yet still chemical-filled) paints, opting for natural plant, milk, or clay-based paints instead.

However, once a malodor has invaded your environment, it's too late for prevention. You have to fight back. And you can't just mask the smell; you need to neutralize it entirely to avoid triggering a reaction.

The answer, in short, is to avoid the commercial deodorizing sprays and plug-ins. These non-solutions only mask odors, not eliminate them and, in doing so, add even more chemicals to the room. Opt instead for natural air purifying agents that actually **remove** the offending chemicals from your environment entirely.

Most commercial deodorizers mask odors with more chemicals. Instead, choose natural air purifying agents that remove the chemicals entirely.

DEODORIZING THE UNAVOIDABLE

Health-seeking lifestylers often rely on baking soda, activated charcoal, and a volcanic mineral, called zeolite, to get rid of unpleasant chemicals and other malodors in their home. And for good reason.

These natural materials don't just cover smells like the chemical deodorizers do. Instead,

they have tiny pores that attract and trap odor-causing bacteria, essentially 'absorbing' the offending particles and leaving you with truly cleaner indoor air.

While this is obviously fantastic news, there are a few downsides you need to know, and stronger alternatives to consider, if you suffer from extreme chemical sensitivities.

The upside of baking soda

Baking soda (aka sodium bicarbonate or bicarbonate of soda) can be sourced naturally or easily synthesized in a lab (simply sodium + carbon) without any toxic chemicals.

Baking soda is great at absorbing most everyday odors in the fridge, diaper bin, kitty litter, and more. And once it has done its job, you can toss it down the sink, tub, or toilet to help keep the pipes clean and prevent future plumbing issues. Nice added bonus, right?

Beyond deodorizing, I also use baking soda just about every day to scrub my pots and pans, clean the sinks and tubs, lift spills from the carpet, and boost the cleaning power of the soaps I use in both the washing machine and the dishwasher.

Because I use it so liberally, I skip the small baking-sized boxes and buy it in bulk. I'll then portion it out into empty pasta sauce and olive jars, keeping one at the kitchen sink and one under the bathroom sink.

The limitations of baking soda

While baking soda is highly recommended as a no-scratch cleaner and can reduce many common odors in your home, it often isn't powerful enough to remove the heavier chemicals and other strong odors that can pollute your indoor air and trigger MCS symptoms.

This is because baking soda doesn't react with all chemicals and, therefore, doesn't attract and absorb every type of odor. The granules also have a small surface area, which limits their ability to react with a high volume of malodorous particles.

As a result, you may find that you need to couple baking soda with another odor-fighter to fully accomplish the task. Or just use a stronger alternative altogether.

The upside of charcoal and zeolite

Activated charcoal (aka activated carbon) and zeolite have a larger surface area to absorb odors than baking soda. They are also able to attract and absorb a wider array of chemical-causing odors.

Unlike baking soda, which needs to be discarded after its job is done, activated charcoal and zeolite can be 'recharged' and reused over and over.

Once their pores are 'full' simply place the bags containing the activated charcoal or zeolite outdoors in the fresh air and sunshine. The sun's heat will release the trapped chemicals, freeing the charcoal or zeolite for reuse.

The limitations of charcoal and zeolite

While activated charcoal and zeolite trap chemicals on their surface, they don't actually neutralize them. This isn't a big deal for your indoor air, if you regularly recharge them in the sun to release the odor-causing molecules outdoors.

But if their surface fills up before you realize it (and there is no real way of knowing when that happens), the trapped molecules can start to release back into the air and trigger MCS symptoms.

This is an issue.

So while baking soda, activated charcoal, and zeolite are great for everyday bathroom and kitchen odors, you'll likely find that you need something stronger to tackle the more serious triggers.

One of the more popular brands in the MCS community is EnviroKlenz, which is profiled on the next page. This is because their fragrance-free products use mineral technology to **neutralize** a wide array of chemicals and malodors on contact and are *specifically formulated for the chemically sensitive.*

Baking Soda in Bulk

VIEW ON AMAZON

Activated Charcoal

VIEW ON AMAZON

Zeolite Pet Deodorizer

VIEW ON AMAZON

BRAND SPOTLIGHT

ENVIROKLENZ

Environmental Protection for the Chemically Sensitive

Using mineral technology to neutralize toxins & malodors

EnviroKlenz uses a patented earth mineral technology that attaches to an array of chemical and biological malodors from surfaces, indoor air spaces, and laundry.

Their products do not mask odors, as chemical deodorizers do. Nor do they just trap them as baking soda or activated charcoal would. Instead, the minerals create small, but entirely safe chemical reactions that **neutralize** the pollutants on contact.

Their ingredients are biodegradable, completely non-toxic, and safe for use around children, pets, extreme allergy sufferers, and those with acute chemical sensitivities.

"I no longer fear my chain smoking neighbor and have been able to sleep through the night for the first time in 7 years."

"I'm hypersensitive to fragrances lingering in clothing. I was amazed that I could wear them without getting sick."

15% off with greenopedia15

Everyday Odor Eliminator

VIEW PRODUCT

Laundry Enhancer

VIEW PRODUCT

HEPA Air Purifier

VIEW PRODUCT

EnviroKlenz®

IN THIS CHAPTER

CLOTHING & TEXTILES

CLOTHING & TEXTILES

'Textiles' refers to any sort of woven fabric including clothing, linens, drapes, shoes, pillow covers, furniture upholstery, and more. There are 2 main issues for the chemically sensitive to consider when it comes to textiles:

1. Choosing fabrics that won't trigger a reaction;
2. Choosing laundry detergents, bleaches, and fabric softeners that are free from harmful chemicals

We'll address fabrics in this chapter and laundering them in the next.

THE ISSUES TO BE AWARE OF

The problem with new, store-bought clothing and linens is that most of the fibers and/or finished products are chock-full of toxic chemicals, some of which are nearly impossible to wash out.

Here's a quick breakdown of how the toxins get there.

- Synthetic fabrics such as polyester, rayon, spandex, and nylon are made from chemically derived fibers.
- Plant-based fibers such as conventionally grown (i.e. not organically grown) cotton are often sprayed with harmful pesticides, herbicides, and fungicides. These biocides can persist, even as the raw fibers are manufactured into fabrics and then into the finished product.
- Manufacturers also use ammonia, formaldehyde, VOCs, and other toxins to keep fabrics wrinkle-free, stain-free, odor-free, mold and mildew resistant, flame-retardant, and waterproof.
- Textiles are also dyed, bleached with chlorine, or printed with a host of chemicals and heavy-metals.

While older vintage clothing and upholstery may have been manufactured with fewer chemicals than they would be today, and any off-gassing of chemicals would have happened by the time you bought them, the older fabrics often accumulate germs, mold, and/or mildew over time.

These contaminants aren't just an issue for the chemically sensitive. Even folks who don't normally experience issues can find themselves with a nasty skin rash after spending some time in the department store (or thrift store) fitting room. So as you can imagine, those with sensitivities are especially vulnerable.

Sensitive or not, it's always important to wash both new and vintage clothing before wearing them. But even a good washing doesn't guarantee to remove all the chemicals. You also have to be careful to use toxin-free detergent. Again, we'll talk about safe and effective laundry options in the next chapter, so for now, let's cover the safer fabrics to buy in the first place.

NATURAL FABRIC ALTERNATIVES

From countless discussions I've read in various MCS Facebook forums, the chemically sensitive tend to fare best with natural fabrics made from chemical-free and organically grown materials such as cotton, linen, hemp, and wool, all processed without formaldehyde, chlorine bleach, heavy metals, or other harmful toxins.

You may be surprised to know that while bamboo is a safe and eco-alternative for wood (e.g., flooring, cabinets, and paper), it is **often**** not the eco-alternative it's marketed to be for soft fabrics such as clothing, towels, sheets, and blankets. This is because the exceptionally strong bamboo stalks need to be heavily processed in order to make them soft enough to be used as a fabric. This is **often**** accomplished with harsh chemicals. By the time it is transformed into a fabric, very little of the original bamboo remains.

*** I say "often" because there are a few brands that claim their processing is not chemical-laden. I have not prioritized researching these brands, so I don't feel comfortable making any sort of definitive statement regarding whether their bamboo fabrics are likely (or not) to trigger a reaction.*

That said, there is a similarly soft fabric called Tencel (or "ECOlyptus") that is made from the cellulose of the eucalyptus tree. Unlike bamboo, processing the eucalyptus is done without toxins.

However, do keep in mind that while the initial Tencel manufacturing may be okay, you should always check the label or the brand's website to make sure they don't **dye or finish** their fabrics with toxins *after the fact*. Truly transparent brands are proud to tell you about their sourcing and production practices, so if the information about the manufacturing, dyeing, and finishing isn't front and center, consider choosing another brand.

Choose natural fabric alternatives such as chemical-free cotton, linen, hemp, wool, and eucalyptus (Tencil).

Another easy way to ensure the clothing and textiles you buy are free from harmful chemicals, is to choose products that are **certified** to be safe. The big names in certified textiles include OEKO-TEX, Greenguard, and the Global Organic Textile Standard (GOTS). Each of these certifications covers more than just textiles, which is a nice added bonus.

While both Greenguard and OEKO-TEX are known to cover every stage of production from fiber to finishing, GOTS goes even further to cover the social aspects of manufacturing, such as worker safety, fair wages, and child-free labor.

BRAND SPOTLIGHT

PACT ORGANICS

Super Soft Organic Cotton Basics

"Do-No-Harm Apparel"

I practically live in yoga pants, t-shirts, and sweatshirts, so a good chunk of my closet is from Pact, as are nearly all my undies.

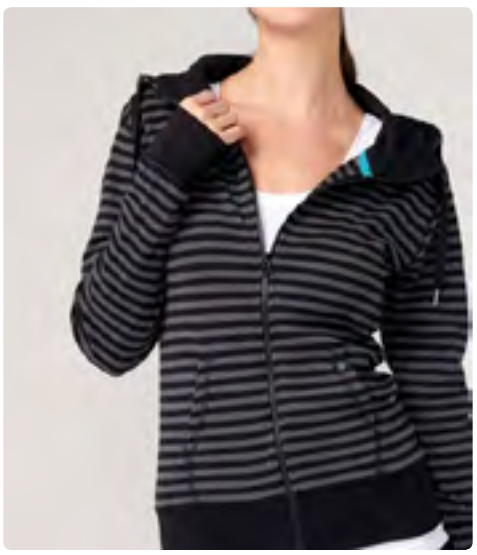
Pact sources only 100% organic cotton for their ethically made clothing. And for items that need a little stretch, they blend the cotton with small amounts of a synthetic, latex-free fiber, called elastane.

Their head-to-toe basics include t-shirts, sweatshirts, leggings, socks, bras, underwear, and sleepwear. All are manufactured in sweatshop-free factories that pay a fair wage and do not employ child labor. Their garments are also produced without the use of toxic dyes, pesticides, or other harmful ingredients.

Most of their apparel is certified by the Global Organic Textile Standard (GOTS) and made with Fair Trade Certified™ organic cotton.

"The leggings are literally the comfiest thing I've ever put on!"

SHOP MEN



SHOP WOMEN

SHOP KIDS

pact

BRAND SPOTLIGHT

RAWGANIQUE

Organic Clothing, Home Goods, and Body Care

Made by Chemically Sensitive Founders!!

I'm not sure I can adequately express my deep love for Rawganique and the purity of their products. Their off-the-grid founders are chemically-sensitive themselves, so they have no choice but to develop every single item as carefully and thoughtfully as possible.

Rawganique offers 100% chemical-free clothing, bed, bath, and home products made in the US, Canada, and Europe (never China or India). The materials they use are grown and sewn from just three raw, untreated, organic fibers: cotton, hemp, and flax linen. They even sell the materials directly as rope, twine, yarn, and fabric, for those who make their own clothing, toys, pillows, and crafts.

Beyond textiles, Rawganique offers chemical-free hair and body care. In fact, they specifically call out their kefir shampoo as "*particularly important to customers suffering from multiple chemical sensitivities, skin allergies, rashes, eczema, and psoriasis.*"

"Compared to cotton and synthetic fibers, this hemp knit wins hands-down, which was a surprise to me, as I wasn't expecting hemp to be this soft. Awesome!

SHOP CLOTHING

SHOP YOGA & LIFESTYLE

SHOP BED & BATH

RAWGANIQUE

IN THIS CHAPTER

LAUNDRY... THAT´S ACTUALLY CLEAN

TRULY CLEAN LAUNDRY

Your clothing, sheets, and towels shouldn't cause your skin to break into an itchy, burning rash. Reasonable expectation, right? But after exposing your laundry to commercial detergent, bleach, and fabric softener, you can be left with some pretty gnarly toxins against your skin.

Most commercial laundry solutions and even many so-called "healthier" brands contain sulfates, phosphates, ammonia, chlorine, and a host of other unsavory ingredients that can trigger symptoms for the chemically sensitive.

But with so many truly natural solutions that are both highly effective and inexpensive, those toxins are entirely unnecessary.

DON'T BE FOOLED

There are too many brands out there claiming to be healthier and more natural. Their pretty labels with flowers, babies, and soft, natural colors can be deceiving. They may even be "fragrance free".

But flip over the package to check the ingredients list and you may be surprised by the volume of chemicals you find.

Worse yet, you may not find any ingredients at all. For example, Purclean (Tide's supposed foray into "natural") only lists a general description and makes you visit their website for the true contents.

Can you imagine standing in the supermarket aisle, checking the ingredients online for everything on your shopping list before deciding which brand to buy? Jeez, Tide, just list the stinkin' ingredients!


FORMULA CONTAINS: water, plant derived surfactants, coconut derived cleaning agent, plant derived processing aid, bio-derived enzymes, mineral based enzyme stabilizer, pH adjuster, and chelant. This formula is free of dyes, chlorine, phosphates, ethanolamine, optical brighteners and fragrance. For a full list of our ingredients and our efforts toward a sustainable future, go to www.tide.com

Well, I did go to their website and I looked up each ingredient on EWG's Skin Deep database. Some were safe (e.g., water, sodium citrate, amylase, protease), but several were also ingredients of concern:

- **Sodium laureth sulfate**, irritant and possible system toxicity (EWG)
- **Propylene glycol**, irritant and possible system toxicity (EWG)
- **Laureth-9**, possible contamination from ethylene oxide and 1,4-dioxane (EWG)
- **Sodium hydroxide**, irritant and possible system toxicity (EWG)

The website says their ingredients are 65% plant-based, but that isn't the same as the ingredient actually **being a plant**. Words like "derived from" or "plant-based" can be tricky. While these ingredients do come from nature initially, they aren't the same thing as the mineral or plant itself. The final ingredient is synthetic and, in some cases, barely resembles whatever it came from in the first place.

Synthetic ingredients aren't necessarily a bad thing; plenty of healthier ingredients are synthesized from nature. In fact, some

lab-synthesized ingredients are cleaner than their naturally sourced counterparts. Titanium dioxide is a great example - it's often contaminated with heavy metals in nature, but can be cleanly made in a lab from pure titanium + oxygen.

Anyway, this distinction between actual plant ingredients vs. plant-**based** ingredients is just something to be aware of, especially if the end result contains impurities or the final ingredient is something you happen to be sensitive to.

When brands do list lab-made ingredients on the label, you may see them as their synthetic ingredient name alongside "plant-based" or "derived from" in parenthesis. Again, these are not necessarily bad; just something to keep in mind.

A few common examples include:

- Cocamidopropyl betaine (coconut-**based**) - *associated with irritation and allergic contact dermatitis (EWG)*
- Cocamidopropyl hydroxysultaine (plant-**derived**) - *no suspected concerns (EWG)*
- Sodium lauryl sulfoacetate (plant-**based**) - *no suspected concerns (EWG)*

HEALTHIER ALTERNATIVES

Healthier laundry detergents, bleaches, and softeners are made from botanical and/or mineral ingredients. Some of those ingredients may be, or may contain, ingredients that have been *synthesized from nature*.

Essential oils aside, the examples listed below are typically not reported as triggers by the chemically sensitive.

To be considered 'safe', the final products that contain these ingredients should be free from harsh chemicals, dyes, synthetic fragrances, and other potentially triggering contaminants.

Below are commonly found ingredients in healthier laundry solutions. Again, they are generally considered safe, clean, and non-triggering for the chemically sensitive:

- **Sodium carbonate**, also called "washing soda" or "soda ash", softens water and helps to remove wine, oil, and grease stains from laundry. While sodium carbonate does occur naturally, it is usually synthesized in large volumes from salt + limestone for commercial use.
- **Sodium bicarbonate**, better known as baking soda, is found in nature and often synthesized commercially. Contrary to popular belief, baking SODA does not contain aluminum, so feel free to buy brands that do not tout "aluminum-free". It's baking POWDER that may contain aluminum.
- **Hydrogen peroxide** is a safe, non-chlorine oxygen bleach that is found in nature - specifically in air, water, and in our bodies. That said, it is synthesized for commercial use.
- **Sodium percarbonate** is sodium carbonate + hydrogen peroxide.
- **Castile soap** is usually made from olive oil and sodium hydroxide, but may include other plant oils such as avocado, almond, or hemp.
- **Enzymes,** extracted from plants, break down organic stains and odors.
- **Essential oils**, distilled from plants, help to kill bacteria in laundry and can replace chemical fragrances. Many chemically sensitive cannot tolerate them; they're listed here for those who can. More on this controversial ingredient in a later chapter.

NATURE'S LAUNDRY DETERGENT

A lesser-known laundry cleaner (and what I've personally used for years) is found inside the shells of naturally grown soap berries. These soap berries are also known as "soapnuts" and you really can't get more natural and non-toxic.

Soapnuts grow on the sapindus mukorossi (soap berry) tree in the Himalayas and the shells contain a natural soap, called saponin. According to some growers, insects don't like the taste of soap berries, so pesticides are not necessary or used.

As a long-time user of soapnuts, I can tell you firsthand how effective they are at cleaning laundry. And despite the name "soap **nuts**", these are actually **berry fruits** and are safe for those with nut allergies.

HOW TO WASH WITH SOAPNUTS

To wash your laundry, just throw 5 or 6 soapnuts into a small cotton or linen bag (usually included). Add your laundry to the washer and toss the bag on top.

Once the washer fills with water and starts swishing everything around, the agitated soapnuts will release the saponin (the soap) and clean your laundry.

A little bit goes a long way and you can often reuse the same bag of soap berries for as many as ten loads.

GETTING THE TOXINS OUT

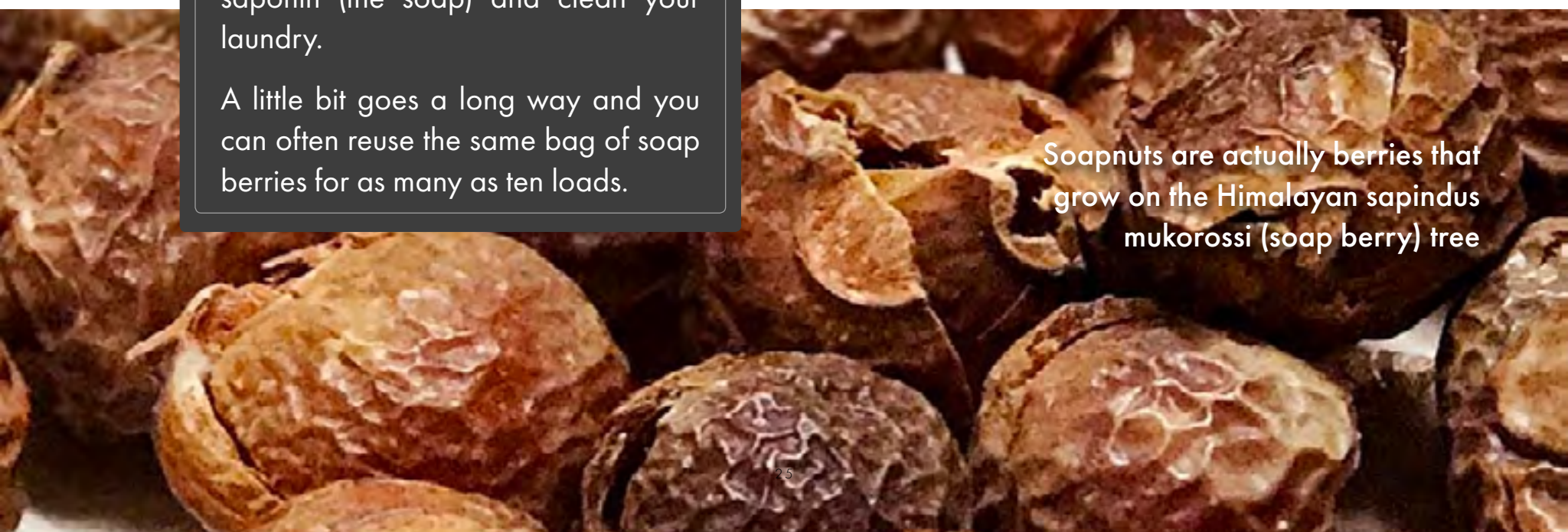
Soapnuts, washing soda, plant enzymes... all are great for washing "regular" laundry without chemicals and fragrances.

The problem is that new clothes are steeped in manufacturing toxins that can be almost impossible to remove with regular cleaning. And vintage clothing, or clothing that has been seasonally stored in the attic or basement, can accumulate bacteria and mildew over time.

EnviroKlenz (featured earlier under "Home Deodorizers") formulates their products specifically for the chemically sensitive and has created a laundry booster that works to safely neutralize these contaminants.

In addition to mold, mildew, and nasty manufacturing toxins, it also removes persistent odors such as the mustiness from sweaty clothes and wet towels left too long in your gym bag, as well as perfume, smoke, and other thrift store odors left behind by the previous owner.

As an added bonus, if you wash your clothes at a laundromat, you'll be happy to know that it helps to prevent cross-contamination of your laundry from chemical-based detergents, bleaches, softeners, or fragrances lingering in the machine from previous users.



Soapnuts are actually berries that grow on the Himalayan sapindus mukorossi (soap berry) tree

BORAX: SAFE OR NOT SAFE?

Naturally occurring borax is a mineral salt of boric acid, found in seasonal lakes that repeatedly evaporate and leave behind this salt. It is also found in seawater and near volcanoes. Despite its origins, it has been controversial as a natural alternative to chemical cleaners for some time.

Healthy lifestylers praise its ability to clean and deodorize laundry (among other helpful uses), while others fear its toxicity.

Those against borax tout scientific research linking it to skin irritation, gastrointestinal distress, and hormone disruption. Those who love borax, tout the same scientific research that claims borax is only toxic when ingested or inhaled in extremely high levels. They say that it is, therefore, safe for laundry, where it is not intended to be ingested or inhaled.

So is borax safe as a laundry detergent?

I haven't seen any research that conclusively resolves the debate. Frankly, if soap nuts did not exist, I'd probably give borax a try, given what I've read.

But since soap nuts do exist and since they are 100% pure, effective, entirely safe, and are not surrounded by any controversy, I personally haven't found the need to use borax.

NATURE'S LAUNDRY SOFTENERS

Liquid fabric softeners and dryer sheets use a host of unsavory chemicals to make our towels, sheets, and clothing soft, static-free, and pleasant smelling. But they achieve these goals by leaving behind the softening contaminants, which we then lay against our skin.

Not cool. And completely unnecessary, as we can easily soften our laundry without chemicals... and for a whole lot less money.

Baking soda & vinegar

We've already talked about using vinegar and baking soda for cleaning the house, but they're also great in the laundry.

White vinegar helps to brighten your clothing, while baking soda boosts the efficacy of your laundry detergent. Both dissolve soapy residue from the washing machine and pipes, reducing the risk of plumbing issues over time. AND both help to soften your laundry.

Using them couldn't be easier. Just drizzle a cup of baking soda over the clothes or add ½ cup of white vinegar to the fabric softener dispenser. Wash as usual.

Wool Balls

I've been using wool dryer balls to soften my laundry for as long as I've been using soap nuts to wash it. Which is to say, I've been using both for several years now. And I love them.

Wool dryer balls may seem expensive at first, when compared to a box of dryer sheets or bottle of liquid softener. But they last **dozens** of loads, so you actually save money in the long run. They also reduce static and pet hair on your clothing, as well as help the laundry to dry faster, which saves on the energy bill.

SOFTEN YOUR LAUNDRY

Toss 2 to 3 wool balls into the dryer and set the timer for 10-15 minutes less than you normally would. Reuse them for roughly 4-6 months.

Soap Nuts (125 loads)

VIEW ON AMAZON

Wool Dryer Balls (6pk)

VIEW ON AMAZON

NATURE'S BLEACH

Chlorine bleach does an amazing job of whitening your dirty socks, tees and towels. But it's a big no-no for the chemically sensitive, as even the faintest whiff can trigger some nasty symptoms.

And by the way, chlorine bleach is even a bad idea for those who are **not** chemically sensitive. The harsh fumes are dangerous to inhale and can lead to serious respiratory issues over time.

The chemical residue also remains on clothing, towels, sheets, and cloth diapers. This can cause rashes and irritation, as the fabrics lay against our skin.

Chlorine-free oxygen bleach

For a more natural white, replace chlorine bleach in the washing machine with non-chlorine bleach.

To whiten your laundry, either pour 1/2 cup of a **liquid** oxygen bleach into the bleach tray OR sprinkle 2 tablespoons of a **powdered** oxygen bleach alongside your regular detergent. Add your laundry and wash as usual. It's really that simple.

Sun bleaching

Sun is the most powerful bleach there is. And it's free.

Fabrics tend to whiten better in the sun when they are wet, so wash or wet items first, then hang on a clothesline or drying rack. Or if you only have a few items, you can just lay them on a towel.

Straighten any wrinkles as best you can, so the sun hits everything evenly. And only keep your laundry in the sun for 2-3 hours at a time, as leaving them out for too long can weaken the fabric.

Especially dingy clothing or dark stains may require another sun-soak or two before fully whitening.

Tackling especially dingy whites

When old socks, t-shirts, cloth napkins, and washcloths become greyish over time, white vinegar can help.

Fill a large pot halfway with water. Add 1-cup of white vinegar. Bring the pot to a rolling boil and turn off the heat. Carefully place the laundry items into the pot. Let them soak overnight, then wash as usual.

Chlorine-Free Oxygen Bleach

VIEW ON AMAZON

Stainless Steel Drying Rack

VIEW ON AMAZON

IN THIS CHAPTER

HOME GOODS

HOME GOODS

Our home should be our sanctuary. But for the chemically sensitive, it can be a toxic minefield. From the carpets and furniture to kitchenware, linens, and appliances, the synthetic materials and manufacturing contaminants are ruthless.

While it would be nearly impossible in today's world to eliminate chemicals from our homes entirely, there are plenty of ways we can significantly reduce exposure.

NEW FURNITURE

When buying new furniture and other home goods, it's a good idea to stick to raw, natural materials whenever possible. One notable exception is pine, which emits natural VOCs that can be quite strong and may trigger MCS symptoms.

If you do buy new furniture or décor made from synthetic materials or coated with chemical solvents, be sure to offgas them for several weeks before using them. This is especially important for anything that will be in the bedroom / sleeping areas.

It's best to leave these products outdoors while they offgas, if that option is available to you. Otherwise, set them in the room you use the least and open the windows. Turn on a fan to better circulate the air, after sealing any vents in the room. Close the door behind you and put a towel under the door to keep the fumes from circulating into the house.

Natural materials can often be more expensive than synthetics, so hardwood furniture or bamboo accessories, for example, may not be in the budget. If that's the case, second-hand furniture (discussed in a moment) may be a more viable option.

Common furniture materials to avoid or to offgas prior to use:

- Pressed wood / MDF / chipboard
- Furniture stuffed with foam, polystyrene, synthetic latex, or other synthetic fills
- Upholstery that has been treated for stain, moth, or fire resistance
- Furniture made from or coated with PVC (also known as vinyl)

Choose these healthier furniture materials whenever possible:

- Natural wood (except pine) or bamboo
- Stainless steel and other metals (if you don't have metal sensitivities)
- Glass or ceramic
- **Upholstery**:
  - Pesticide-free wool, cotton, and hemp are common exteriors
  - Also look for fillings made from kapok (a vegetable-based fiber similar to cotton), natural latex (not synthetic latex), or coconut coir (i.e. coconut husk)

SECOND-HAND FURNITURE

You don't have to be **as** concerned with the manufacturing materials when buying second-hand furniture, as you would with new furniture. This is because any vapors would typically have off-gassed before making their way to your home.

However, that doesn't mean these new-to-you items won't smell musty, smoky, or otherwise funky. And on the off-chance they don't smell at all, it's still a good idea to clean any second-hand items thoroughly before using them.

You'll likely find that white vinegar and baking soda will clean, disinfect, and deodorize most items well enough. However stubborn smells will need a bit more oomph.

Here are a few tips to get the stink out.

Deodorizing thrift store smells

In the Deodorize chapter, we talked about air purifiers and laundry enhancers by a company, called EnviroKlenz that makes products specifically formulated for the chemically sensitive. One product I haven't yet mentioned is their Odor Eliminating Pads, which get the funk out of enclosed spaces, such as dresser drawers and cabinets.

You can also wipe down most hard surfaces with their Everyday Odor Eliminator by simply adding it to a spray bottle and diluting it 1:4 with clean tap water. That same product can be sprayed on most washable fabrics as well, such as throw pillows, rugs, and upholstery.

Sanding

Sanding wood furniture is risky business for the chemically sensitive. However, it can do a great job of removing foul odors from second-hand furniture, as most (if not all) of the smell will be at the surface.

You could hire a handy-(wo)man to do the sanding for you. Or, depending on your level of sensitivity and the type / severity of odor you're trying to remove, you could carefully do it yourself.

Either way, all sanding should happen outdoors, when possible, and with your windows closed, so the dust can't get in. The further away you are from the house while sanding, the better. And always wear safety glasses, gloves, and a vapor mask with a P100 rating.

Note that to remove the smell entirely, you may also need to sand the **inside** spaces of any drawers or cabinets.

Choosing easier-to-clean materials

When shopping for second hand furniture and décor, you can minimize the risk of triggering a sensitivity by choosing materials that are relatively easy to clean.

Examples of easier-to-clean materials:

- Real wood or metal dressers, bookshelves, and desks
- Glass, mirrors
- Lamps (but not the lamp shade)
- Real wood dining table and non-upholstered chairs
- Sculptures and non-porous art
- Easily washable fabrics such as curtains, small rugs, and small throw pillows

Consider buying the more difficult-to-clean materials as new, when possible. Off-gassing chemicals from new items tends to be far easier than trying to remove bed bugs and long-standing mold and mustiness. Plus, you can choose natural fibers to avoid chemical smells.

Materials that tend to be more difficult to clean and better to purchase new include:

- Mattresses and pillows
- Upholstered items (sofas, armchairs)
- Books
- Leather and suede
- Lampshades

PROTECTING YOURSELF WITH A VAPOR MASK

It's always a smart idea to protect yourself with a vapor mask, whether sanding or cleaning second-hand furniture.

The P100 rating is the highest rating for personal respiratory protection and can block at least 99.97% of airborne particles. Always be sure your mask fits properly and consider using a vapor cartridge / mask that also blocks gas, if what you're sanding (or cleaning) is covered in paint or solvents.

If you start to smell odors through the mask or it becomes difficult to take a breath, it is time to replace the cartridge and/or the filter.

Reusable Respirator Mask

VIEW ON AMAZON

P100 Filters

VIEW ON AMAZON

Odor Eliminating Pads

VIEW ENVIROKLENZ

RUGS AND CARPETS

Rugs and carpets are often made from polyester, polypropylene, acrylic, nylon, or other synthetic materials that can be an issue for the chemically sensitive.

But rugs and carpets made from natural materials, such as wool or cotton, may also be an issue when the plants they are made from are laden with pesticides or finished in chemicals.

Both natural and synthetic fibers are often dyed with chemical colorants and backed with synthetic rubber, PVC, and adhesives. They may also be treated with formaldehyde, pesticides, and other chemicals to make them stain proof, moth repellent, fire retardant, and water repellent.

These chemical cocktails covering your floors may only smell awful for the first few days, but they can continue to leach triggering VOCs into your home for years.

Better options

Whenever possible, opt for rugs or carpets made from natural materials that are free from pesticides, herbicides, and other chemical "protectants" and finishes.

Rugs and carpets that are certified organic offer some peace of mind in this respect. However, the organic certification is unfortunately expensive, so certified organic textiles are also more expensive.

As such, some brands may thoughtfully source their fibers and fabrics and manufacture them without harmful chemicals, yet do not seek the organic certification. I always check the 'about' page on websites to read about their sourcing and to learn more about their manufacturing process.

Examples of healthier rug and carpet materials include (chemical-free): cotton, wool, sea grass, mohair, jute, or sisal. These materials are beautiful in their natural state, or may be naturally dyed using **plant-based** colorants such as indigo, henna, and root bark.

Also, when possible, choose rugs that are free from glues (usually found on rugs with trim) and chemical solvents. And look for rug and carpet backings made from hemp, cotton, or natural latex, instead of PVC or petroleum-based latex.

RUG & CARPET CARE

Be sure to vacuum rugs and carpets at least once per week and wash them regularly to keep trigger-causing dust and mites at bay.

It's also worth noting that vacuum cleaners with a sealed HEPA filter do a better job of maintaining your indoor air quality by trapping dust particles inside the machine vs. blowing dust around the room, as non-HEPA vacuums often do.

For stains, try vinegar, baking soda, or good ol' club soda. Enzyme based stain removers are also great. Just check the label to make sure they do not also contain unwanted chemicals.

BRAND SPOTLIGHT

HOOK & LOOM

Chemical-Free & Dye-Free Rugs

From eco-cotton and sheep-colored wool

Hook & Loom offers a beautiful selection of non-toxic wool and eco-cotton rugs made without chemicals, dyes, or glues.

Their 100% chemical-free **wool rugs** are undyed, using only the sheep's natural colors. Their **eco-cotton rugs** do use recycled fibers, which means there is a polyester component and a very small presence of other non-natural fibers. That said, any off-gassing from these fibers has long since transpired and no new chemicals or dyes are added.

Hook & Loom also uses a unique, innovative process to recycle old cotton textiles into new rugs. What's cool is that they won't patent the process, because they believe (even hope) that other manufacturers will copy them and make their cotton rugs in the same eco-friendly way. I love that.

Good to know: If you're on a budget, their least expensive rugs are the Eco Cotton Flatweave, available in dozens of patterns and colors.

"This is a great rug! It is excellent quality and the weight is just right. It lays down perfectly and doesn't slide! Best of all it does not stink!"

HOOK & LOOM

SHOP WOOL RUGS

SHOP COTTON RUGS

BRAND SPOTLIGHT

ORGANIC WEAVE

Handcrafted, Certified Organic Rugs & Carpets

No Odor, Chemicals, or Off-Gassing

Organic Weave's GOTS certified organic rugs are guaranteed to be free from chemical additives that are often found in conventional "natural" rugs.

Their wool is sourced from organically farmed sheep that are never dipped in chemicals. Their cotton is farmed organically without the use of insecticides and pesticides. And their organic silk is hand-twisted and weaved the traditional way, without the usual chemical baths or synthetic additives that are typically used to create and soften silk textiles.

All their raw materials are sourced from traceable, certified organic producers and washed only with biodegradable cleansing agents. They use no synthetic agents or oils in their spinning process. And they dye their yarn using GOTS certified colorants.

Beyond toxin-free materials, each of their beautiful rugs is also certified to be free from child labor and to pay a sustainable living wage to their workers.

SHOP AREA RUGS

SHOP CARPET

5% off with greenopedia5

MATTRESSES AND BEDDING

If there's one place where you really don't want chemicals, it's where you spend roughly 1/3 of your life: in bed. Yet just like rugs and carpets, most mattresses, pillows, and bedding are made from, filled with, and treated with synthetic materials and harmful toxins. Gross.

Thankfully there are a growing number of brands focused on providing a truly healthy sleep. (We'll profile them in a moment.)

Mattresses

In terms of mattresses, these thoughtful brands are using **natural** latex from the rubber tree in place of **synthetic** latex, soy, and so-called 'bio-foams', which are made with petrochemicals and other harmful toxins. *(See the Note on Natural Latex Rubber below to learn more about latex production and allergies.)*

They also use wool coverings as a natural fire retardant in place of chemicals. And they use organic, pesticide-free cotton and/or coconut coir (shredded coconut husks) in place of polyester, nylon, or other synthetic linings.

Mattress Covers

If you don't have the option of buying a new mattress, or buying one that is all-natural, then it's a good idea to buy a mattress cover to provide a barrier between your body and the chemicals and dust mites on the mattress.

Mattress covers are often made from synthetic polyester (polyethylene / PET plastic), or vinyl (PVC / phthalates). By contrast, healthier alternatives include organic cotton, wool, or eucalyptus. (You may see the eucalyptus labeled as Eucalyptus Tencel, Tencel-Lyocell, or just Lyocell.)

These covers are naturally resistant to mildew, mold, bacteria, and dust mites. But if sweat, incontinence, and/or pet accidents are also a concern, you'll want your cover to be waterproof to further prevent mold and mildew build-up over time.

Cotton, wool, and eucalyptus (Lyocell) are often waterproofed by adding a thin layer of thermo polyurethane (TPU) to the bottom of the mattress cover. If you go that route, look for TPU that is marketed as "food grade" or "biodegradable". As an alternative, a brand called My Green Mattress uses a non-GMO corn-based moisture barrier to waterproof their protective mattress covers.

Pillows, Sheets, and Blankets

Like your mattress (and, let's face it, just about everything), it's best to choose natural, organic materials for your pillows, sheets, and blankets, when possible.

Organic cotton, flax linen, and hemp are excellent options for healthier bedding. Since colorants can add unwanted chemicals to otherwise natural materials, check that your bedding is labeled as unbleached and undyed, or naturally dyed with botanicals (plants) and minerals.

Also, look for pillows filled with pesticide-free cotton, natural latex rubber (shredded or solid), buckwheat hulls, or kapok. (Kapok is an excellent, vegan alternative to down - see the call-out on the next page.)

Each of these options naturally resists mold, mildew, and dust mites. Commonly used natural coverings include organic cotton, wool, and hemp.

IS YOUR PILLOW STUFFED WITH KAPOK?

Kapok is a fluffy, luxurious, cotton-like fiber harvested from the tropical ceiba (kapok) tree. While it feels like down when stuffed into a pillow, it is unlike down in that it is 100% plant-based and 100% cruelty-free.

Kapok is wild-harvested, rather than cultivated on a farm. It is naturally pest-free and requires no processing, when used as a pillow stuffing. Pillow makers pretty much just need to wash away any debris and shove it in the pillowcase. I love that.

Since kapok is wild harvested and free from pesticides, an organic certification is not necessary. However, if the kapok was turned into a fabric and dyed for use as something other than pillow stuffing (e.g., to make sheets or blankets), then you'll want to make sure the dye is chemical-free before buying it.

NATURAL LATEX RUBBER: PROCESSING & ALLERGIES

You know how REAL maple syrup is tapped from the maple tree and contains all sorts of healthy micronutrients from nature? And then we have the commercial crap that's made in a factory, primarily from genetically modified corn syrup? Yep. Latex is kind of like that.

Natural latex - the real stuff - is a milky liquid tapped from the rubber tree (hevea brasiliensis) that is grown primarily in Thailand, Indonesia, Sri Lanka, Vietnam, Malaysia, and India. Organic latex is grown and manufactured without harmful pesticides, herbicides, or other chemicals.

By contrast, synthetic latex foam and latex blends are made from a variety of chemicals that we wouldn't want to lay our bodies against for 8 hours each day. These nasties include formaldehyde, bromides, styrene, butadiene, polyurethane, phthalates, and more.

Performance

Real latex from the rubber tree is naturally resistant to mold, mildew, and dust mites, as is the wool that is also commonly used on natural latex mattresses. Therefore, unlike synthetic foam mattresses, natural latex mattresses don't require chemicals in order to offer these properties to consumers. Natural rubber is also highly durable, lasting up to 15 years. And (like wool) it is also breathable, so it helps to keep you cool in warm weather and warm in cool weather.

Sustainability

Natural latex - also referred to as natural rubber - is considered a sustainable and renewable resource. Rubber trees can produce latex for as long as 30 years and at the end of their useful life, the tree may be replaced and the wood used to build furniture. The cut bark, where the latex is extracted, heals fairly quickly without damaging the tree. Studies have also shown that rubber trees may not only improve the health of their surrounding soil, but also sequester a significant amount of carbon dioxide from the environment each year.

...continued

NATURAL LATEX RUBBER: PROCESSING & ALLERGIES *(cont'd)*

Allergies to Natural Latex

Natural latex consists of a variety proteins, a few of which can trigger an allergic reaction for a growing number of people. The severity of the reaction differs by person and can be extreme when the person is in direct contact with the rubber. For example, blowing up a balloon, wearing latex gloves, or using condoms made from natural latex rubber may cause a severe reaction.

That said, allergic reactions to organic latex mattresses (and their wool coverings) tend to be less common for two main reasons. First, mattress manufacturers are well aware of natural rubber allergies (as are condom-makers, by the way). The allergy-causing proteins are water-soluble, so brands that thoughtfully produce organic latex mattresses wash their products extensively in order to remove as many of the proteins as possible.

Second, most mattresses are covered in a layer of wool and/or cotton and we then add sheets to the bed. These protective barrier between our bodies and the latex effectively eliminate the risk of an allergic reaction.

Certifications

The safest latex mattresses are certified organic, at the very least. For additional peace of mind, look for certifications from authorities such as Greenguard, oeko-TEK, eco-INSTITUT, and the exceptionally well-regarded GOLS (Global Organic Latex Standard).

Dunlop vs. Talalay Latex

Natural latex mattresses are often manufactured as "Dunlop latex" or "Talalay latex". Both are naturally tapped from the rubber tree, whipped into a froth, and poured into a mold to form the mattress.

For the Dunlop process, natural sediments from the latex mixture settle to the bottom of the mold, resulting in a heavier mattress that is firmer at the bottom. For the Talalay process, the mold is flash frozen and then baked, resulting in a softer mattress or cushiony top layer.

Choosing which latex to buy is mostly a matter of sleeping preference - firm (Dunlop) or cushy (Talalay). That said, chemicals are sometimes used in the Talalay flash freezing process... and sometimes they are not. Be sure to check the company's website or call them to find out how they manufacture their Talalay.

BRAND SPOTLIGHT

AVOCADO

Luxurious Beds, Pillows & Toppers

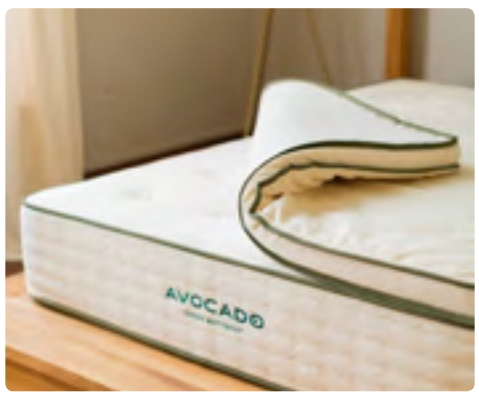
Non-Toxic • All Natural

I could easily profile Avocado's natural mattresses here, as they are made from 100% natural latex rubber (Dunlop), natural wool and certified organic cotton, with no polyurethane foams or toxic fire retardants. But I kind of fell in love with their handmade, natural wood bed frames and plush organic pillows.

Made from 100% reclaimed wood and a zero-VOC finish, their beautiful, minimalistic bed frames are handmade in Los Angeles and assemble without tools. The water-based finishes are non-toxic, have no traditional paint or polyurethane odor, and contain no solvents (such as formaldehyde and toluene) to off-gas.

Also handmade in Los Angeles, their non-toxic pillows are filled with all-natural latex rubber and kapok, and wrapped in a certified organic cotton cover.

SHOP PILLOWS



SHOP TOPPERS

SHOP BED FRAMES

AVOCADO

BRAND SPOTLIGHT

MAGNOLIA ORGANICS

Organic Bedding, Towels & Baby Products

Beautiful, Cozy, Durable, and Ethically Made

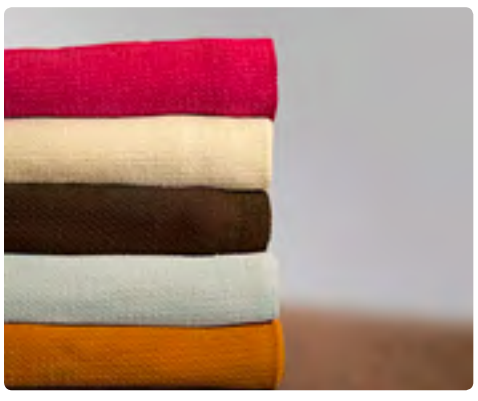
I own a couple sets of Magnolia's Percale sheets, as well as their cotton blanket (in Inca Gold) — and I absolutely love them. They are soft (after a few washes), beautiful, ethically made, and each step of their production process has been carefully traced and certified organic.

Their GOTS certified cotton is grown without toxic herbicides, pesticides, or GMO seeds. Their finished bedding is produced without toxic chemicals, heavy metals, or unfair labor practices. And they work exclusively with GOTS certified, low-impact dyes.

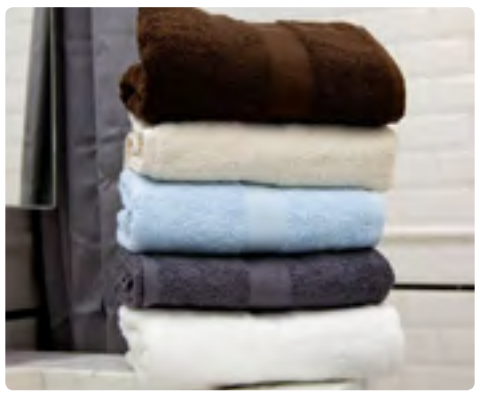
Magnolia also sells a line of natural pillows stuffed with either buckwheat hull, wool, kapok, cotton, or latex rubber — no down. If you're a parent, they also have a line of organic cotton baby linens including crib sheets, swaddles, blankets, and face cloths.

For those seeking to protect against dust mites, bed bugs, and pet dander, they've also developed a highly effective mattress barrier and pillow protector, made from densely woven organic cotton.

"What a pleasure to open a set of nice, heavy sheets without that horrible knock you down chemical stench!"



SHOP BEDDING



SHOP TOWELS

SHOP PILLOWS

magnolia ORGANICS

BRAND SPOTLIGHT

MY GREEN MATTRESS

Safe, Healthy Mattresses, Toppers & Protectors

Carefully crafted for the most sensitive individuals

My Green Mattress was founded by a dad, who learned that his newborn suffered from eczema and allergies. He couldn't let her sleep on a chemical-filled mattress. Already a skilled craftsman, Tim apprenticed with a mattress-maker until he mastered the art himself. He eventually bought the business and created the My Green Mattress division. (This is one dedicated dude!)

The inner mattress is a pocketed coil spring system, topped by 3-inches of organic Dunlop latex. (Read about Dunlop vs. Talalay latex on a previous page). The latex is then covered with untreated wool, sourced from California and Oregon, and topped with organic cotton.

The mattresses are handmade by Tim and his team in Illinois - not China. And each is tested and safe for the most sensitive individuals.

His 100 night trial offers an exchange or full refund, if you decide the mattress isn't a good fit. And while he's more affordable than many natural alternatives out there, he offers a payment plan, as well as a military discount.

Good to know: Tim's wool is completely untreated, so it can carry a **natural** odor initially - no chemical smells or triggers. Reviewers call it "earthy" (an awesome testament in my book) and say it dissipates in 2 or 3 days.

SHOP MATTRESSES

"We've been looking for a mattress that doesn't smell of chemicals for a year-now... Definitely more affordable than what we've seen out there."

BATHROOM MATERIALS

One very important thing to consider with regards to your bathroom, is that even with a fan on, it can get pretty hot and humid in there.

This is important, because heat and humidity are two factors that contribute to the leaching of contaminants, such as hormone-disrupting phthalates from vinyl shower curtains or PVC-lined bath mats.

When we inhale these contaminants, we add to our body's toxic load. To avoid this added burden, it's a good idea to skip the plastic accessories as much as possible.

Here are a few healthier options.

Shower curtains

Organic / pesticide-free cotton, linen, or hemp shower curtains are my first choice. Pretty simple. (I have Rawganique's hemp shower curtain. It's definitely not cheap, but it is gorgeous.)

Shower curtain liners

I've seen hemp offered up as a natural alternative for shower curtain liners, as well. For the shower curtain itself, great. But hemp is pretty expensive and not water resistant, so I'm not sure how practical it is as a liner.

A popular alternative is a non-PVC liner made from EVA, which is a type of vinyl that apparently does not leach toxins. I'm still not crazy about the idea, but I couldn't find anything else, so that's actually what I ended up with in my own bathroom.

Bath mats

Natural latex rubber or bamboo are viable options for non-slip mats inside the tub. Medical-grade silicone is another good option. Bamboo and organic cotton bath mats are great for outside the tub.

Towels

To avoid pesticides and other chemicals in towels and wash cloths, I'd recommend organic cotton in place of conventional cotton and poly-blends, when possible. If it's in the budget, organic cotton blended with hemp or linen is another great option. These blends aren't cheap, but they certainly are beautiful. And yes, they are absorbent. (Linen comes from the flax plant, by the way.)

For all of the above, opt for fibers and fabrics that are undyed, unbleached and otherwise untreated. Or choose textiles that have been naturally dyed from plants and minerals.

Durables

If plastic bothers you (frankly, I think it bothers the chemically sensitive and non-sensitive alike these days), you may find glass, bamboo, and stainless steel to be more acceptable for things like toothbrush holders, bathroom cups, trash bins, diaper pails, and other bathroom durables.

Toothbrushes

I've seen too many heartbreaking conversations on the MCS Facebook forums, where folks could barely brush their teeth, if at all, because their plastic toothbrush burns their mouth.

A few solved the problem by switching to a metal toothbrush, though most switched to unfinished bamboo. Bamboo toothbrushes typically come with nylon bristles, which most folks said they could tolerate. A few folks could not. Boar hair bristles are another option, though again, some were fine with it and others not.

I found a third option that is popular in India and the Middle East, but that most folks in the west have never heard of: **a natural teeth cleaning twig**.

This is not a man-made toothbrush at all, rather it is literally a stick, commonly from either the arak tree or the neem tree. While teeth-cleaning twigs are not the most pleasant-tasting and can take some getting used to, they are chemical-free and perhaps worth a try for the acutely sensitive.

P.S. Some bamboo toothbrushes are sold with "charcoal" bristles. These are actually nylon bristles infused with charcoal. Some manufacturers are transparent about that and some are not. Just a head's up.

Natural Tooth Cleaning Stick

VIEW ON AMAZON

Bamboo Toothbrushes (4pk)

VIEW ON AMAZON

Bamboo with Boar Bristles

VIEW ON AMAZON

Sandalwood Brush, Wood Bristles

VIEW ON AMAZON

KITCHEN MATERIALS

Pots and pans are a big enough topic to merit their own chapter, so we'll hit on them separately and touch on everything else here.

For the most part, the materials to avoid are pretty straightforward, but let's take a quick look...

Cooking utensils and silverware

I have a few friends who still stir hot stuff on the stove with a plastic spoon and scrape the bottom of their pans with aluminum spatulas. Agh!!

As you probably already know, it's best to skip the plastic and aluminum cooking utensils, both of which can leach unwanted contaminants into your food.

Uncoated wood, bamboo, ceramic, and (nickel-free) stainless steel are healthier options. Yes, they do tend to be more expensive, but not by much and the few extra dollars could translate to better health and more energy down the line.

Silicone spatulas and utensils are also a good option, when the silicone is medical grade and **tested** to be free from additives.

Why? As we'll discuss further in the cookware section, silicone is not as safe as many eco-websites claim it is. While silicone absolutely CAN be manufactured without additives that leach endocrine disrupting chemicals into our food, most silicone products that were independently tested for leaching, failed.

If you do buy silicone, do check their label or website to make sure they have their products **independently tested to be free from EA (estrogenic activity)**.

Food storage

As much as possible, skip the smelly plasticware and opt for glass or stainless steel storage containers instead. And never microwave plastic, as it can increase leaching.

It isn't easy to find silicone lids for glass containers for some reason. I did find plenty of silicone gaskets on BPA-free plastic lids, but that wasn't helpful in my search for 100% plastic-free. I was able to find stainless steel containers with silicone lids, but do be prepared to pay a bit more.

Dishes, glasses, and serving pieces

Again, skip the smelly plastic. (I know, I sound like a broken record.)

Glass, ceramic (i.e. clay, porcelain), bamboo, uncoated or naturally coated wood, and stainless steel are healthier options.

Also, when buying brightly-colored dishes, glasses or serving pieces, check the label to make sure it says 'free from cadmium'. Cadmium is a toxic heavy metal that is sometimes found in products that are dyed red, yellow, or orange.

Dyed or not, do also check that your dishware (especially ceramic) have been tested to be lead-free. While lead is much less common these days for products made in the U.S., it can still be found in handmade and imported pottery.

Lastly, avoid dishware that has been lacquered or coated with non-natural glazes.

Note that it is recommended to NOT put uncoated wood and bamboo in the microwave or dishwasher. If a label says their wood or bamboo product IS safe for the microwave

or dishwasher (or it does NOT state that it is NOT), there is a chance it may be coated with polyurethane or other chemical that you don't want touching your food.

Disposables

When choosing disposable dishes, cups, and eat-ware for picnics and parties, skip the stark white (i.e. bleached) plates and plastic cups. Instead choose plant-based materials, which are usually labeled as compostable or biodegradable.

To be fair, these biodegradable options don't degrade in a landfill. So unless you compost them at home or through your city's compost bins, they may last in the environment nearly as long as their plastic or bleached paper alternatives. That said, the compostable / biodegradable options won't contain harsh chemicals, so they are the safer, non-toxic choice.

Bamboo Utensil Set

VIEW ON AMAZON

Bamboo Flatware (3pc)

VIEW ON AMAZON

Stainless Steel Lunch Box

SHOP BENTO BOXES

Duralex Tempered Glass Bowls

VIEW ON AMAZON

IN THIS CHAPTER

POTS & PANS

POTS & PANS

In a later chapter, we'll discuss the types of foods you may want to limit or remove from your diet, as well as their healthier alternatives, to help minimize your body's toxic load. But in the journey to keep your diet toxin-free, it's equally important to talk about the pots, pans, and baking materials we use to cook that food.

Why is this important? Unfortunately, the safety regulations placed on manufacturers are not enough to keep contaminants from our kitchen. As a result, the market is flooded with cookware and dishware, whose core materials and/or coating can leach into our food and our bodies. If we can't rely on government regulations to keep us safe and healthy, we'll have to rely on ourselves.

While safety is a chief concern in this chapter, cookware doesn't only need to be toxin-free. It also needs to heat evenly, last a long time, and not break the bank. We'll touch on some of these characteristics as well, so you'll know what to expect.

UNSAFE CONTAMINANTS

The three types of cookware that most experts recommend avoiding are copper, aluminum, and Teflon (non-stick coating).

Growing up, we had a full set of aluminum pots and pans plus a few small copper pieces for sauces and sautés. The aluminum was lightweight and easy to use day-to-day. The copper was beautiful, but we had to polish it to keep it looking that way (with toxins, I'm sure). Man, I **really** wish we knew then, what we know now!

Aluminum

Aluminum, a known neurotoxin, easily leaches into our food when pots and pans are scratched by metal spoons and spatulas. The metallic ions are also readily released when heated aluminum comes into contact with the lactic acid in milk, as well as with acidic foods, such as tomato paste, spices, and citrus. (I squeeze lemon into everything, so that caught my attention.)

While our bodies normally process aluminum fairly well, many of us take in more than we release, often from cooking with aluminum foil and aluminum cookware. Aluminum can accumulate in our brain, bones, and liver. It can also compromise the blood-brain barrier, making it easier for contaminants such as bacteria, viruses, and chemicals to leak into the fluid that circulates through our brain.

What about anodized aluminum?

Anodized aluminum is a safer option than regular, non-anodized aluminum... for a while.

When aluminum is "anodized", it is placed in an acidic solution and exposed to an electric current. The process is called electrolysis and it forms a protective layer that makes the aluminum more durable and resistant to scratches.

Still, the anodization breaks down over time, keeping it in the "don't buy" category.

Copper

Copper pots sure are pretty. They are also highly conductive, heating evenly across the surface and making them a favorite among chefs. But like aluminum, heated copper can easily leach, when scratched by utensils or harsh scrubbing, or when the metal comes into contact with acidic foods.

While our bodies do require a small amount of copper, most of us get enough from our daily diet, not to mention our water pipes, and do not require supplementation from either tablets or cookware.

Too much copper can also accumulate in our liver and interfere with our body's ability to detoxify. Elevated levels of copper can lead to issues with our nervous system, adrenal functions, reproductive organs, and our connective tissues.

It's worth noting that copper cookware is usually coated, making it less likely to leach into our food... when it's new. Unfortunately, the coating can begin to scratch off after a few good scrubs.

Teflon (non-stick coating)

Teflon. What a nightmare. It doesn't take much for the non-stick coating to chip into our food. And leaving a non-stick pot or pan on a very hot stove too long can produce toxic vapors that have been known to kill pet birds. (Yep, Google it.)

Studies have also shown that the chemicals used to produce Teflon are found in our drinking water and can persist in our bodies and in the environment for years.

The bad guys in this story are polytetrafluoroethylene (PTFE) and perfluorooctanoic acid (PFOA). Teflon, was developed by DuPont in the 1930s and is the trademarked name for a concoction of perfluorochemicals with PTFE being the main ingredient.

I'm not typically a fan of calling out long chemical names like this because, frankly, who cares what they're called? This isn't chemistry class and there won't be a test at the end. I only mention them, because you will find non-stick options on the market that are labeled as "free from PTFE and PFOA", so it's good to know what that means.

When the non-stick coating is free from PTFE and PFOA, you'll likely see the products labeled as "green" or "eco" non-stick cookware.

ECO NON-STICK COOKWARE: IS IT SAFER?

Non-stick pots and pans that are free from PFOA, PFAS, lead, and cadmium are marketed as a non-toxic alternative to traditional Teflon. And the alternatives typically are safer.

Still, it's a good idea to see what the company is using in place of Teflon to coat their cookware and to check the reviews to see

how long users say the coating lasts, before it begins to scratch off.

Most non-stick alternatives to Teflon are ceramic coatings. It's helpful to note that a ceramic **coating** is different than ceramic **cookware**. Here's the difference...

Ceramic **coating** is typically applied over an aluminum core, or sometimes stainless steel. By contrast, ceramic **cookware** is ceramic through and through. Because it won't scratch off, pure ceramic cookware (discussed in a moment) is generally a better option overall than ceramic coating. However, ceramic cookware is not non-stick, while ceramic coating is.

HINT: Just use some high-heat vegetable oil and voila! Your ceramic cookware is now non-stick.

A popular and highly rated eco-coating is Thermalon, which is a mineral based ceramic coating, derived mostly from silica and oxygen.

While Teflon starts to break down and release toxic fumes at 500°F (260°C), Thermalon has a much higher resistance up to 840°F (450°C). And when Thermalon does break down, it doesn't release toxic fumes, as Teflon does.

Thermalon is also marketed as resistant to scratches, abrasion, and corrosion, and said to last longer than other coatings. However, the coating does break down over time and the non-stick benefit does wear away.

To help the coating to last longer:

- Use wood utensils in place of metal to avoid scratching.
- Wash by hand instead of in the dishwasher.
- In place of metal scrubbers, remove any stuck on foods by soaking the pot or pan in water before washing and/or by scrubbing it with a non-abrasive helper such as baking soda or Bon Ami (whose main ingredient is baking soda).

Because the coating will eventually deteriorate, it's also good to note what makes up the core of the cookware. In other words, if you scratch through the surface, will you end up cooking on copper or aluminum? Or is the cookware made from one of the safer options, discussed in a moment?

SILICONE BAKEWARE: IS IT SAFE FOR BAKING?

While silicone is touted as safe by many, it can, and usually does, contain unwanted additives that can leach into our food.

According to Dr. Stuart Yaniger, an author of a 2011 Environmental Health Perspectives study that discusses endocrine disruptors leaching from plastics into foods, silicone CAN be manufactured to be safe. However, most is not.

He says, *"...although silicones can be formulated to be free of leachable endocrine disruptors, most aren't, including most medical grades."* (source)

Yaniger goes on to say that unless the manufacturer has **specifically formulated the product to be free from EA (estrogenic activity) and has had it tested by an independent third party to prove it**, you can assume it leaches.

As such, whenever I discuss silicone as a healthier option in this book, you'll notice that

I also say something along the lines of "***only if it's been independently tested to be free from unwanted additives.***" This is important, even if the silicone is food-grade or medical-grade.

Personally, I use silicone quite a bit in my kitchen. Spatulas, ice cube trays, dish mats, potholders, lids to my storage containers - are all silicone.

While I do prefer silicone to plastic, I still trust ceramic, metal, and glass more. Unfortunately, I find it difficult to find a safer solution to silicone for some uses (wooden spatulas aren't flexible, for example) and will probably continue using these items for some time. That said, I won't bake in silicone pans.

Separate tests from Dr. Yaniger's have found silicone to be safe at high temperatures. However, the argument for those in the "silicone is bad" camp, is that these testers only looked at silicone that was free from additives, so '*of course they didn't leach anything*'. These folks believe that, had these same tests been done on a random sampling of commercially sold pans (like Yaniger did) they likely would have ended up with different, less favorable results.

For me, it's just common sense and a bit of "gut". The overly bright colors just don't "feel" safe to me and the idea of heating food in a neon rubbery material kind of freaks me out.

My (non-scientific) preference is to stay away from cheap silicone products that may contain chemical additives and to make sure that what you do buy (as I mentioned) is labeled as either food-grade or medical-grade **AND** has been tested to be free from EA (estrogenic activity). Again, this independent testing is muy importante!

When it comes to cookware / bakeware, I'd stick to ceramic, cast iron, carbon steel, stainless steel, or glass... all of which are discussed below.

P.S. I've seen it said that you can test whether silicone has plastic fillers or other contaminants by twisting it. If the silicone turns white where it's been twisted, then it has fillers that may leach into your food. If it retains its color, it does not have fillers. Please be aware this test may not be entirely reliable, so take that advice with a grain of salt.

SILICON VS. SILICA VS. SILICONE

I see blog posts & Facebook posts that mistake silicone for silicon and silica all the time. Here's the difference.

Silicon is metallic element #14 on the periodic table. Your spatula is not made from silicon; your computer chips are. (Hence the name, "Silicon Valley".)

Silica is a natural mineral formed when silicon is exposed to oxygen. The most common crystalline form of silica is quartz (a.k.a. silicon dioxide or SiO_2). Crystalline silica is the main component of sand, granite, and clay. In its powder form, natural silicon is used to manufacture ceramic cookware and coatings.

Silicone is different from silicon and silica in that it is not formed in nature. It is a synthetic substance (a polymer) of silica, carbon, and oxygen. It can be manufactured as a liquid, gel, or a rubbery solid depending on its intended use. For example, we see silicone in its solid, rubbery form in the kitchen as bakeware, spatulas, and baby bottle nipples.

SAFER COOKWARE

Ceramic / Earthenware / Clay

Ceramic cookware and bakeware are beautiful, and highly durable. They are excellent at conducting heat and can withstand extremely high temperatures. They're also versatile and can be used on the stove top, inside the oven, and in the microwave. You can even put them in the freezer once they've cooled.

Ceramic-ware is pricey, but (along with cast iron) is a top choice for those who are passionate about cooking.

Ceramic is also healthier. That is, ceramic is healthy *when it has been properly heated and glazed.* The reason is this...

Pure (classic) ceramic cookware is made from clay and earth minerals. Once shaped, it is glazed and baked in a kiln. Toxic cadmium- and lead-containing glazes were commonly used in the past to add a bright orange, red, or yellow, and to give the ceramic a smooth, shiny finish. If the ceramics are not baked long enough and/or at temperatures that are not high enough, the lead can leach into the food.

Most ceramic brands in the United States no longer use lead glazes, however do beware of antique, handmade, and imported pottery that may be labeled for cooking.

When shopping for ceramic cookware, check the label or website to ensure it has been tested and does not contain metals or chemical coatings. Properly crafted or manufactured ceramics do not leach toxins into your food, their glazing will not chip off, and they are easy to clean.

Cast Iron

Cast iron cookware has been around for centuries. It is inexpensive, toxin-free, and a well seasoned pan is naturally non-stick.

Unlike non-sticks made with Teflon, cast iron pans safely withstand extremely high temperatures. While it can take longer for the cast iron to heat up, it holds the heat extremely well and easily moves from stove top to oven.

One thing to be aware of is that, although cast iron holds heat well, it does not heat evenly. A pan on the stove top will get hottest where it is directly in contact with the flame, while staying much cooler in the areas not in direct contact.

Cast iron can also leach trace amounts of iron, especially when cooking tomatoes and other acidic foods. Usually when your cookware leaches into your food, it's a bad thing. But iron is a critical component of blood building in our bodies and is also a nutrient in which we are commonly deficient. While some say that this makes cast iron a good thing, I've also seen claims that our body does not assimilate this iron, so it can accumulate and act as a toxin.

Upon further research, I'm inclined to believe that the **metallic form of iron** is not healthy, as our body does not easily assimilate it. By contrast, **dieteary iron** from plants and animals is healthy, as our bodies can utilize it more readily.

Also, if you suffer from a condition called hemochromatosis, your body already absorbs too much iron. In that case, you won't want to cook with cast iron.

Many cooking websites say not to cook acidic foods in cast iron, as the acids can react with the iron and give your dish a metallic taste. Instead, cook acidic foods in ceramic, glass, or stainless steel.

There are three things to note here:

1. The metallic taste can make an otherwise delicious dish less appealing.
2. This tends to be more of an issue with newer pans vs. well-seasoned cast iron.
3. It's also only an issue for long-cooking times. For example, sautéing tomatoes or squirting lemon on your veggies is fairly quick. But simmering a tomato sauce or chili for a while, gives more time for the acids to react with the iron.

Keep your cast iron pans well-seasoned to prevent rusting and to maintain a (mostly) non-stick surface.

Carbon Steel

For the most part, cooking with carbon steel is pretty much the same as cooking with cast iron. This is because they have a very similar in makeup.

Carbon steel is 98-99% iron and 1 to 2% carbon, while cast iron is 97-98% iron and 2 to 3% carbon. (Yep, carbon steel has a touch more iron than cast iron does.)

Like cast iron, carbon steel cookware is non-toxic, relatively inexpensive, and can last generations. You will need to season carbon steel, as you would cast iron, in order to protect it and make it (mostly) non-stick.

Both of these cookware options are safe under extremely high heats and can be used on both the stove top and in the oven. (Both are also great for campfires, by the way.)

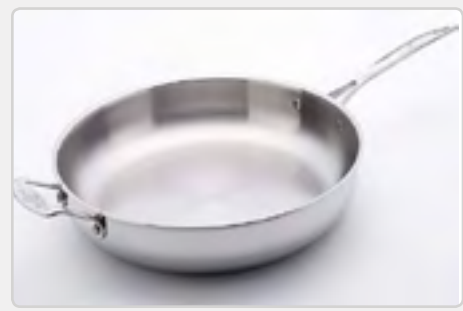
Finally, both need to be hand washed (no dishwashers) and both come with the same warning about cooking with acid foods, such as tomatoes.

Lodge Cast Iron Pans

VIEW ON AMAZON

Mineral B Carbon Steel Pans

VIEW ON AMAZON



USA Pans - Stainless Steel

VIEW ON AMAZON

The main differences are:

- Carbon steel is not quite as heavy as cast iron (though I wouldn't exactly call it "lightweight") so it is slightly easier to toss around in the kitchen.
- Carbon steel heats faster than cast iron and doesn't keep the heat as long. (You'll barely notice the difference.)
- The sides of a cast iron skillet tend to be straighter up and down (better for searing, frying, and baking), while carbon steel tends to be angled (better for sautés).

Ultimately, the differences between the two are not enough to merit owning a full set of each. Pick one or mix and match.

Either way, so long as you don't use them to cook acidic foods and don't use metal utensils, they're both considered healthy options.

Stainless steel

Stainless steel is a blend of metals (an alloy) usually containing iron, carbon, chromium, manganese, silicon, nickel, titanium, and/or molybdenum. The reaction of these elements with oxygen, particularly the chromium and nickel, forms a tight film that helps to prevent rust and corrosion. (You'll see why I'm calling out the chromium and nickel in a moment.)

The alloy makes stainless steel pots and pans durable, easy to clean, beautiful, and non-toxic. For almost everyone. Those with a severe allergy or sensitivity to nickel should know this:

Generally speaking, the natural coating formed by stainless steel is quite stable and safe. However, pots and pans can become damaged by overheating them or by scratching them with abrasive scrubs or metal utensils. When the coating is compromised, it is possible to leach some nickel into your food.

You'll often see pots and pans described as "18/8 stainless steel" or "18/0 stainless steel", for example. The numbers indicate the percentage of chromium and nickel, respectively. So 18/8 has 18% chromium and 8% nickel, while 18/0 is nickel-free (almost nickel-free, there may be some trace amount).

So if you are sensitive to nickel, you'll want to choose nickel-free or opt for cast iron, carbon steel, or pure ceramic cookware instead.

Good to know: On its own, stainless steel is not the best conductor of heat. For this reason, manufacturers will often use aluminum or copper as the base, or sandwiched in the middle, to significantly improve the pan's ability to conduct and retain heat. Several layers of stainless steel are layered on top and (often) the bottom of the cookware.

The aluminum or copper will improve the performance of the cookware in a way that is completely safe, as those metals will never touch your food.

Also good to know: Nickel is what makes pots and pans shiny. The higher the nickel content, the shinier the cookware. Stainless steel utensils and bowls tend to have more of a matte finish, rather than shiny, because they contain no nickel... or just a trace amount of nickel (max 0.75%).

Glass

Glass cookware and bakeware is considered safe, as there are no toxins to leach into your food. The glass is often blended with a small amount of ceramic (also safe) to improve its performance.

One pro is that glass is inexpensive, making it easy to replace if you break it. It's also easy to monitor the food and see when it's done, as it is (obviously) transparent.

Like ceramic, cast iron, and carbon steel, most glass cookware can be used both on the stove top and in the oven. Glass bakeware is often beautiful as well, so it can double as the service dish.

Added bonus, you can store leftovers right in the glassware in either the fridge or freezer, and you can reheat those leftovers in the microwave (or stove top or oven), all in the same glass piece.

Glass is also completely non-reactive with foods. So unlike carbon steel or cast iron, you can cook tomato sauce or whatever acidic foods you want without worrying how it might taste.

One big downside to glass cookware is that it can chip or break easily, so you have to be careful. If you put a hot glass baking dish on a wet counter top or cold stove top, it can crack. Put it in the fridge or freezer before it has cooled sufficiently, it can crack. Put it straight from the fridge into the microwave without bringing it to room temperature first, it can crack. It doesn't take much.

Like ceramic cookware, glass cookware is not non-stick. I use both glass and ceramic baking pans to roast veggies. Whichever I use, I always lay a piece of parchment paper on the bottom AND toss the veggies in a bit of olive or coconut oil. If I don't, everything sticks to the bottom and it takes work to clean.

It does help to soak the pan in water, after the pan has fully cooled. If soaking in water isn't enough (and this goes for both glass and ceramic), I'll either spray a little white vinegar on the pan and/or scrub it with some baking soda. I don't use metal scrubbers on either, as that's too harsh and can scratch the surface.

Titanium

Titanium is a "bio-compatible" metal meaning it doesn't react with human tissue. For this reason, it is widely used in surgical instruments and for orthopedic procedures such as hip replacements or for holding broken bones together with pins or screws.

Pure titanium cookware is lightweight, incredibly strong, and affordable. It is also not known to leach into foods. Here's why.

Titanium naturally reacts with oxygen in the air and water. In doing so, it naturally forms a strong shield of completely safe titanium dioxide (TiO_2) on the surface. So if you do manage to scratch titanium cookware (with metal utensils, for example), the exposed titanium will simply react with oxygen to re-form TiO_2, essentially resealing itself.

So while titanium is not entirely scratch resistant, the scratches won't degrade the performance of the cookware and won't cause metal particles to leach into your food.

With so many upsides, titanium sounds like the best cookware solution overall. And if

you're an outdoor enthusiast, it certainly is. Hikers and campers love it, because it's so lightweight that it's easy to carry in a backpack and so durable that you can throw it on the campfire without worry.

Unfortunately, pure titanium is not a great conductor of heat, so it takes a while for it to heat up and creates hot spots where the pan meets the flame, often burning food in those areas. So despite the naturally non-toxic nature of pure titanium, you probably wouldn't use it for everyday cooking. It is, however, highly recommended to have on hand for outdoor excursions.

Manufacturers do love titanium and easily solve for its downsides in order to use it in their not-purely-titanium cookware.

Here are two ways they do it. Both are considered safe options.

Solution #1

The manufacturers will layer the titanium over an aluminum core. This drastically improves the cookware's ability to distribute and retain heat across the surface for faster and more consistent cooking. This is considered safe, as it would be pretty difficult (if not impossible) to scratch through the titanium and expose the aluminum.

Solution #2

They will also coat the cookware in a ceramic-titanium blend. While titanium is pretty food-sticky on its own, the ceramic-titanium coating makes it non-stick. I've seen reviews that indicate this type of coating doesn't last forever. The exception seems to be when the coating applied using a "sol gel" process, which is reported as more durable, long lasting, and non-toxic.

Lodge Cast Iron Pans

VIEW ON AMAZON

Mineral B Carbon Steel Pans

VIEW ON AMAZON

USA Pans - Stainless Steel

VIEW ON AMAZON

HOW TO CLEAN YOUR CAST IRON SKILLET

You won't need to clean your cast iron often. But when you do, you can usually clean it with just water and a non-abrasive brush or gentle scraper. Or you can lightly scrub it with salt and lemon.

A few tips:

- Always hand-wash cast iron; never put it in the dishwasher.
- Cast iron will rust, so never soak the pans and always dry them thoroughly, immediately after rinsing.
- Coat your pan with oil after every use (and after every light cleaning) to keep it well-seasoned.

HOW TO SEASON YOUR CAST IRON SKILLET

If the pan is new...

Wash the pan and dry it thoroughly. Next, preheat your oven to 325°F and set the pan inside for about 10 minutes, as it's preheating.

If the pan is used... (e.g., inheritance, yard sale, thrift store)

To remove any old seasoning and prepare it for a new coat, preheat the oven to 400°F. Scrub the pan with a bit of salt and water, paying special attention to any rust spots that need to be removed. Place the pan in the oven for a few hours to cook away the old seasoning and give your pan a fresh start.

Whether new or used

Remove the pan from the heat and let it cool. Using a clean cloth or paper towel, rub enough ghee or vegetable oil (e.g., avocado oil, refined coconut oil, flaxseed oil) to coat the entire pan, inside and out.

Wipe in any excess oil until you see only a light sheen. Place the oiled pan upside down on the top rack of the oven at 350°F for 1 hour. Then turn off the oven, leaving the pan inside until it has cooled completely.

It's now ready for use.

BRAND SPOTLIGHT

MIRIAM´S EARTHEN COOKWARE

100% Pure Clay Cookware & Dinnerware

Handcrafted from nutrient-rich clay

Clay cookware is the bomb-diggity! But in this industrial age, it is important to ensure the purity of your earthenware. Miriam's team doesn't just test the clay **after** it's harvested, they research the land itself **ahead of time** to ensure there has been no farming or industrial activity in the last 200 years.

They also verify there are no industries disposing of toxic waste within a 15 mile radius of the dig site. Samples are then lab tested to further ensure no contaminants. And only then do they harvest the clay from 8-10 feet below the surface.

The clay is sourced in the USA and her products are handcrafted by professional potters in Boston, MA. There is absolutely no use of lead, cadmium, arsenic, additives, or chemicals of any kind.

What their reviewers love, beyond safety

Once the cookware is fully seasoned, it becomes naturally non-stick, allowing you too cook with little to no oil. It is easy to cook with, easy to clean, and food cooks uniformly.

Reviewers also claim the food tastes better, which makes sense. Water soluble nutrients, along with their natural flavors, are lost as steam escapes conventional cookware. But Miriam's cookware is uniquely designed to drip accumulated steam back into the pot, keeping the flavor and moisture intact.

"... I am so happy to finally cook with non-toxic cookware!! You can't imagine how much that means to me and my family. The food tastes exceptional."

SHOP COOKWARE

SHOP DINNERWARE

GOOD TO KNOW

Miriam offers a discount on imperfect items. This is a great option, if the regular line is out of your price range.

BRAND SPOTLIGHT

XTREMA® COOKWARE

Pure Ceramic Cookware

From All Natural Materials

Made from 100% ceramic through and through, Xtrema® offers an extensive line of healthy cookware and teapots that are free of harmful chemicals, heavy metals, and unwanted contaminants. It is also non-reactive, non-leaching, scratch-proof, and chip-resistant.

Their cookware is safe to use on the stove top, in a conventional, microwave, or toaster oven, in the broiler, and on the barbecue grill. From its core to glaze, it contains no metal, cadmium, lead, PFOA, PTFE, glues, polymers, coatings, or dyes. You can store it in the fridge or freezer, and it is also dishwasher-safe.

Beyond healthy, their cookware is also better for the environment. While metal mining, refining, and manufacturing pollutes the environment, Xtrema® is crafted from renewable raw materials, using earth-friendly manufacturing methods.

SHOP COOKWARE

"It is wonderful to have finally found toxin-free pans! I recommend them to all my patients."

Get 10% off with
greenopedia10

xtrema®
PURE CERAMIC COOKWARE

IN THIS CHAPTER

HAIR & BODY CARE

HAIR & BODY CARE

You've heard this many times: *What we put **onto** our body is as important as what we put **into** our body.*

The reason is that while our skin acts as a protective shield, it still does absorb its fair share of toxins from hair and body care products. Our skin can also react *topically* to chemicals it touches, even when it does not fully absorb them.

And, when you suffer from an acute sensitivity to chemicals, you don't even need the product to touch your skin for your body to react. In fact, it doesn't even need to be YOUR body care product that triggers a response.

But here's the thing. A lot of folks think it's just the scent that matters. They look for soaps, shampoos, lotions, and other products labeled as "fragrance free" or "free and clear" without looking to see what else is lurking inside.

There may only be a small amount of chemicals in whatever label you're reading at that moment, but you can't just think about that one product, because we don't just use one or two products and call it a day. I dare you to count how many hair and body products you apply in the morning. Then read each ingredient label to count how many chemicals you've put on your body, before you've even left the house. If the only claim you're paying attention to is "fragrance-free", you may be in for a surprise.

The more chemicals we inadvertently apply to our hair and skin, the more opportunity their toxins have to accumulate in our body and to interact with each other. Conversely, the more we actively avoid the contaminants we **can** control (i.e. by choosing only the purest products), the better equipped our bodies will be to handle the environmental contaminants that are **beyond** our control.

BEYOND "FRAGRANCE-FREE"

Obviously, the healthier the ingredients, the better. This common sense rule applies to everyone, not just the chemically sensitive. But finding these products isn't always easy.

Traditional supermarkets and drugstores don't always carry products that fit the bill. They're definitely better than they used to be, I'll give them that. But it is still difficult to find products whose ingredients match the enticing "healthy" claims and natural looking artwork on the front of the label.

If you do find labels that claim the product is free from phthalates, parabens, sulfates, sulfites, and (for antibacterial soaps) triclosan, you're off to a good start. Still, read the back of the label as well.

You'll want to see plant-based and/or safe mineral ingredients topping the list - and ideally dominating the list. The first few ingredients are the most important, as ingredients are listed in order of most volume to least. But even if I see the minerals or botanicals listed first (a good thing), I always read on.

If those (usually) healthier ingredients are

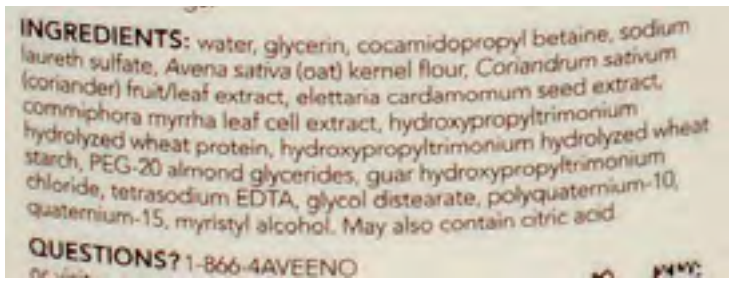
followed by more minerals or botanicals, I'm a happy shopper. If they're followed by a bunch of ingredients with scary looking names that only my high school science teacher could pronounce, I put it back on the shelf.

Which are truly healthy alternatives?

Example #1

This well-known brand is often mistaken as a natural alternative. Easy to do, given the package design, along with the claim of "dermatologist recommended" and their deceiving use of the word "natural".

But let's take a look at the ingredients.



Water is the top ingredient. Personally, I don't want my shampoo or lotion watered down, but ok, at least water truly is natural. And frankly, many healthier brands use water as their first ingredient too. Whadda ya gonna do.

Next up is glycerin (usually from animal fat, unless it specifically says it's vegetable based), followed by cocamidopropyl betaine, which is a chemical known to cause skin irritation and allergic reactions.

These are followed by sodium laureth sulfate (SLS), a skin irritant that the Environmental Working Group's Skin Deep Database says "*may be contaminated with potentially toxic manufacturing impurities such as 1,4-dioxane*".

These ingredients are finally followed by a few botanicals, and then some more unsavory ingredients.

Oh Aveeno! Well, at least the product is "fragrance-free", right?

Example #2

This example is not a well-known brand, but I see folks asking about it sometimes on the MCS Facebook groups. I assume this is because it's fragrance-free and says "clear" on the front side of the label. It also says "*recommended by dermatologists*".

Ingredients: Purified Water, TEA-Lauryl Sulfate ("*possible organ toxicity*" and "*enhanced skin absorption*" according to EWG), Cocamidopropyl Betaine (*known irritant*), PEG-8 Distearate (*also flagged as "possible organ toxicity"* per EWG), Benzyl Alcohol ("*possible organ toxicity*" and "*associated with contact allergy*" per EWG), Cocamide MEA, Polyquaternium-22, Citric Acid.

Well, at least it doesn't claim to be "natural". Kudos, I suppose??

Example #3

What does a healthier shampoo look like?

Dr. Bronner's calls their castile soaps "18-in-1" because they have 18 uses, from face soap and shampoo to washing the dishes - all of which, castile soap is traditionally known to do.

Their ingredients are organic, so no worries about pesticides. And they are almost entirely plant-based. One exception is potassium hydroxide, known as potash.

You may be more familiar with lye (sodium hydroxide), which has long been used to make bar soaps. Potash works the same way.

The potassium in potash (like the sodium in lye) reacts with the fatty acids of the oil ingredients to create glycerin -- in this case vegetable glycerin, though some soap makers use animal lard (gross, I know). During this reaction, the hydroxide splits from the potassium (potash) or sodium (lye) to form water. Ultimately, this "saponifies" the product, while leaving behind no lye or potash.

This process of "saponification" is how traditional soap making is done. Both lye and potash are caustic ingredients linked to organ toxicity. However, since neither lye nor potash ends up in the final product, their toxicity becomes a non-issue.

With that out of the way, let's look at Dr. Bronner's other ingredients: Water, organic coconut oil, organic palm oil**, organic olive oil, organic hemp oil, organic jojoba oil, citric acid (preservative), tocopherol (vitamin E, preservative).

Overall, nothing you don't recognize. Phew!

Dr. Bronner's unscented castile soap is quite popular in the MCS community. I've seen a few folks say they can't use it because they're allergic to hemp, coconut, or palm oil**, but in terms of chemical sensitivities, the unscented formula seems to be non-triggering.

** PALM OIL ETHICS

I normally stay away from anything with palm oil for ethical reasons, because its harvesting often leads to the devastation of rain forests and inhumane slaughtering of the orangutan who live there. I make an exception when the ingredient is certified as "sustainably harvested", especially when the plantation is in South America, where there are no orangutans. I'm also okay with Dr. Bronner's, because they own their own orangutan-safe palm plantations and harvest their oil sustainably.

Example #4

Obviously, I'm a Dr. Bronner's fan. But they're not the only non-toxic (and ethical) brand around. Let's take a look at another example, 100% Pure.

Ingredients (mostly organic): aloe leaf juice, rose hydrosol (i.e. rose water), saponified coconut oil, vegetarian glycerin. This is followed by extracts of neem, burdock root, and kelp. Then we have vegan cellulose (from plant cell walls and vegetable fibers), tocopherol (vitamin E), panthenol (vitamin B5), and extracts of green tea, nettle, rosemary leaf, calendula flower, virgin coconut oil, and peppermint leaf.

Next up is french sea salt, oregano leaf, thyme flower, honeysuckle flower, eucalyptus leaf essential oil, melaleuca, and tea tree essential oil.

All in all, comparing these labels that live up to their all-natural claim to the fragrance-free (and yet still chemical-filled) products, which would you feel safer putting on your body?

NOTE: Not all chemically sensitive folks can tolerate essential oils (which we'll discuss in a later chapter), so even this may be a no-go. However, I've seen several conversations in the MCS Facebook groups, where folks who **can** tolerate essential oils love this brand and don't react to it at all.

PAYING MORE

Swapping out the chemical stuff for the healthier alternatives is ideal, but it can be expensive for some. Dr. Bronner's is reasonably priced and comes in gallon jugs, making it even more economical. However, many other natural alternatives are, admittedly, not accessible for all.

Chemicals are cheap, are easy to produce, and they don't spoil. By contrast, plants have to be cultivated and nurtured over time. They need acres and acres to grow. And they are subject to hurricanes, drought, and other whims of mother nature. Plus, most of the healthier, plant-based products are made by smaller brands, who don't benefit from the economies of scale that larger companies enjoy. In other words, plant-based products are usually more expensive than chemical-filled products.

It's worth noting that there are plenty of fancy pants brands that charge a fortune, yet are filled with cheap chemicals. In other words, they're selling a low quality product with a high price tag and elegant label. Always check the ingredients, no matter whose name is on the front, how natural or high-end their branding *appears*, or how healthy the store or online shop where you buy.

DIY ALTERNATIVES

One great way to save some money AND ensure your body care products don't have chemicals is to make them yourself.

Some recipes out there are faster and easier than others. But you can usually make them in bulk, divvy them up into smaller containers and, since natural ingredients do go bad, refrigerate or freeze what you don't immediately need. Or, for fun, throw a DIY party and split everything up with friends!

Good to know: For many recipes, you can add a little bit of citric acid or other (usually) non-triggering preservative to help it last longer outside the fridge or freezer.

Pinterest Recipes

Pinterest is an amazing resource for finding DIY body care. I've been gathering healthy and (mostly) easy recipes as I come across them and will continue to add to these boards over time.

I'm posting the Pinterest boards here for your convenience. Please let me know which you end up trying and whether you love or hate them!

- DIY natural soap and shampoo
- DIY natural moisturizer
- DIY natural deodorant
- DIY natural oral care
- DIY natural face masks & body scrubs
- DIY natural ointments and cures

SIMPLE INGREDIENT SWAPS

Moisturizer

Usually when we think of body lotions, we think of pre-mixed, multi-ingredient products. Truth is, single-ingredient, plant-based oils (ideally organic) can be highly moisturizing.

While each has its own skin benefits, you can try these oils on their own or blend them, as you like. Some moisturizing oils include jojoba, coconut, olive, sesame, avocado, almond, or grapeseed oil.

Shampoo and conditioner

I haven't yet tried what's called the "no-poo shampoo method", but I have several friends who love love love it and it's on my (ever-growing) To Do list.

The short of it is that you can wash your hair with baking soda, diluted in water. Then follow it with a conditioning apple cider vinegar rinse (also diluted), which neutralizes your hair's pH.

No-poo'ers find they only have to wash their hair a few times a month. In between baking soda washes, some will detox their hair with bentonite clay and occasionally do a deep conditioning hair mask with coconut oil or jojoba oil.

It can take your hair a couple months to adjust to the no-poo method, so ponytails and hats may become your friend. But if you can stick it out, your hair will (they say) be detoxed and gorgeous in no time.

Aftershave or Toner

For a clean, fragrance-free aftershave or skin toner, simply dab on some all-natural witch hazel and call it a day.

Witch hazel comes from the bark and leaves of the *hamamelis virginiana*, a plant that is native to North America. It is a traditional skin healing astringent, long known to help with acne, insect bites, poison ivy, and more.

Some manufacturers add fragrance or alcohol to their witch hazel, so do check the label.

Hair spray or hair gel

In place of hair spray or gel, just dab a bit of aloe vera gel and style, as usual. You can also use aloe as a pre-wash to help with dandruff, or as a post-wash in place of conditioner.

Toothpaste / tooth powder

I haven't used regular toothpaste in years. Instead, I use a tooth powder made from baking soda, coconut oil, and activated charcoal.

Some folks worry about the taste, but honestly, it doesn't taste like much of anything. Maybe it has a tiny bit of bitterness at first, but I'm so used to it that I don't even notice anymore.

And I have to say is that my teeth feel like I've just been to the dentist... every single day. I also don't wake up with a nasty film on my tongue anymore.

Of course, I don't just brush my teeth, I also brush my tongue, the roof of my mouth, inside my cheeks, my gums, and inside my upper and lower lip (opposite my gums). It only takes a few extra seconds, but what a difference it makes!

I buy my mix from The Crunchy Chemist, who is a super smart dude (and now a personal friend) who sells it at my local farmer's market. The founder (Blake) used to be a chemist for aerospace leader, Lockheed Martin, helping

them to create a natural detergent to wash their airplanes without dumping toxins into the groundwater.

But Blake's also a crunchy hippie dude, so he left aerospace to make healthier products for everyone. His fun tagline is "*aeronautical engineer gone rogue*". Gotta love it.

He sells a few other natural products that outperform the synthetic stuff as well, but his Chomper Chalk is his best seller. It seems expensive at first, but it lasts for months, so you end up saving quite a bit.

All that said, if you prefer a DIY, you can mix baking soda and pure activated charcoal, with or without the coconut oil. Again, with respect to DIY recipes, Pinterest is your best buddy.

Mouthwash

I'm a fan of plain ol' hydrogen peroxide as a mouthwash swish. It doesn't taste like anything and I like that I can feel the fizzy bubbles doing their job.

I also keep a small spray bottle of organic peppermint essential oil with me for a quick mouth spritz after meals and throughout the day. I know this wouldn't work for all chemically sensitive (and some will cringe at the mere mention), but I love it.

Henna hair color

I wouldn't call henna a "quick and easy" swap, but it is definitely a healthier alternative to synthetic colorants. Coloring with henna can be a long process that takes some commitment, so it took me a while to even consider it.

What got me to change over, was that I found a brand, Henna Color Lab, that uncomplicated the process. All you need to do is add some warm water to their henna powder, apply it to your hair, let it sit, and then rinse. (It does have a scent, but it's earthy - not chemical.)

For context, other henna brands require mixing different things together at different times, letting them sit for a while before adding something else and then letting it sit again

Bentonite Clay

VIEW ON AMAZON

Witch Hazel

VIEW ON AMAZON

Activated Charcoal

VIEW ON AMAZON

and adding yet another thing, and... I don't know. I just don't have the time or patience for all that. With Henna Color Lab, you just add water and go.

For all henna brands (complex or not) you do need to let it hang out in your hair longer than the chemical stuff - roughly 90-minutes for henna vs. the 20-minutes for chemical colorants. That said, I henna my hair while I'm answering emails or watching TV, so it's not a big deal.

Deodorant

Since ancient times, salt has been used to preserve foods, because it naturally prevents the growth of bacteria.

For the same reason, salt bars have become a popular, all-natural deodorant for those looking to remove toxins from their lives. Salt does not prevent us from sweating; rather it creates an environment where the malodorous microbes cannot survive.

There are two types of deodorant salt bars. One I have used and feel confident recommending (i.e. the Himalayan salt stones); the other is used by MANY in the natural world, but I find it a bit dubious and personally wouldn't use it (i.e. crystal salt stones).

Himalayan salt stones

I dig Himalayan salt stones. They are safe, effective, and non-toxic. The salt is naturally sourced, then sanded and polished into different shapes.

To use a deodorant salt bar, simply wet it, rub it on your hands, then rub your hands onto your armpits to transfer the salt.

You definitely don't want to rub the salt bar directly onto your armpits or other soft-skin areas, especially with freshly shaved skin. Been there, done that, regretted it. Salt is salt and it does scratch and itch!

Applied properly, you can use the salt anywhere on your body that sweats -- feet, back, crotch, wherever.

Also, it's best to apply the salt to freshly washed skin, because it's NOT going to do a great job of neutralizing the bacteria that has already built up. What it WILL do is prevent new bacteria from stinkin' up your pits.

Crystal salt stones

Despite being popular in the world of natural living, I wouldn't use crystal salt stones myself and would not feel comfortable recommending them.

To be fair, they may be perfectly safe. But maybe not. I couldn't find studies either way and I'm not taking my chances.

Folks claim the crystal salt stones are more effective than Himalayan salt and that may be true. But the main ingredient (and sometimes the only ingredient) is either ammonium alum or potassium alum. Both of these natural mineral ingredients are rated well on the Skin Deep Database (here and here), yet you usually don't see either called out directly on the ingredients label.

Instead you'll usually see them listed as "potassium mineral salt" or just "mineral salts", presumably so the brand can steer clear of using the word "alum". I find this lack of transparency unsettling.

Aluminum is the ingredient that most folks already know to avoid in deodorant and I'd be willing to bet that a fair percentage of crystal salt customers would think twice before buying an alum-containing product, if the brand were more forthcoming about what TYPE of salt it really is. Thankfully some brands are forthcoming...

Dear Tom's of Maine, while I don't buy your alum deodorant, I do truly, truly applaud and appreciate your transparency!

Multi-ingredient deodorants

If, for some reason, you can't use salt as a deodorant or you don't find that salt stones work for you, there are still plenty of natural-ingredient deodorants to choose from.

Many aluminum-free brands use activated charcoal and/or baking soda as a key ingredient in their deodorant, since they can safely and sensitively neutralize odor and absorb moisture.

Obviously, you'll want to check out their other ingredients to make sure they don't contain unwanted synthetics. Also, many natural deodorants also use tea tree oil, which can be triggering for some.

BAKING SODA IS ALUMINUM-FREE

Baking soda is, and always has been, aluminum-free. It's baking powder that can contain aluminum.

When buying baking powder, always look for "aluminum-free" on the label. When buying baking soda, you'll sometimes see the words "aluminum-free", but that's only because the makers know how often people confuse baking soda for baking powder.

If your baking soda does NOT say "aluminum-free", it doesn't matter. It doesn't have any aluminum in it.

Charcoal powder

BRAND SPOTLIGHT

100% PURE

Nourishing Skin & Body Care

Healthy, Natural Formulas

The founders of 100% Pure are committed to only using ingredients that originate from nature and that only undergo chemical changes due to biological processes such as fermentation, distillation, and cold processing.

In place of artificial dyes, they color their cosmetics with antioxidant-rich fruit, vegetable, tea, and other plant pigments that are healthy for the skin. And while many skin, hair, and body products use water as their first (major) ingredient, 100% PURE uses organic hydrosols, aloe juice, fermented rice water, and teas.

Beyond using only non-toxic, organic, vegan ingredients, their packaging is post-consumer recycled or recyclable. Any plastic materials they use are free from BPA and phthalates. And their biodegradable packing material is made from corn starch. Thoughtful across the board, their 8 acre headquarter property is even 100% solar powered.

"I have extremely sensitive skin and allergic eyes. This has been the ONLY mascara I can wear."

SHOP MAKEUP

SHOP FACE CARE

SHOP HAIR & BODY

BRAND SPOTLIGHT

AU NATURALE

Non-Toxic, Cruelty-Free Cosmetics

Organic & Handcrafted in the US

Ashley Prange, the founder of au Naturale, is kind of a bad ass. A former Washington DC Nuclear Analyst with sensitive skin, Ashley isn't just providing clean cosmetics via her own brand; she's started an entire **#CleanBeautyRevolution** to drive change across the cosmetics industry.

The problem is that "*too many products are labeled as natural and organic with little or no evidence to back up the claim.*" In response, Ashley and her team of "beauty ambassadors" actively lobby for stricter regulations to protect the health of consumers. And they call for an end to ambiguous labeling, so that we can make healthier and more informed purchasing decisions.

Au Naturale, doesn't just talk the talk; they walk the walk. Before adding an ingredient to a product, it is fully scrutinized to ensure it is "naturally sourced, factually healthy, and ethically sound". Her labeling is transparent. And she stakes her reputation on her promise to never compromise the integrity of her line.

> *"I did a lot of research after I suddenly started to have allergic reactions to other brands. I loved that this company keeps it as simple and clean as possible. I am very pleased and have had no adverse reactions."*

SHOP FACE

SHOP EYES

SHOP LIPS

au NATURALE

BRAND SPOTLIGHT

EARTH MAMA

Effective Herbal Care for Mama & Baby

Nature is the Pharmacy

For more than 20 years, Melinda Olson, the founder of Earth Mama Organics, has been studying the healing powers of medicinal herbs. She infuses this ancient knowledge and earth wisdom into her organic tinctures, teas, soaps, lotions, and salves for a very simple reason: herbal remedies work.

Melinda believes that while our bodies are innately capable of combating everyday toxins, they can become inundated by these toxins and cause the process to fail. She, therefore, carefully and consciously chooses every ingredient to *"allow our bodies to work their innate magic"*.

Earth Mama's products combine traditional plant medicine with the safety and assurances of contemporary evidence-based research. They are geared to nourish the skin and to treat the natural discomforts of pregnancy, postpartum and breastfeeding.

"I started to develop a rash as my stomach was stretching. When my trusty sweet almond oil was not enough to keep my itchies at bay, this belly butter came to the rescue and has been a lifesaver. I LOVE this product!"

SHOP DEODORANTS

SHOP BABY CARE

SHOP PREGNANCY CARE

BRAND SPOTLIGHT

ORA´S AMAZING HERBAL

Healthy Herbal Face & Body Care

Organic Healing Herbs & Botanical Oils

Ora is a holistic lifestyle mom, who leveraged her B.S. in biology and M.S. in nutrition to create this beautiful line of salves, butters, and serums.

Her products are carefully handcrafted using certified organic herbs and plant-based oils that nourish, protect, and heal the skin. They are free from synthetic ingredients, preservatives, and additives. They are also gluten free.

Using grapeseed oil as the basis, Ora infuses healing herbs, such as calendula, comfrey root, St John's Wart, thyme, licorice, burdock, chickweed, and/or plantain into most of her products. (Check her ingredients page to learn the benefits.)

Good to know: Ora offers several fragrance-free products that are free from essential oils. They are also free from synthetic fragrances, obviously. :)

"My 2 yr old grandbaby had a rash/chaffing on her face & a stuffy nose/ cough. Applying a lil on her face & around her nose a couple times a day has done wonders in 36hrs!"

SHOP BODY CARE

SHOP LIP CARE

SHOP BABY CARE

ORA'S AMAZING HERBAL

BRAND SPOTLIGHT

SO WELL MADE

Pure Himalayan Salt Products

Handmade & Fair Trade

So Well Made's Himalayan sea salt is harvested from ancient, mineral-rich, pollution-free sea beds. This pure, high quality salt is at the heart of every product they offer.

They harness the unique health benefits of Himalayan salt to create a line of beautiful, small-batch, energetically-enhanced products from salt pipe inhalers and richly hued lamps to organic bath and body care, healthy gourmet items, and holistic lifestyle essentials.

They also work with skilled artisans, who hand-sculpt each salt crystal lamp to be as stunning and unique as the salt's rich color and striations.

An added bonus, their fair trade products are packaged in either recyclable or reusable materials.

"A stunningly beautiful salt lamp. Unique design. Absolutely LOVE it!"

SHOP SALT LAMPS

SHOP DEODORANT

SHOP BATH SALTS

SoWell

IN THIS CHAPTER

FEMININE HYGIENE

TOXINS IN FEMININE HYGIENE PRODUCTS

NATURAL PADS & TAMPONS

MENSTRUAL CUPS

REUSABLE CLOTH PADS

SEA SPONGE TAMPONS (NOT RECOMMENDED)

BRAND SPOTLIGHT: CORA

FEMININE HYGIENE

I stopped using tampons ages ago, when toxic shock syndrome (TSS) became a hot topic. Even after learning that TSS is actually pretty rare, I just never went back.

At first, I'd switched to regular menstrual pads from the supermarket. It was only later, once I started eating organic foods and started to overhaul the cleaning products under my kitchen sink and the body care products in my bathroom, that I ditched the commercial stuff and made the move to **organic cotton pads**.

I never did the research on what was actually in conventional feminine hygiene products at the time. I just kind of made the switch along with everything else. But I recently **did** do the research (for this book) and I have to say, the amount of toxins in pads and tampons is more concerning than I'd realized.

I also took the time to read the websites for the more 'conventional' brands -- the brands I used in my teens and twenties. Not all of them list their ingredients (red flag!) and those that do, say there is no proof that organic cotton is better or that the synthetic materials and chemicals used to manufacture their products are dangerous.

Frankly, even if they did studies to show the pesticides in cotton and the manufacturing chemicals were completely fine, there's no flippin' way I'd lay that crap against my sensitive bits. The skin in and around the vagina is incredibly thin with tons of small blood vessels, which, in my book, makes it no place for chemicals of any kind. Period. (Pun intended.)

TOXINS IN SANITARY PRODUCTS

Conventional pads and tampons (plus the applicator) are often made from polyester, nylon, polyethylene (PET), polypropylene, and/or propylene glycol (PEG).

They can also contain additional chemicals that increase the product's absorbency, neutralize odors, and add artificial fragrances for that "fresh scent". (Honestly. For all the products out there that contain "fragrance", could any be more pointless than a pad or tampon?)

Anyhoo, when these companies do use "100% cotton" (as marketed on the front-side label), it is typically not organic cotton. This is a problem, as non-organic cotton is often genetically modified and heavily sprayed/ contaminated with glyphosate, which is a widely used herbicide.

Conventional cotton, as well as any synthetic fibers from the rayon and polyester, is often bleached and, depending on their bleaching process, could leave behind dioxins. Dioxins. In your vagina. Agh.

(Dioxins are not an ingredient, so you won't see them on any label. They are a byproduct of the bleaching process and a known carcinogen.)

Dioxins can be found in bleached diapers too, by the way. Just letting you know, in case

you're a parent.

Non-toxic hygiene for your lady parts

Luckily, as awareness grows for the dangers of toxins in our hygiene products (not to mention our lives, in general) the number of thoughtful companies stepping up to do it better also grows.

These thoughtful brands are using organic cotton and other natural, non-toxic materials as a healthier alternative. They have also eliminated toxic chemicals from the manufacturing process.

Let's review the options.

NATURAL PADS AND TAMPONS

The more thoughtful brands in disposables offer pads and tampons made from certified organic cotton. Their products are also free from chlorine bleach, dyes, plasticizers, chemical absorbents, fragrances, and other synthetics.

While some do offer tampon applicators made with BPA-free plastic, many offer entirely applicator-free options as well.

You can buy "as needed", though several newer brands also offer a subscription box, which can make life a bit easier.

Consider a monthly subscription if...

You meant to restock your supply of pads and tampons last month, but you forgot. Whoops! Has it been 28-days already? Life's busy, it happens. But if it happens a lot, consider a subscription.

What's great about a subscription box is that you can customize what goes into it, set how often you'd like it to arrive, then forget about it.

MENSTRUAL CUPS

A menstrual cup is a reusable cup that sits inside the vagina and collects the menstrual flow. Devotees say that while there is a (very) slight learning curve to using a menstrual cup, once you get the hang of it, you'll never go back.

Menstrual cups are considered leak proof (swimsuit and white dress friendly) and you can use it up to 12 consecutive hours.

They are also highly economical. You might spend a little more at first, but you can use the same cup for a year; some brands say even more. How many tampons or pads do you use each day and how long does your period tend to last? You can easily calculate the savings.

Because they are reusable, period cups also eliminate the need to fit pads or tampons into a small purse, which is great for nights out. Plus they don't involve any waste. Just rinse it out with a natural water-based (oil-free) soap or a white vinegar solution, if you're at home, and reinsert.

And since silicone can withstand extremely high temperatures, you can always boil it to disinfect, if needed. Just be sure your period cup is made from medical-grade silicone ***that has been independently tested*** to ensure it does not contain unwanted additives.

REUSABLE CLOTH PADS

Switching to a reusable cloth menstrual pad may seem a little daunting at first. But it's actually quite easy and is a great way to avoid exposure to plastics and adhesives. Here's how they work.

The pads are designed to be highly absorbent and have inserts to account for flow - use more inserts for heavier days and fewer for lighter days. You can also use the shorter pad during the day and the longer pad at night for extra coverage, just as you would with disposables.

Once you've placed the inserts into the holder, your pad is ready to go. Place it in your undies and wrap the wings around the crotch, just like a disposable, except instead of using adhesives to hold it in place, you'll use snaps. Easy peezy.

If you would normally change your disposable pad every 4 to 6 hours, you'll do the same with the reusable. When you're out and about, you can just fold up the pad and toss it into a waterproof bag. If you're at home, you can toss them into a soaking pot.

To clean your pads, pre-rinse them with natural soap, using cold water to prevent stains. Then hand wash or machine wash with a natural detergent.

Skip the bleach and fabric softener. Instead, add a few drops of white vinegar to the water, if you hand-rinse. Or if you're machine washing them, add the white vinegar to the softener tray, so it will release during the rinse cycle. Air-drying is recommended to avoid shrinkage.

Like many safer alternatives, reusable pads can seem pricey at first. But the pads can often lasts five years or longer and can save anywhere from a few hundred to a few thousand dollars over time.

SEA SPONGE TAMPONS

Yes, sea sponge tampons. I know, I'd never heard of them either until I was doing research for this chapter.

At first, I thought I was in love with them because, of all the options I've written about here, these are the only 100% natural period solution.

Unfortunately, the more I dug in, the more I was reminded that all-natural does not always mean safe.

What are sea sponges?

Technically, a sea sponge is a multi-cell animal that looks like (and is often mistaken for) coral. But sea sponges do not have a brain, a digestive tract, or even a circulatory system. So practically speaking, it exists as a plant and is generally considered a natural, even vegan-friendly resource.

Sea sponges are also a renewable resource, when harvested properly. This seems easy enough, as all the diver needs to do is leave behind a small piece of the sponge to allow it to regrow.

Sea sponge as a tampon?

I've never used a period sponge, but from

what others say, they are as comfortable and easy to use as a regular tampon and are completely non-irritating... so long as you wash it well before the first use. That's because they come from the sea and may still have sand on them.

That's actually what I love about the idea of using a sea sponge as a tampon. Just wash off the sand! I mean, you can't get more natural than that, right?

Sea sponges are naturally absorbent (of course) and reusable. I found some sites that also claim their natural enzymes discourage odors and bacteria growth. I'd believe that. Plus, instead of toxic additives, sea sponges contain beneficial sea minerals.

During my research, I found plenty of healthy lifestyle sites touting the awesomeness of sea sponge tampons, so I was pretty excited. They sounded amazing and I couldn't believe I had only just heard of them! But then I found one study reported by the FDA that completely killed my buzz.

In 1980 the University of Iowa Laboratory studied 12 sponges and found "*particles of sand, grit, bacteria, yeast, and mold. One sample was confirmed to contain Staphylococcus aureus*".

The sand and grit don't bother me - just wash it well. But bacteria, yeast, and mold in my vagina? Nope. And if that's not enough, staphylococcus aureus is the bacteria that causes toxic shock syndrome.

Needless to say, while I felt the need to include sea sponges here, in order to cover my bases, I (unfortunately) do not feel comfortable recommending them as a healthy period care alternative.

Hesta Reusable Pads

VIEW ON AMAZON

Lena Menstrual Cups

VIEW ON AMAZON

BRAND SPOTLIGHT

CORA

Toxin-Free Period Care

Monthly Subscription & Individually Sold

Cora's pads and tampons are about as clean as you can get. Made from GOTS Certified organic cotton, they are also manufactured without chlorine, artificial dyes, fragrances, deodorants, toxic adhesives, acetone, polyester, rayon, and other unsavory ingredients or synthetic materials found in conventional period products.

In addition to healthier menstrual care, Cora is also heavily focused on empowering women. In developing countries, a period can keep girls from getting a proper education, because they cannot afford period supplies. And in the US, menstrual products are not covered by food stamps. Cora partners with non-profits around the world to donate pads to women and girls in need, so they have a better chance for success.

The Cora team has designed modern, highly absorbent pads that are "mindblowingly thin". They also offer tampons both with or without an applicator.

Give Cora a trial run and, if you like their products, you can have a refill kit conveniently delivered to you each month.

SHOP TAMPONS

SHOP PADS

"...The cotton is also soft and non-abrasive. I'm super sensitive to chemicals and these fit my need for a natural option without any drawbacks."

CORA

IN THIS CHAPTER

CHEMICAL-FREE SEX

(Yep, we're talking about it!)

CHEMICAL -FREE SEX

When we talk about safe sex, we are usually talking about measures to prevent sexually transmitted infections (STIs) and unwanted pregnancy.

But when you're chemically sensitive, and I'd argue, even if you're NOT chemically sensitive, this conversation also includes the toxins and unwanted additives in sex products, such as condoms, personal lubricants, and sex toys.

Let's dig in.

CONDOMS

When I first glanced at the ingredients and fillers in condoms and personal lubricants, I was shocked. Not that it's acceptable to have chemicals in the products that I put on the outside of my body, but on the inside? Jeez!

The skin in and around the vagina, penis, and anus is delicate, sensitive, and vulnerable to toxins and irritants. Slathering this skin with toxins is not sexy.

So, how can we simultaneously prevent unplanned pregnancies, protect against STIs, **and** avoid toxins on our extra-sensitive parts, without giving up sex altogether?

First, here's what you can**not** do...

Unsurprisingly, many chemically sensitive women find their bodies don't handle birth control pills well. Their hormones feel out of whack, they experience yeast infections (candida overgrowth), and their immune systems weaken.

Hormonal and copper IUDs are known to cause allergic reactions, so those are a no-go for many chemically sensitive women as well. Plus, if you don't have a dedicated partner, neither the IUD nor the pill can protect against STIs. So, we're back to condoms.

Condom ingredients to avoid

Here's a quick list of ingredients commonly found in conventional condom brands that the healthier and more thoughtful brands would never use...

Casein

Casein is a milk-derived protein and a common allergen. Also, you know that sour smell that so many condoms have? That's the casein. I'm not sure if you can technically say that it puts sour milk on your genitals, but still... gross.

Glycerin

Glycerin is a preservative found in condom lubricants. The glycerin converts to sugar, as our body assimilates it. Sugar feeds candida, making our vaginas significantly more susceptible to yeast infections. No thank you.

Parabens

Parabens are a family of preservatives commonly used in personal care products, including lubricants. Parabens are known to cause allergic reactions and disrupt hormone production.

Nitrosamines

Known carcinogens.

Benzocaine

This numbing agent is commonly used in gels and creams to prolong an erection. Apologies if this makes you blush, but... a penis ring made from medical grade silicone (that has been independently tested to not contain unwanted additives) would be a non-toxic alternative.

Petrochemicals

'nuff said.

Nonoxynol-9

Nonoxynol-9 kills sperm and STI-related pathogens, but is also a major skin irritant. It can also break down vaginal and anal tissues, increasing susceptibility to urinary tract infections (UTIs) and, ironically, STIs.

Talc

Talc is a dry lubricant found on the surface of condoms. Research indicates that talc in the reproductive tract can lead to ovarian cancer, fallopian tube fibrosis, and infertility.

Artificial flavors and GMO sugar

Artificial flavors and GMO sugar are commonly found in oral sex lubricants and flavored condoms.

Cleaner condom ingredients

These are the ingredients you WILL find on the label of the more thoughtful brands.

Natural rubber latex

Natural latex rubber comes from the rubber tree, *hevea brasiliensis*, and is a healthier condom material for most. There seems to be a fair share of chemically sensitive folks who are also highly sensitive to latex. However, I've read plenty of comments by others who are completely fine with it. Everyone's sensitivities are different and like many substances, it just depends on what you can tolerate.

A NOTE ON LATEX ALLERGIES

Research indicates that less than 1% of the general US population is allergic to latex. Condom makers, such as Sir Richard's and Glyde that use non-toxic ingredients, have found (***anecdotally***) that many who believed they were allergic to latex condoms, realized they had likely been reacting to the fillers and chemicals used by other condom manufacturers, and not to the latex itself. Good to know!

That said, legitimate latex allergies can be quite serious. I don't know how these folks figured out the cleaner latex condoms were safe for them, but I'm guessing it wasn't by sliding one on, grabbing a partner, and seeing how their body reacted. If you believe you are allergic to latex, do be careful!

That said, the synthetic alternatives to latex condoms **likely** contain other unwanted ingredients. I say "likely" because I checked a few websites for these non-latex alternatives and couldn't find their ingredients anywhere. As you know by now, I'm a fan of transparency and don't trust brands who aren't forthcoming about what they put into their products.

Natural lambskin and sheepskin condoms are another latex alternative, however they do not prevent STIs. As such, these are best used with a steady partner. Just keep in mind that lamb and sheepskin condoms do tend to break more often and experience a shorter shelf life than latex or synthetic alternatives.

Medical-grade silicone

Used as a lubricant, this silicone is considered safe when it has been independently tested to be free from unwanted additives.

Fruit extracts

Natural and organic fruit extracts replace the synthetic flavors found in many oral sex lubricants and flavored condoms. And I'd be willing to bet they taste better, if that's your jam.

(Fruit extracts → if that's your jam. Get it? 😄*)*

Magnesium or calcium carbonate

This mineral ingredient helps to increase the tensile strength of the latex and keeps the condoms from sticking together.

Zinc Oxide

This mineral ingredient protects the latex rubber from fungus and UV light.

PERSONAL LUBRICANTS

If you're a fan of personal lubricants for sex, you know first-hand the sensation-enhancing difference they make. If you haven't tried them, let me tell you... whether you're with a partner, with a toy, or on your own, lubes can add some serious yessss!! to your sexual experience. (Just sayin'.)

However new or experienced you may be, it's important to understand the different types of lubrication, so you can fully enjoy the benefits without accidentally compromising the protective barrier of your condom, melting your sex toy, or ending up with a vaginal or anal infection.

Yep! As amazing as lubes are, they can do all these things, if you use the wrong type for the situation.

Plus, you'll obviously want to skip the harmful ingredients found in most conventional lubes.

Here's what you need to know.

Conventional lubricants

Many of the popularly branded lubricants are made with petrochemicals that can burn your genital and anal tissues and, for women, kill the beneficial bacteria in your vagina. Each of these situations can leave you more susceptible to STIs and other diseases. Fun, right?

They also contain glucose that converts to sugar as your body assimilates it. This sugar feeds candida, which makes your body more vulnerable to yeast infections.

And they contain parabens, phthalates, and other nasty ingredients known or suspected to cause cancer or disrupt the body's natural hormone production.

So, that's the bad news.

The good news is that there are highly effective personal lubricants that are completely

natural, and you may already have some of them in your kitchen pantry or bathroom cabinet.

While these options are completely safe for your body, (as mentioned) they aren't always safe for your condoms or sex toys.

Let's chat about natural oils, water-based lubes, and silicone, as well as when to use, or not use, each.

Natural, oil-based lubricants

Pure plant oils and butters, especially when organic and unrefined, provide the cleanest and most natural form of lubrication around.

Melt some cocoa butter, shea butter, or coconut oil in your hand for a few seconds, then apply. Or drizzle on a few drops of olive oil, almond oil, jojoba oil, avocado oil, or grapeseed oil.

When it comes to natural lubricants, you aren't short on options. They're healthy, nourishing, and last much longer than water-based lubes. They're also great for use in the shower and safe to use with most sex toys.

That said, one very important thing you need to know is that **oils can break down natural latex, degrading the efficacy of a condom and making it easier for it to tear during intercourse**. This is especially true for mineral oil (petroleum jelly, baby oil) and mineral oil-based lotions, which have been shown to degrade a condom by as much as 90% in as little as sixty seconds. Yikes!

Oils can break down natural latex, degrading the efficacy of the condom and making it easier to tear during intercourse.

But don't fret! Natural oils and butters are only an issue for condoms. They are still a fantastic option for solo play, manual stimulation, and sex with a dedicated partner, where STI prevention (hopefully) isn't a concern.

Water-based lubricants

When you are using a condom, you'll want to use a naturally formulated water-based lubricant. You'll often find aloe vera as the main ingredient. Here's why.

Aloe vera (on its own) is sold as a juice or a gel. It is not an oil and will not degrade a condom. Aloe vera is commonly found in natural lubricants, because it emulates (to a fair degree) the natural lubrication of a woman's vagina.

You probably wouldn't use aloe vera gel on its own, because it's pretty sticky. Plus, the gel sold in most stores contains alcohol and other unsavory ingredients that are not good for your va-jay-jay.

Safer ingredients you'll find alongside aloe in water-based lubes include:

- **Citric acid, ascorbic acid (vitamin C), potassium sorbate, and/or sodium benzoate**: These preservatives help to protect the product against bacteria and give the lube a longer shelf life.
- **Xanthan gum and/or agar agar**: These are natural thickeners from plants and seaweed, respectively, and help to give the lubricant an even smoother texture.

While water-based lubricants can be used with condoms and sex toys, their downside is that they typically don't last very long and need to be reapplied, which can sometimes mess with your mojo.

Silicone-based lubricants

Silicone-based lubes are longer lasting and even more slippery than oil-based lubes, making them especially popular for anal sex.

Silicone-based lubes don't break down the latex in condoms, which is great. However, they do break down silicone toys. If you use silicone-based lubes with silicone sex toys, the toys will become sticky and less fun to use.

During my research, there were five ingredients that I kept seeing on the labels for (safer) silicone-based lubes. I checked them against the EWG Skin Deep Database and while they aren't terrible, I wasn't 100% happy with what I found.

Two of these ingredients, dimethiconol and cyclomethicone, were rated as completely non-toxic. Great.

But the other three common ingredients: cyclopentasiloxane, dimethicone, and cyclotetrasiloxane, were essentially scored the equivalent of a "C".

First, when I'm looking at the label, I don't want to see an unrecognizable ingredient, no matter what the Skin Deep Database says. If I can't eat it or pronounce it, I'm wary about putting it **on** my body, let alone **in** it.

Also, dimethiconol vs. dimethicone and cyclomethicone vs. the other two? I can barely tell them apart and could easily mistake one for the other while shopping.

These ingredients may be perfectly fine for the chemically sensitive. Or not. Every body reacts differently, so it's just something to keep in mind.

OIL-BASED LUBE: Use with silicone sex toys, but not with condoms.

WATER-BASED LUBE: Use with sex toys and condoms. May need to reapply often.

SILICONE-BASED LUBE: Use with condoms, but not silicone sex toys.

Organic Oil Based Lube

VIEW ON AMAZON

Organic Grapeseed Oil

VIEW ON AMAZON

Organic Sweet Almond Oil

VIEW ON AMAZON

SEX TOYS

It's crazy how many sex toys are made from harmful, chemical-filled materials. Well, maybe it's not that crazy, given how much of everything we bring into our lives is made from, filled with, or coated with toxins. But still, yuck.

Like everything else, there are materials to avoid and healthier alternatives you can choose instead. Most materials on the "avoid" list are found in cheap "novelty" sex toys, though it's a good idea to always check the package regardless of price. Just because a toy is more expensive, doesn't mean the brand has thoughtfully manufactured it products.

What to avoid in sex toys

Materials commonly found in sex toys that you can and should avoid include: jelly rubber, *synthetic* latex rubber, polyvinyl chloride (shortened as PVC or vinyl), low-grade silicone (which usually contains chemical additives), cadmium (heavy metal), phthalates (endocrine disruptors), and some less recognizable names such as trimethyltin chloride (highly toxic), toluene (the toxic smell associated with gasoline and paint thinner), carbon disulphide (industrial solvent), and more.

A quick note on Lucite

Lucite is widely considered a safe, non-leaching material for sex toys. And it's likely that it is. However, I'm including it in this "avoid" section, because Lucite is a hard, durable plastic and I'm just not a fan of plastic. So, this is 100% my personal bias.

Lucite is often mistaken for glass, but Lucite is not glass. It is polymethyl methacrylate. Common / recognized names for Lucite include acrylic, acrylic glass, and Plexiglas.

The non-plastic (and yes, more expensive) alternative to Lucite is borosilicate glass, which we'll discuss below.

Healthier sex toy materials

Yes, you can expect to spend more for the safer and higher quality toys. But you can also expect them to last longer, so ultimately you should come out ahead.

Obviously, a body-safe sex toy is made from materials that don't leach toxins. However there is one other VERY important characteristic to consider: it should also be non-porous.

Sex toys that are porous have tiny spaces within the material that can harbor bacteria.

PHTHALATE-FREE

Parabens and phthalates are less common in sex toys than they have been in the past. However, they are still used and need to be avoided.

Something to note is that, it is common for sex toy packages to read "phthalate-free" yet still contain other hazardous materials.

Be sure to read the label or the brand's website to ensure the materials and ingredients are safe. If the brand is not completely transparent about what goes into their toys, consider shopping elsewhere.

These minuscule holes make the toy more difficult to sterilize and provide an environment that makes it easy for bacteria to live, grow, and multiply.

By contrast, sex toys that are non-porous have a completely smooth surface, making them water-resistant, easy to clean, quick to dry, and less habitable for bacteria.

Still, non-porous toys need to be cleaned properly to wash away any bacteria that have come into contact with it during use. And if the toy is insertable and/or will be used by multiple partners, it is always a good idea to use a condom for added hygiene.

Sex toy materials that are non-porous and hypoallergenic include high quality medical-grade silicone (independently tested for additives), as well as borosilicate glass and stainless steel.

100% pure medical-grade silicone

Silicone is used to make sex toys softer, more flexible and more realistic.

Pure medical-grade silicone (tested to be free from impurities) is more expensive than food-grade silicone. However, it is worth the premium, because this is the only type of silicone that is deemed safe to use inside the human body.

Be careful not to fall for "fake silicone". Thermoplastics (TPR and TPE), phthalate-leaching vinyl (PVC), and jelly "silicone" are often just referred to as "silicone" on the label.

If the toy is cheap and the label does not specifically say it is "medical-grade silicone", you can assume it is one of these chemical alternatives masquerading as the real thing.

Borosilicate glass

Made primarily from boron trioxide and silica (the main component of sand, not to be confused with silicone), borosilicate glass is highly durable and resistant to changes in extreme temperature. This means you can easily sterilize it in boiling water without worrying it will crack.

Borosilicate glass is hypoallergenic and lead-free. It is also safe to use with any type of lubricant and is often quite beautiful in design.

Stainless steel

While stainless steel is considered hypoallergenic, those with acute nickel sensitivities may disagree. As discussed in the cookware section, nickel is what gives stainless steel its shiny gloss. So if the sex toy has a matte finish, it likely does not contain much (if any) nickel.

To be sure, look at the numbers that describe the type of steel used, such as "18/8 stainless steel" or "18/0 stainless steel". These numbers indicate the percentage of chromium and nickel, respectively. So 18/8 has 18% chromium and 8% nickel, while 18/0 is nickel-free. Well, almost nickel-free, as there may be some trace amount.

While pots and pans may be scratched by metal utensils or harsh scrubs (potentially causing them to leach some nickel), it is less common to scratch a sex toy.

That said, those with acute nickel sensitivities may prefer another material to avoid the risk.

BRAND SPOTLIGHT

GLYDE

Safe Sex Also Means Toxin-Free Sex

Natural Latex Condoms

While many brands rely on cheap ingredients and synthetic fillers, Glyde's condoms are completely free from risky petrochemicals, parabens, casein, glycerin, talc, spermicides, and other toxins.

They use only sustainably harvested natural latex rubber and have eliminated the unpleasant latex odor that is commonly experienced with conventional brands.

On the 'give-back' front, Glyde has also donated millions of condoms globally and has been instrumental in advancing HIV/AIDS and STI prevention through various partnerships with public health agencies and non-profits around the world.

I've pored through several pages of reviews on their website and found several from allergic and chemically sensitive folks, who happily report they can use Glyde condoms without issue.

SHOP CONDOMS

crueltyfree and vegan

Certified B Corporation

"After a severe allergic reaction to condoms, I started looking for a natural, non toxic alternative. I am extremely happy with Glyde! Absolutely no allergic reaction so far and my partner likes them too. :)"

IN THIS CHAPTER

ESSENTIAL OILS

ESSENTIAL OILS

I've seen countless discussions across MCS Facebook groups, where about half the folks scream at the mere mention of essential oils, while other half absolutely swears by them to help alleviate their symptoms and triggers. It's kind of a toss up. And a really big one at that.

I mean, I've seen plenty, plenty, plenty of conversations where some can tolerate something that others cannot. But when it comes to essential oils (EOs), the divide just seems exceptionally wide.

I couldn't quite wrap my head around why, so I did some research to see if I could make sense of it.

What I ultimately found (and will outline in this chapter) is that there are a few factors that can affect the quality and purity of the final essential oil product, as well as usage guidelines that can affect how our bodies react - whether positively or negatively - to even the purest EO.

With that in mind, I couldn't help but wonder if some of the folks who cannot tolerate EOs, might have been fine with, and dare I say *helped by*, certain oils that have been more carefully crafted by truly thoughtful brands, who put in the work and spend the extra money to ensure the safety and quality of their products.

If you're already sensitized to certain EOs, it may be too late, as your body has already registered them as an enemy and will be unlikely to dole out pardons.

You could test the oils to find out but, ultimately, each individual is responsible for their own health, so if testing even the healthiest of EOs on your skin is too risky, don't do it.

All I'd like to do here is offer up some of the information I found, and you can make that decision for yourself.

Let's get to it.

WHAT ARE ESSENTIAL OILS?

Natural essential oils are specifically the aromatic compounds that are extracted from a plant's leaves, flowers, roots, stems, seeds, bark, or fruit. These natural chemicals help the plant to protect itself against pests, disease, and other environmental dangers. And they can do the same for us.

Research has shown that essential oils can help the body to heal by killing bacteria around us, fighting infections inside us, calming our nervous system, reducing inflammation, and more.

We most commonly reap the benefits of essential oils (or react adversely to them, as the case my be) by inhaling them and absorbing them through our skin. We can also ingest essential oils by dropping them under our tongue or into some water, tea, or other drink.

MORE IS NOT BETTER... AND CAN BE DANGEROUS!

It can take thousands of plants to produce a single bottle of essential oil. So to characterize EOs as "highly concentrated" is a pretty big understatement.

The most powerful essence of thousands of plants in a single bottle isn't something to mess around with. Essential oils do come with risks, even for those who are not chemically sensitive. It is worth noting, however, that those risks are often associated with not using the oils properly.

For example, many of us (and you can put me in the 'guilty' box) have a tendency to think that more is better. If one drop is good, then 3 drops will be three times better, right? Wrong.

Because of their extreme potency, essential oils can be harmful for those who, like me, have a tendency to go overboard. In this way, EOs are not unlike medicinal herbs.

Essential oils are powerful compounds. A single bottle can contain the essence of thousands of plants. Don't take EOs for granted. Use only as directed.

A quick story for context...

A few months ago, I was proudly telling my very wise, and sometimes wise-ass, acupuncturist about all the herbs I was taking for a liver cleanse - a little of this, a bit of that, more of this but in liquid form, and more of that for good measure.

During his subsequent lecture (his good natured, caring, and mostly tactful lecture) about how I was doing myself more harm than good, he said something that really landed: *"you can't cook a cake faster, by cranking up the heat in the oven."*

Having actually done this, I know that rather than ending up with a moist, evenly baked torte, my need for "more and faster" burns the outside, while leaving the inside goopy.

Tying this back to EOs, I learned from my research that people who could once tolerate EOs became sensitive to them simply by overdoing it.

This over-exposure came in two forms:

1. Not diluting a strong essential oil in a carrier, despite the label clearly saying to do so
2. And using much more of the oil than the brand recommended (diluted or not)

Either way, it seems the body took in too much at once and the overload led to an increased sensitivity to that oil, as well as other oils with a similar chemical makeup.

All that to say, do use as directed. If the brand's label or website says that you should add 3 to 5 drops to your body lotion or carrier oil, don't add six.

QUALITY AND PURITY

Beyond overdoing it, there are factors that affect the quality and purity of the essential oils that we buy directly, or that end up as an ingredient in other products we use. These factors can bring unwanted characteristics into our products and may be the real culprit of a sensitivity reaction.

Here's the quick list, but we'll go into each

so you know what to look for on the brand's website, if/when deciding to buy:

- Quality of the plant
- Additives/adulteration
- Extraction method
- Salicylates
- Age/spoiling
- Irritants/dilution

1. Quality of the plant

As with food, it is ideal for the chemically sensitive to avoid essential oils in body and aromatherapy products that have been grown with biocides (i.e. pesticides, herbicides, fungicides) or with chemical fertilizers. The plant from which the oil has been derived should also be non-GMO.

Ideally the essential oil, whether sold alone or as an ingredient within another product, would be wildcrafted (i.e. gathered from nature vs. farmed) or it would be certified organic (i.e. farmed sustainably and free from biocides).

That said, the organic certification is expensive and there are plenty of ethical farmers who cultivate their plants according to organic standards, but do not apply for the certification. As a result, sometimes you'll just see "ethically farmed" on the product label.

While the term "ethical" is typically a good indication of thoughtfulness, it is not regulated by the FCC for advertising and you have to be careful of unscrupulous brands.

As such, it's always a good idea to check the brand's website to learn how they source their oils or cultivate their plants and decide for yourself whether you agree with their use of the term "ethically farmed". Transparency is key, so if you can't easily find this information, consider shopping another brand.

2. Additives / Adulteration

The term "100% pure" is also not regulated, so theoretically, brands could add fillers, fragrance enhancers, or other contaminants to their EOs, yet still claim "100% pure" on the label. These contaminants could trigger a reaction for the chemically sensitive.

Truth is, the regulation of essential oils is lacking overall, so if you only read a brand's claims - and not its ingredients - you could end up buying a synthetic fragrance that masquerades as an essential oil.

As a first step to ensure an unadulterated oil, look beyond the "100% pure" claim on the front of the label to check the ingredients on the back. There should be only one ingredient listed: the oil itself.

In addition, they may also say "no added fillers, additives, or synthetic ingredients" on the label and/or the website. This is important, because even though the "100% pure" claim can be thrown around loosely, such specific wording about a product's ingredients **is** subject to FCC scrutiny.

I would, therefore, be more inclined to believe a brand that backs a purity claim by specifying that they don't use additives.

The other thing I look for is independent testing for purity, which we'll get to in a moment.

First, keep in mind that some oils are intentionally diluted with a carrier oil. This is a good thing. Many essential oils, beneficial as they may be, can also be skin irritants when

used directly and should always be diluted prior to use.

Sometimes the brand already does this and sometimes they offer only the essential oil and add the precaution: "*dilute with a carrier oil*". Regardless, a carrier oil is generally considered a good thing and **not** an unwanted additive.

Similarly, some essential oils are sold as blends and not intended to be "100% pure". Each oil **within the blend** should be unadulterated (truly 100% pure), but you may not see the blend itself advertised as "100% pure".

In terms of buying products that **contain** essential oils as an ingredient, make sure you see the oil listed directly. In other words, the front of the label may say "lavender scent" alongside an image that can make you think it's a natural EO. But then the ingredients label may say "fragrance", "natural fragrance" or "perfume" and never list an actual EO.

Don't be fooled. If it doesn't explicitly say "essential oil of lavender" (often accompanied by its Latin name to call out the specific variety of lavender), then be wary.

"Fragrance", when listed as an ingredient, often contains hundreds, even thousands, of synthetic components that are not required to be disclosed and is a huge trigger for the chemically sensitive.

Testing the purity of essential oils

Another way for brands to showcase the purity of their product is to have their oils tested by an independent 3rd party. Some will go as far as to post the detailed reports to their website, though it's not common.

Plant Therapy, for example, not only shares their test results; they also make them exceptionally easy to find, as they attach the appropriate report to **each** product page on their website.

The test you'll see most often is called **Gas Chromatography and Mass Spectrometry.** GC/MS lets the testers identify individual components within the oil, so they can gauge its purity. While not a perfect test (misidentification happens), it is generally considered an important measure for quality control. I always check for this test on a brand's website before buying their EO.

3. Extraction method

Most essential oils are extracted from the plant using steam or steam + water distillation. However, some extremely delicate flowers (vanilla and jasmine, for example) cannot withstand the heat and so their oils need to be extracted using solvents such as hexane, petroleum, ethanol, or methanol.

Technically speaking, oils extracted this way are called "absolutes", not "essential oils", as they contain both aromatic and non-aromatic components. (Essential oils are exclusively the aromatic compounds.)

While most of the solvent is removed during processing, up to 5% may remain in the final product. The chemically sensitive, who are generally not sensitive to EOs, still may want to avoid absolutes for this reason.

4. Salicylates

Salicylates are naturally occurring compounds within a plant that protect it from harmful bacteria and insects. While most

people have no issue with salicylates, a small percentage with already compromised immune or digestive systems may develop a sensitivity to them.

For context, aspirin is a type of salicylate known as acetyl**salicylic** acid. If you cannot tolerate aspirin, you also may not be able to tolerate certain EOs.

Many plants, including plant foods, contain salicylates, but there are only a few with exceptionally high amounts. Birch and wintergreen contain the highest amounts of methyl salicylates (greater than 95%). While these oils can be beneficial for those suffering from muscle aches or skin blemishes (very well-diluted, please!!), the chemically sensitive should probably avoid them.

A few other essential oils contain significantly lower concentrations (less than 1 or 2%) of methyl salicylate and should be used with caution or avoided entirely. These include ylang ylang (specifically from Madagascar) and clove that has been extracted from the stem or bud.

5. Age / spoiling

Like my now-squinting eyes and crackling knees, essential oils eventually break down with age. This aging (spoiling) leads to a loss of quality and beneficial properties. In fact, the aging of some EOs can cause an adverse reaction that looks a lot like allergic contact dermatitis. This reaction can also lead to a hypersensitivity, meaning it doesn't take much to trigger a reaction.

The aging process can be accelerated by heat, light, and moisture. So to prolong shelf life, keep your EOs away from direct sunlight and heat sources. You can even refrigerate them to slow the process.

Also, put the cap back on as soon as you're done using them, in order to minimize oxidation. And avoid opening the bottle in a steamy bathroom.

6. Irritants / dilution

As discussed, essential oils are highly concentrated, powerful extracts. So powerful, that many cannot and should not be placed on the skin without first diluting them in a carrier oil.

The label or brand's website will usually tell you the ratio for dilution. Using the oil without diluting it (against recommendation) can trigger a reaction and potentially increase your body's sensitivity to other essential oils going forward.

Any EO can become a sensitizer, so dilution is appropriate for all essential oils, even those that are known to be safe when applied undiluted.

Carrier oils will lessen the intensity of potentially irritating essential oils. Common carriers include: Olive, jojoba, coconut (fractionated or virgin), grape seed, avocado, tamanu, almond, and arnica oils.

To test your skin's sensitivity to EOs, you can dilute 1 drop in at least 2 ounces of carrier oil. Apply it to a very small area of skin, let it soak in, and see how it responds both immediately and over the course of a few hours. If you don't experience a reaction, try less dilution, perhaps 1 drop in 1 ounce of carrier oil. You can then adjust based on how your body

reacts.

It is important to note that you may be able to tolerate an essential oil at first, but experience a strong skin reaction with repeated use over time.

NOTE: If you are chemically sensitive, please check with your doctor first, before trying this test.

ESSENTIAL OIL DIFFUSERS

There are a few ways to diffuse essential oils into the air. Having researched and subsequently used each of the below, I can tell you that the nebulizing diffuser is my everyday favorite. That said, I also love (and regularly use) my ceramic ultrasonic diffuser as well.

Here's how they work.

Heat diffusers

One way to diffuse EOs is by adding a bit of water and a few drops of the oil into a small ceramic bowl. Light a tea candle underneath or turn on the switch, if it's an electronic diffuser. Once warmed, the oil's aroma will release into the air.

The two main upsides of heat diffusers are that they are inexpensive and they can quickly diffuse oils through a small room. One major downside, however, is that it's way too easy to burn the oil. I've done this countless times, either because the wick on my candle was too long (causing the flame to be too big) or by not paying attention and leaving the candle to burn long after the water was gone.

The other downside is that the heat (even when it's just warm and not burnt) can chemically alter the therapeutic properties of essential oils. Obviously, that's not ideal.

Evaporative diffusers

You can also diffuse essential oils by adding a few drops into a glass beacon or vase, along with some carrier oil to help fill the container and spread the oil. Then add a few wooden reeds to draw the essential oils from the glass and into the air.

Evaporative diffusers are beautiful and inexpensive. The downside is that they are not terribly effective or long lasting.

Ultrasonic diffusers

Ultrasonic diffusers release a fine mist of water and essential oils into the air using vibration (i.e. electronic frequencies), instead of heat. Since heat is not used, the therapeutic properties of the oil remains unchanged, which is great.

Another upside is that, because ultrasonic diffusers also mist water into the air, they are helpful in winter and in dry environments, where you would use a humidifier.

The (slight) downside is that the water dilutes the essential oil and, in turn, its therapeutic benefits. That said, you can run the diffuser for as long as you'd like, so I wouldn't exactly rule this a deal breaker.

The other thing to keep in mind is that many ultrasonic diffusers are made from plastic.

Essential oils are corrosive to plastic, so stick to diffusers that hold the oil in ceramic or glass.

Nebulizing diffusers

Nebulizing diffusers use "atomizers" to break essential oil into fine particles. And they use pressurized air to disperse this micro-mist of oils into the environment.

Powerful and effective, nebulizing diffusers use neither heat nor water, and its plastic parts are usually limited to the on/off knobs or other small components that do not come into contact with the oil itself.

Depending on the model, you can either drop some EO directly into the glass tub, or attach the EO bottle directly to the diffuser, letting it do the work for you.

The fine particles of oil remain suspended in the air for hours, so even just 15 to 30 minutes of nebulizing can provide hours of benefit.

AIR PURIFYING ESSENTIAL OILS

If you are chemically sensitive, but fine with EOs, you may be interested in using oils to help keep your indoor air clean.

Essential oils that are known for their antibacterial and air purifying benefits include:

- Lemongrass (Cymbopogon citratus)
- Tea tree (Melaleuca alternifolia)
- Citronella (Cymbopogon winterianus)
- Clove Bud (Eugenia caryophyllata)
- Lemon (Citrus limonum)
- Cinnamon Bark (Cinnamomum zeylanicum)
- Eucalyptus (Eucalyptus radiata)
- Rosemary ct. verbenone (Rosmarinus officinalis)
- Lavender (Lavandula angustifolia)
- Peppermint (Mentha piperita)
- Thyme (Thymus vulgaris L.)

SUMMARY

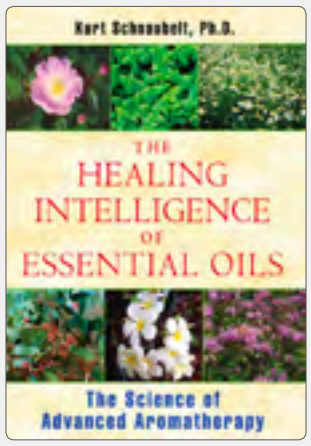
Essential oils have been used for aromatic and therapeutic benefit since ancient times. But not all EOs are created equal - quality matters, as does proper usage.

Always buy essential oils from a reputable brand that is transparent about where and how they source their oils and/or cultivate the plants from which they extract the oils. The plants should ideally be wild harvested, certified organic, or otherwise ethically grown.

Check the ingredients label and/or website to ensure the oils are free from synthetic ingredients. The manufacturing should, likewise, be free from harmful chemicals.

And to ensure quality, check that the oils have been independently tested, usually by GS/MS.

Finally, keep in mind that quality EOs are not cheap. If you find a brand whose price looks too good to be true, it probably is. Compare the product and its claims against like products from other brands to make sure it passes your "sniff test", so to speak.



The Healing Intelligence of Essential Oils: The Science of Advanced Aromatherapy

VIEW ON AMAZON

Essential Oils: Ancient Medicine for a Modern World (Dr. Axe)

VIEW ON AMAZON

Nebulizing EO Diffuser

VIEW ON AMAZON

Ultrasonic EO Diffuser

VIEW ON AMAZON

A NOTE ON AROMATHERAPY / DIFFUSING OILS

Scientific research has shown that certain essential oils are effective at killing bacteria, fungus, and mold. This alone is significant for the chemically sensitive (who can tolerate EOs), as a clean environment is a major concern, and of critical importance in lowering the body's toxic load and preventing adverse reactions.

Studies on the effectiveness of using essential oils specifically as aromatherapy - in other words, therapeutically inhaling these aromatics directly from the bottle or via a diffuser - are limited and results range quite distinctly from "yup, they work" to "nope, they don't".

For the chemically sensitive who cannot tolerate EOs, whether directly or as an ingredient within another product, they can be as much an "inhalation" issue as much as a "contact" issue. For that reason, the idea of using essential oils as aromatherapy is unthinkable for many.

That said, while some are triggered by essential oils, many MCS sufferers swear by them to help reduce symptoms and to increase their capacity to handle chemical interactions when they happen.

Results from the "yup, it works" studies, combined with anecdotal evidence (personal testimonials) from MCS forums, indicate that inhaling essential oils (for those who can tolerate them) may help with some common issues experienced by those live with chemical sensitivities.

In addition to reducing airborne chemicals and malodors, the natural aromatic compounds found in essential oils have been found to:

- Reduce stress, anxiety and depression
- Promote relaxation and restful sleep
- Improve mood
- Boost energy levels
- Clear brain fog and improve mental clarity
- Relieve headaches

BRAND SPOTLIGHT

PLANT THERAPY

100% Pure Essential Oils

A Relentless Commitment to Quality

Plant Therapy is a family-run business and it's clear that the founders truly care.

First, they partner with farmers and distillers that are as dedicated to quality as they are. Despite working with suppliers who have repeatedly proven themselves, they still use GC/MS testing to inspect every batch of essential oil for possible adulterants or accidental contaminants. If the results find anything questionable, they follow with a more sophisticated "chiral analysis" to be safe, so that only the purest essential oils make their way into inventory.

Each bottle is then labeled with a batch code, which is linked directly to the test results. They then link the test results to that oil's product page, so customers can see everything for themselves with just a click. That's some serious transparency!

Plant Therapy offers a full line of pure, single ingredient essential oils (all ethically grown, many certified organic) as well as synergistic blends, roll-ons, carrier oils, essential oil diffusers and more.

SHOP ESSENTIAL OILS

SHOP CARRIER OILS

"The quality of the oils is excellent, prices are amazing and the staff is incredible at answering any questions you may have about using your oils!"

PLANT THERAPY®

IN THIS CHAPTER

EMF PROTECTION

NATURAL VS. MAN-MADE EMF SOURCES

REDUCING EMF EXPOSURE

BRAND SPOTLIGHT: DEFENDER SHIELD

EMF PROTECTION

As if chemical sensitivities weren't enough, some suffering from MCS also tend to be sensitive to the electromagnetic fields (EMF) that are emitted by electronic devices. In fact, the symptoms triggered by EMF -- rashes, headaches, brain fog and fatigue -- can look a bit like MCS.

Sensitive or not, today's high and concentrated levels of electromagnetic field disturbances on our body are considered by many scientists and doctors to be a possible carcinogen and related to higher incidences of degenerative diseases. Of course, many other doctors and scientists dispute the idea and believe EMF sensitivities are bunk.

While the effects of EMF on the body are still in debate, those who take measures to significantly reduce their EMF exposure tend to see a significant reduction in their symptoms. I say, be your own judge.

NATURAL VS. MAN-MADE EMF

It's worth noting that EMF isn't inherently 'bad'. Adventurers have long relied on natural sources of EMF to point their compass north. Birds similarly rely on it to guide their flocks. And natural, low-level EMF is also emitted from the sun's rays, the earth's core, and from natural events such as thunder and lightning storms.

Even the earlier man-made EMF from the advent of radios, TV, refrigerators, and other electronics wasn't too terrible, since our exposure was fairly limited. Yes, these electric sources were still more concentrated than the natural sources, but at least we weren't in physical contact with them all day.

Today is obviously a different story. We are physically engaged with our personal devices all day long. They are on our laps, in our pockets, wrapped around our wrists, and even next to our heads as we sleep. And beyond the EMF flowing from these devices, we are also continually bathing in the wifi and bluetooth signals they rely on.

If only our hybrid electric cars could whisk us away from our smart home to a remote cabin in the woods! (*Hey Siri! Find me a remote cabin in the woods! :*)

REDUCING EMF EXPOSURE

While we can take measures to decrease our EMF exposure, avoidance is barely possible in today's world. The good and somewhat ironic news is that we can use devices to help significantly reduce the EMF from our devices.

Don't worry, these EMF blockers, diverters, and absorbers are not electronic. They typically involve some kind of thin wire or mesh made from silver, copper, or aluminum, that is woven into a polyester or cotton fabric.

Plenty of users claim these fabrics and devices have significantly reduced, and in some cases eliminated, their EMF triggers. And independent testing in certified FCC labs have verified the results. (Take that, nay-sayers!)

On that note, not all brands have their products independently tested for efficacy, so be sure to look for those who have.

EMF-reducing devices

Some of the more popular devices include:

- Laptop mats and mobile phone covers that are designed to block, divert, or absorb a device's EMF
- Blue light eyeglasses and filters that block as much as 99% of the retina-damaging, sleep-disrupting blue light emitted by TV, computer, and mobile device screens
- Signal attenuators ("tamers") that reduce the unnecessarily high output of wifi routers without affecting their speed
- RF meters to test for this type of EMF in your home, as well as mesh RF shields and window films to block it

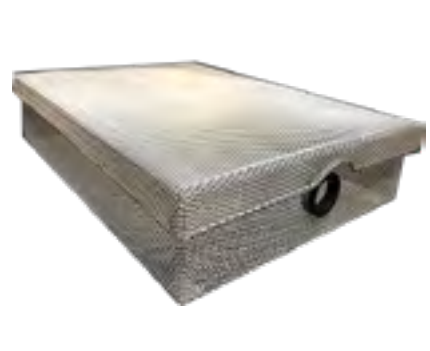
The interesting thing about EMF sensitivity is that "non-sensitive" folks don't think it affects them... until they start to take measures (on behalf of a loved one, for example) to identify and reduce it in their home and car. Hmmm.

RF Detector 200MHz - 8GHz

VIEW ON AMAZON

TriField EMF Meter

VIEW ON AMAZON



WiFi Router Guard

VIEW ON AMAZON

BRAND SPOTLIGHT

DEFENDER SHIELD

Full Body EMF Protection

Block up to 99% of Device Radiation

Electromagnetic fields (EMFs) include Extremely Low Frequency (ELF) and Radio Frequency (RF) radiation.

DefenderShield® has a line of products that provides full-body protection against the heat and EMF (both ELF and RF) that are radiated by cell phones, laptops, and tablets, including the wifi and bluetooth emissions these devices rely on.

Simply put, their technology attenuates and reduces harmful emissions to undetectable levels. Their products are thin, lightweight and portable, so they don't get in the way. And their technology is backed by independent FCC certified laboratory testing.

BLOCK CELL PHONE EMF

BLOCK LAPTOP RADIATION

RADIATION-FREE EARBUDS

EMF Radiation Blocked by DefenderShield®

Cellular	WiFi	Bluetooth	ELF
99%	99%	99%	98%

"I was reacting to my cell phone and this blocks it completely"

DefenderShield

IN THIS CHAPTER

CLEAN DRINKING WATER

CLEAN DRINKING WATER

Local water suppliers in the United States are required to meet strict water quality standards put out by the Environmental Protection Agency (EPA). Yet studies by various health and environmental groups have found that we still have a high volume and broad variety of pollutants in our drinking water.

How is this possible? The reasons are infuriating.

For starters, not all water suppliers comply with the EPA requirements. Perhaps it's cheaper to just pay the fines than to install the necessary equipment? Or perhaps it just takes too much time to fix everything? Your guess is as good as mine.

The EPA also doesn't test for, or regulate, every possible contaminant. With countless new chemicals introduced to manufacturing every year, I imagine this would be a somewhat impossible task.

However, there are known toxins (perchlorates, were an example) that seemingly do not make it onto the EPA's test list until they are pressured to do so by the National Resource Defense Council (NRDC) or other health or environmental group.

In addition, it was found that not all water safety tests are done properly and/or are not reported to the EPA as they should be. Sheesh!

PROTECTING OURSELVES

If we can't rely on our local water suppliers and governments to ensure we have clean drinking water, then we have to take steps to protect ourselves and our families. Thankfully there are several purifying options, covering various types of pollutants.

The hard part is knowing which contaminants you face and then matching them to the right purification system, all at a price you can afford.

To find out what's in your water, you might start with reading the most recent annual report put out by your water company. These reports are typically included with your water bill once per year, or you can find the report on their website.

Personally, I find some aspects of the report difficult to interpret; however it's still worth a read. Here's an example of the Consumer Confidence Report from my district, to give you an idea (see pages 5 through 8). The EPA has a general list of what to test, depending on your circumstance (see the table on page 2 of the above report).

TESTING THE WATER

There are essentially 3 options, when it comes to testing your water. Hire a professional, buy a few DIY kits, or make use of a newer solution that falls somewhere in the middle.

Spoiler alert!!

After comparing, you'll likely come to the same conclusion that I did. That is, the middle solution (professional lab tests, using a DIY kit) probably makes the most sense. Still, let's take a quick look at each.

1. Hiring a Professional

To avoid having to do all the research and testing on your own, you might call an experienced water tester in your area. The EPA offers an easy to use database to find a certified water testing facility near you. Another solution is to simply Google "test my water" to find localized search results for testing facilities.

Either way, an experienced professional that is already familiar with your particular locale should know what questions to ask about your home, in order to determine the type(s) of tests to run. And they should know what typically affects homes in your area (for both public and private water systems), which will further help to inform their (and your) choice of tests.

That said, professional testing can be expensive. And, since the bread and butter for these companies tend to be large industrial customers, the attention they give for individuals with questions can be lacking.

Some companies do offer free testing. However, be aware that these tests are often a vehicle to sell their treatment plans, which means there may be some conflict of interest.

2. DIY water testing kits

If you want to run a preliminary test yourself to see whether professional testing is warranted, or for some quick peace of mind, you'll find tons of affordable kits on Amazon.

There are a few things to be aware of, if you go this route. First, different kits test for different things, so you will likely need to buy more than one kit to cover your bases. Plus, you'll need to know what is commonly found in your area, so you know which tests to choose in the first place.

Finally, the kits are intended to give general results and rarely have the specifics you need in order to remedy the issues you find. For example, the kit may tell you that you have heavy metals in your water, but not tell you which ones. More detailed results would require the more expensive professional testing.

3. Professional lab testing with a DIY kit

This third option sits somewhere in between professional testing and DIY kits. I found a pretty cool company, called Tap Score, that was founded a few years ago by a smarty pants grad student from the University of California, Berkeley.

Tap Score is an affordable service for easy home water testing and analysis. It's more expensive than the individual kits you'd buy on Amazon, but not prohibitively so. And the reporting and recommendations you get from Tap Score are as detailed as what you'd get from a professional tester, but far easier to read and understand.

Here's how it works.

They send you a simple kit with a few vials. You fill the vials with your city tap water or well water, and then pop the vials back in the mail, using the packaging and postage included in the kit. The whole process takes all of 2 minutes.

About 10 days later, they send you an easy-to-read report about your water and local environmental water hazards, along with an objective** recommendation on purification systems to help your specific water issues.

*** I say "objective" because Tap Score does not sell (or partner with) water treatment solutions. They are 100% focused on testing, so there is zero conflict of interest.*

What might you find in your water?

The type of pollutants you find in your water will depend on a number of factors including, but not limited to...

- Whether you live near a manufacturing plant, sewage treatment plant, mining operations, gas and oil production facilities, factory farms, nuclear facilities, or other industrial sites
- Whether you get your water from the city or from a well
- The type and age of the pipes and plumbing fixtures in your home

In addition to the above, storm runoff, leaky septic systems, people flushing unused medications or recreational drugs down the toilet -- this and more can contaminate your water.

While you can often smell and taste contaminants in your drinking water, you can't always tell **which contaminants** they are. Plus many contaminants - lead and arsenic, for example - do not have a detectable smell or taste, so you may not realize they are there.

Common pollutants that make their way into our drinking water, even after being processed by the local water company may include:

- **Lead** - from your home's pipes and plumbing fixtures
- **Arsenic** - naturally occurring from arsenic-rich rocks and soil, volcanic activity, and forest fires; and human activity from manufacturing, mining, improper disposal of paints, etc.
- **Farming aids -** fertilizers (including nitrates), pesticides, herbicides, etc
- **Pharmaceuticals** - antibiotics, antidepressants, anti-anxiety meds, painkillers, hormones
- **Perchlorates** - these are widespread, dangerous, and, until recently, not regulated by the EPA
- **PFAS** (perfluoroalkyl) - chemical compounds used to make non-stick cookware, paper and packing products, firefighting foam, carpets, leather, and water-repellent textiles
- **Pathogens** - viruses, bacteria, and parasites in a water supply that hasn't been properly treated
- **Cleaners** - Ammonia, chlorine, and by-products of the local water chlorination process
- **Fluoride compounds** - added "for our dental health". (We can debate whether or not fluoride is a "contaminant" some other time.)
- **Radioactive materials** - from oil and gas production and/or naturally occurring

PURIFYING YOUR WATER

There are so many options in water filtration that figuring out which one to buy can be overwhelming. I'll do my best to summarize the more popular choices in the easiest way possible, so you can spot your solution more quickly.

Each filtration technology has its strengths and weaknesses, so some brands will combine 2 or more technologies into a single system to capture a wider array of contaminants.

The fine print

The quality of filters can vary widely, so be sure to check a brand's website or packaging

to ensure it has been independently tested and certified by a reputable agency (such as NSF or the Water Quality Association) to remove the contaminants that it claims it does.

Also, read the labels closely, as the words "NSF certified" alone only tells you that the filter is certified for **something**. But it's up to you to read the fine print to see what exactly the filter is certified to remove.

For example, are they only certified for removing chlorine? Or does the certification cover everything they list on the front of the box? You have to check.

Water filtration technologies

The table on the next page is not an exhaustive list, but it does cover the most commonly recommended options. Specifically, it compare the following five water filtration technologies:

1. Reverse Osmosis
2. Activated Carbon
3. Ceramic + Activated Carbon + Silver
4. Water Softeners
5. Distilled Water Machines

WHY BOTTLED WATER IS NOT THE ANSWER

It's scary to learn about the toxins contaminating our drinking water and it's not uncommon to think that switching to bottled water will solve the problem. Unfortunately, it will not.

Like tap water, bottled water has been shown to contain contaminants, many of which are not regulated by the FDA and, therefore, do not have to be included in the bottled water company's quality tests. You may have also heard that some bottled water is simply filtered tap water. But unlike local municipalities, these companies do not have to disclose the results of their water tests to consumers.

At least two independent studies (by EWG and a German study) have found pesticides, VOCs, bacteria, industrial chemicals, pharmaceuticals, and more in popular brands of bottled water.

The German study also noted that if the plastic water bottles are "exposed to high temperatures, they can become contaminated by the degradation of the material from which the bottle was made." A recent 2018 study has also found particles of polypropylene and nylon that they believe may have leached from the bottle cap.

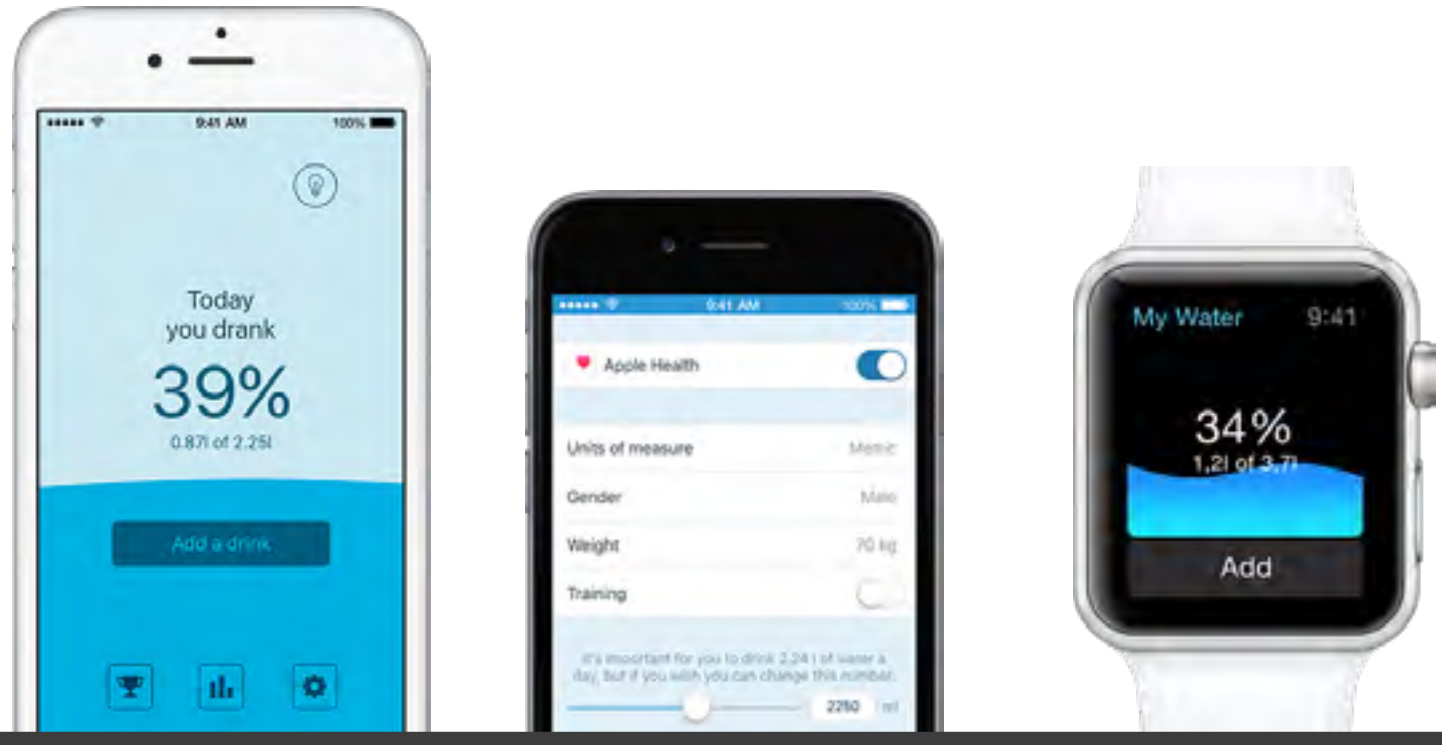
Health issues aside, bottled water is also expensive, costing up to hundreds of times more than tap water.

So what is the solution?

A quality water purification system can help to remove unwanted contaminants from your tap water. While these systems can often be more expensive up front, you'll likely find them to be a more cost-effective and healthier solution in the long run, compared to bottled water.

COMPARISON CHART
WATER FILTRATION SYSTEMS

WATER FILTRATION	WHAT IT REMOVES	WHAT IT DOES NOT REMOVE	WHERE / HOW IT'S USED	RELATIVE COST
Reverse Osmosis (RO)	RO systems remove almost everything: bacteria /microorganisms, arsenic, fluoride, hexavalent chromium, nitrates, some pharmaceuticals, and perchlorate. In fact, RO filtration is so comprehensive that ALL minerals are removed, including beneficial minerals. For this reason, RO systems sometimes add back calcium and magnesium. Users often add drops of seawater to their RO water to re-mineralize it.	Chlorine, trihalomethanes, radon, pesticides, and volatile organic compounds (VOCs)... however, most RO systems address this by adding carbon and/or ceramic filters.	Either fitted to individual taps (usually the kitchen sink) or plumbed into the entire house through the main line.	While RO units are not prohibitively expensive, hiring a plumber to install them can be. They can also add quite a bit to your water bill, as they are extremely wasteful, requiring roughly 20 times more water than they produce. So while these can be installed as whole-house filtration, it's best to use RO for just cooking and drinking, not for showering, laundry, or toilet flushing.
Activated Carbon Two types: **granulated carbon** (less effective) or a **carbon block** (more effective)	The efficacy of carbon systems vary greatly. Some (typically the granulated carbon) only remove chlorine and are meant to improve taste and odor, while others (typically the carbon block) also remove solvents, pesticides, VOCs, mercury, lead, asbestos, some radioactive contaminants, large parasites, and some pharmaceuticals.	Bacteria, asbestos, arsenic, chromium, fluoride, perchlorates, heavy metals, and some radioactive compounds	**Granulated carbon**: water pitchers, sink & shower faucets, refrigerator taps, sports bottles. **Carbon blocks**: may be plumbed into the main line or to individual taps, or as separate counter top units	Low initial cost, but replacing the filters can add up over time.
Ceramic + Activated Carbon + Silver	Ceramic alone can block only solid contaminants such as cysts and sediment. But when combined with carbon and silver (a powerful antibiotic) this combo also removes bacteria and parasites, chlorine, some radioactive contaminants, some pharmaceuticals, most solvents, pesticides, chemicals, and some heavy metals.	Fluoride, some heavy metals, viruses and very small microbes	Usually comes as a cartridge under the sink, so some plumbing is required	Relatively low cost to purchase and to install. Filter life is good, so not costly to maintain.
Water Softeners (Also known as de-ionization or ion exchange)	Removes barium, radium, mineral salts (that can build up in pipes and fixtures), and other electrically charged molecules (ions). **NOTE**: The water softening process replaces minerals, such as calcium and magnesium, with sodium. As a result, water softeners are not recommended for those seeking to lower their sodium. It is also not advised for watering plants and gardens.	Microorganisms, VOCs, pharmaceuticals, and most other contaminants	Typically plumbed into the main line for use throughout the house	Relatively low cost to purchase, install, and maintain.
Distilled Water Machines	Distilled water machines heat your water enough to vaporize it, while leaving most minerals, heavy metals, and chemical contaminants in their liquid states to separate them from the steam. The machine then condenses the steam back into water. The process is highly effective at removing most bacteria, viruses, and chemicals, however (like reverse osmosis) it also removes beneficial minerals and is therefore not recommended to drink regularly without re-mineralizing the water.	Chlorine, VOCs, insecticides, herbicides, trihalomethanes, and other contaminants with a lower boiling point than water	Commonly found as counter top machines	Range from moderately to very expensive



APPS TO HELP YOU DRINK MORE WATER

Water is a key element of a healthy body, but life gets busy and we forget to drink enough. Forget to hydrate consistently and you can end up with headaches, dry skin, constant fatigue, muscle weakness, high blood pressure, kidney stones, and more. Drink MORE water and you can help to alleviate all of the above.

There are plenty of free and inexpensive cell phone apps that can help you stay hydrated by setting daily goals, sending you reminders throughout the day, and using charts and other visuals to keep track of your daily intake and your ongoing progress over time.

Search the Google Play or iTunes App store for "water reminder apps". You'll find that some are overloaded with features that you may or may not use. Personally, I find that the simpler and cleaner the app, the more I tend to use it.

I chose to list the below two apps, because they have the minimum features for tracking water intake and both have maintained top ratings, even after thousands of reviews.

Water Drink Reminder by Leap Fitness Group (Android only): I'm bummed this one is Android only, as it looks great and I would have loved to try it.

My Water by Viktor Sharov (iPhone and Android): The free version is great. I used it for ages before buying the full version. For $4.99 you can remove the occasional ads at the bottom, graph your progress over time, and track more drinks beyond just water, coffee, and tea.

A NOTE ON BIG BERKEY WATER FILTERS

I was going to spotlight Big Berkey's water filtration systems at the end of the chapter, but ended up removing them at the last minute. I've owned a Berkey for ages and the water really does tastes better than any filtered water I've tried. Their shower and drinking water filters are also popular among the MCS community, because so many have found the filters curb the reactions they experienced from whatever tap water contaminants were triggering them.

However, something bugged me when I was researching Berkey for this book and my skepticism was later validated by New York Times journalist, Dan Koeppel, who recommended I read this Wirecutter article. I'm thankful he brought it to my attention.

I spent a considerable amount of time trying to find information regarding exactly what makes up Berkey's filters, but all I could dig up was that they were made from "6 different filtering elements". Which six? No idea. And Wirecutter couldn't find the info either. This should be readily available on their website, but I almost gave Berkey a pass, simply because I've been a customer for so long and because they're so beloved in the MCS community.

By the way, I also didn't realize that Berkey isn't certified, or even tested, to NSF standards. I always encourage folks to check for this testing, yet I didn't follow my own advice, because I just *assumed* they were certified. Lesson learned.

While Wirecutter found that Berkey did an exceptional job filtering lead, they couldn't verify several other test results or claims made on Berkey's website. Casting further doubt, they learned "*it would cost well over $1,000,000 to conduct certification testing for all of the substances*" that Berkey claims their filters can remove.

Berkey's lack of transparency with regards to their filtering elements bothers me, as does the fact that they don't test to NSF standards. All that said, I can't discount them entirely. Berkey's filters are widely used by the MCS community, because users do experience a notable reduction in triggers from their water. So with the community testimonials in mind, I can still recommend Berkey... just not as enthusiastically as I would have liked.

BRAND SPOTLIGHT

AQUASANA WATER FILTERS

Superior Water Filtration

Tested & Certified to Strict NSF Standards

Aquasana offers a range of highly effective water filtration options including:

- Whole house systems for city or well water, plus optional UV filtration & salt-free water softening
- Shower filters to remove chlorine and other breathable chemicals from shower steam
- Reverse osmosis and Claryum under-counter filters
- A counter top filtration machine / pitcher

Their filters are NSF certified to remove up to 99% of 77 contaminants including lead, mercury, herbicides, pesticides, volatile organic chemicals (VOCs), asbestos, fluoride, chlorine, chloramines, viruses and cysts, pharmaceuticals, industrial solvents, and more.

(Depending on which system you choose, you may need to add-on certain filters to capture the full range of these contaminants. The website makes it easy to tell what each product filters and what add-ons are available.)

A few of their filters even come with bluetooth capability to track the number of gallons used and to send alerts to your phone when it's time to replace the filters.

VIEW OPTIONS

"I bought this filter a year ago when I realised how sick the chlorine was making me - and I can't recommend it enough. This isn't just a nicety for me - it's a necessity."

aquasana Live Healthy

BRAND SPOTLIGHT

TAP SCORE

Professional Lab Water Testing Kit

Relevant Quality Reports & Recommendations

Tap Score is a next-generation home water testing service that goes beyond what regular labs or test kits can provide.

Applying toxicological and epidemiological research to your water's contaminant profile, they give you a full picture of how your drinking water affects your health.

TEST CITY WATER

Easy and affordable

Tap Score will send you a simple kit. You fill the vials with your tap water and then pop the vials back in the mail, using the packaging and postage included in the kit.

About 10 days later, they'll send you an easy-to-read report about your water and local environmental water hazards. (Check out this sample report)

Also included are unbiased treatment recommendations that match the particular contaminants found in your water, so you don't waste money on a system that doesn't do what you need it to.

TEST WELL WATER

"We've tested our water every year for 20 years and Tap Score was the first test I fully understood."

"My local utility had an incident that exposed our city to dangerous amounts of Trihalomethanes in our tap water. I bought Tap Score to make sure my new treatment system is doing its job."

TAP SCORE

IN THIS CHAPTER

FOOD & DIET

FOOD & DIET

Until this point we've mainly been talking about ways to avoid or eliminate toxins in your environment, as a way to prevent triggering a reaction. That's all well and good for dealing with chemical sensitivities at home, but not so helpful everywhere else.

Unfortunately you can't control chemical triggers outside your own environment and there don't seem to be any miracle drugs that consistently do the trick.

However, I have read through mountains of conversations across the MCS Facebook forums to learn how those who suffer from chemical sensitivities have found relief for extended periods of time.

I've noticed a lot of helpful conversation around folks strengthening their body's ability to process and tolerate toxins by avoiding or including certain types of foods in their diet. *(p.s. I backed up the anecdotal evidence by reading through a bunch of scientific studies as well. You can find links at the end of the book in the Resources section.)*

To oversimplify for a second, the general idea is to increase nutrients and enzymes that help the body deal with toxins, while reducing calories from "anti-nutrients" (bad foods) that burden the body's ability to heal.

This practical approach is built upon the idea that as the immune system builds its strength, the body becomes better equipped to process and eliminate the toxins it encounters.

Below are some of the trends (backed by my additional research) that seemed to make a noticeable difference for folks participating in the MCS forums. Admittedly, the list of "foods to avoid" isn't short, but don't worry -- we'll discuss plenty of healthier alternatives as well.

HEAVILY PROCESSED FOODS

Heavily processed foods can be a trigger for the many who, in addition to chemical sensitivities, also have food sensitivities. Removing them from the diet tended to provide considerable relief for those taking part in the MCS conversations.

Eliminating unproductive calories from your diet makes room for the more nutrient-rich calories that can help anyone (sensitive or not) to boost, rather than burden, their body's detoxification and immune-building efforts.

This makes sense, given these "foods" typically include a host of ingredients that are more easily found in a science lab than in nature. (Hence the sarcastic quotation marks around "foods".)

Highly processed foods include:

- Deli and breakfast meats such as cold cuts, hot dogs, bacon, and sausages, which contain nitrates, nitrites, and phosphates to preserve or add flavor
- Frozen microwave meals and canned soups that contain artificial flavors, colors, and preservatives
- Condiments such as ketchup, mayonnaise, mustard, soy sauce, and pasta sauces that contain artificial flavors, colors, and preservatives

- Packaged cookies, cakes, and other junk foods that contain a host of chemical (non-food) ingredients and high amounts of sugar
- Packaged food and drinks that contain corn syrup, dextrose, maltodextrin, or other synthetic corn derivatives
- Processed grains such as white rice, as well as white flour in pasta and bread

FOODS CLOSER TO THEIR NATURAL STATE

Fruits & Veggies

Even if you're not chemically sensitive, it's a good idea to swap out processed foods (or what food activist, Michael Pollan, calls "food-like substances") for foods closer to their natural state.

For example, fresh potatoes and corn that come from your garden, the farmer's market, or the produce aisle of the supermarket are in their natural state. By contrast, fast food french fries and tortilla chips that are made from potatoes and corn, respectively, but typically have artificial flavorings or additives as well, are not in their natural state.

Similarly, the processing of canned fruits and vegetables typically reduces their nutrient content, pushing them further from their natural state. And packaged foods from the middle aisles of the supermarket often contain as many synthetic ingredients as natural.

Frozen fruits and vegetables with no added colors, flavors, or preservatives fall somewhere in the middle. Frozen produce isn't "fresh", but the fruits and veggies are typically frozen soon after harvest to maintain their nutrients and to keep them closer to their natural state. Frozen produce, that is otherwise not processed, can be a good alternative, when fresh produce isn't an option.

Also, organic and biodynamically grown produce are grown without the help of chemical pesticides, fungicides, or herbicides, making them a better choice than conventionally grown produce.

Meat, Poultry, Fish, Eggs, Dairy

Meat, poultry, and fish that do not come in a can and contain only one ingredient (i.e. the meat itself) are in their natural state. However, that's not the only characteristic you should look for.

The chemically sensitive are often triggered by animal products that come from industrially raised animals. It's possible that this is because factory-farmed animals eat genetically modified soy, processed grains, and/or grasses grown with pesticides or other chemicals.

In addition, industrial ranchers add growth hormones and antibiotics to the animal's food or inject them into the animals' bodies. These unnatural "additives" make their way onto our plates.

To minimize MCS symptoms, opt for meat, eggs, and dairy* from pasture-raised animals and look for "organic", "hormone-free", and "antibiotic-free" on the label. Ideally, these labels would also say "humanely raised", because the safer and healthier the animal, the healthier and safer their food products.

Also, opt for smaller species of wild-caught fish* that are lower on the food chain. Mercury and other toxins biologically accumulate as

the bigger fish eat the smaller fish, so smaller fish tend to be safer to eat.

Alternatively, opt for fish that have been sustainably farmed without the use of hormones and antibiotics. (Not easy to find, but not impossible.)

** The chemically sensitive often report a serious reduction in symptoms by eliminating fish and dairy from their diets altogether.*

Related reading on Greenopedia

- Cage-Free, Free Range, Pasture Raised... Here's What the Labels Mean for Your Health and the Animal's
- Wild-Caught vs. Farmed Fish: Which is the Healthier and More Sustainable Option?

Rule 19: "If it's a plant, eat it. If it was made in a plant, don't."

Rule 36: "Don't eat breakfast cereals that change the color of your milk."

Rule 20: "It's not food if it arrived through the window of your car."

– From Food Rules by Michael Pollen

HIGH ALLERGEN FOODS & THE ELIMINATION DIET

In addition to highly **processed** foods, many high **allergen** foods have also been noted to affect MCS sufferers. These include: wheat (gluten), eggs, dairy, fish, shellfish, soy, corn, peanuts, and other nuts.

Less common allergens (but still common enough) that can also cause sensitivities include: alcohol, refined sugar, packaged/processed foods, fast foods, and some nightshade vegetables.

If you aren't sure which foods are causing your body to react, you might start with a traditional allergy test at your doctor's office. However, you probably know by now that while an MCS reaction may LOOK and FEEL like an allergic reaction, your body may not produce the antibodies (known as iGE or immunoglobulin E) in response. (I say "may not" because MCS is often accompanied by traditional allergies.")

This means that if your symptoms are not technically an "allergy", then an allergy test will not provide the answers you seek.

You may find that an **Elimination Diet** will provide a better indication of which foods you can tolerate and which you cannot. While the Elimination Diet is pretty straightforward, it requires some discipline and should be done under the supervision of an experienced medical professional.

The basic idea is to eliminate all high allergen foods from your diet for a few weeks to help clear them from your body. If you notice a reduction in symptoms and generally feel better, you can assume that one or more of these foods is contributing.

Next, you'll gradually re-introduce **one food at a time** back into your diet, keeping a food journal to actively note how you feel and whether any symptoms have returned. After a few weeks, you should be able to pinpoint which foods are causing issues for your body and which you can enjoy again.

WHOLE GRAINS

Whole grains refer to a grain that is in its natural state, meaning it still has all its parts intact. Every grain is originally harvested as a whole grain and, while some are sold that way (in their natural state), others are taken to a factory to be processed, or "refined".

A **refined grain** has been stripped of its fiber-rich bran and nutrient-rich germ, leaving only the nutrient-poor endosperm. Grains are refined for the purposes of extending their shelf life and making them easier to ship long distances without spoiling.

WHAT MAKES A GRAIN "WHOLE" ?

A whole grain is the entire seed (or "kernel") of a plant and is made up of the bran, germ, and endosperm:

The bran: This protective outer skin is rich in fiber and also provides B-vitamins and antioxidants.

The germ: This is the plant's reproductive embryo, which can be sprouted into another plant. The germ is the most nutrient-rich part of the grain, containing B-vitamins, protein, healthy fats, and minerals.

The endosperm: This is the source of energy for the germ, allowing it to sprout roots into the ground in order to collect water and nutrients and to sprout upward toward the sun for photosynthesis. While the endosperm is the largest part of the grain, it contains only a small portion of vitamins and minerals.

These days, most pasta, bread, crackers, cereals, cakes, cookies, and pastries are made with refined grains, which had been further milled into flour to make the dough. This is true whether the foods are packaged or served fresh, and whether you're at a supermarket, a bakery, or even a fine restaurant.

Why is this a problem?

Because refining a grain - removing its edible parts - also removes its nutrients. In fact, refining grains caused widespread nutritional deficiencies and subsequent illnesses back in the 1800s when the milling process was first developed. In response, governments began requiring brands to enrich their grains (or the foods containing them) with the vitamins and minerals that were lost.

Unfortunately, enriching grains only adds back a fraction of the lost nutrients, making them nutritionally inferior to whole grains.

Further, enriched grains still lack most or all of the fiber that was lost to the milling process. Foods lacking in vitamins and minerals is an obvious issue, but the lack of fiber is also a problem for two reasons.

The first and very simple reason is that fiber helps to make us feel full after a meal, which, in turn, helps to prevent overeating.

A more complex second reason is that fiber helps to slow our body's digestion of carbohydrates, which, in turn, helps to regulate our blood sugar levels. So when we eat carbs, such as whole grains that still have their fiber intact, they (beneficially) cause a slower rise in blood sugar, allowing our body to maintain healthy levels more easily.

The opposite is true when eating carbohydrates that lack their natural fiber

(e.g., refined grains). In this case, the carbs are more quickly converted into blood sugar, causing the pancreas to spike insulin secretion and force the body to work harder to maintain healthy blood sugar levels.

The ongoing strain on the body from spiking insulin levels to maintain normal blood sugar levels has been shown to increase the risk of diabetes, heart disease, obesity, and more.

Refined grains for the chemical sensitivities

Earlier we discussed how folks have noticed a significant reduction in symptoms from chemical exposure simply by eating healthier.

As a reminder, the idea is that adding more nutritious foods to their diets, while limiting or avoiding "bad foods", would help their immune system to better deal with environmental chemicals.

Refined grains lack nutrients. So it follows that the more refined grains you eat, the more nutrient-poor calories you provide your body.

Simply put, to boost your immune system and overall health, it is recommended to get as many of your daily calories from nutrient-dense foods, while minimizing nutrient-poor foods.

Examples of whole grains

Generally speaking, if you see the word "whole" or "sprouted" next to the name of grain, then it is "whole", not "refined".

For example, "whole wheat" and "sprouted wheat berries" are whole grains, while "wheat flour", "white flour" and "multi-grain" are processed (refined) grains.

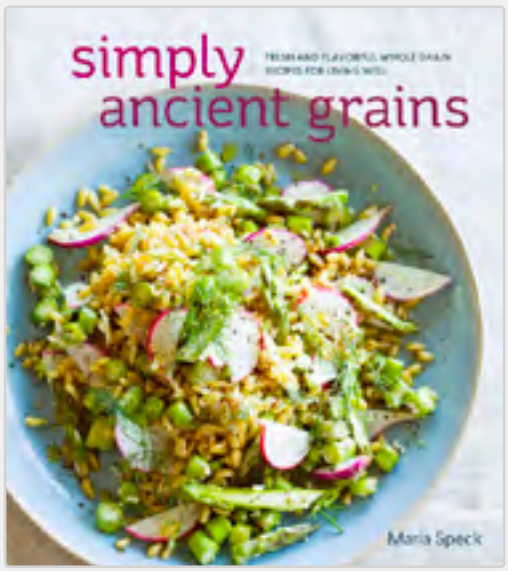
However, most whole grains don't use the word "whole" on the label. For example, brown rice is a whole grain and will just be listed as "brown rice", not "whole rice".And white rice is a refined grain, but will just be listed as "white rice", not "refined brown rice". (White rice starts off as brown rice, however it becomes white rice once the bran and germ are removed.)

Whole grains include:

- Amaranth *
- Barley
- Black Rice (aka "forbidden rice")
- Brown Rice
- Buckwheat *
- Bulgur (cracked wheat)
- Corn (unrefined)
- Millet
- Oats / Oatmeal (rolled or steel-cut)
- Quinoa *
- Whole Rye
- Sorghum
- Teff
- Whole Wheat (including durum, farro, Kamut®, and spelt varieties)
- Wild Rice

** Amaranth, quinoa, and buckwheat are not really grains. They are considered "pseudo-cereals" or "pseudo-grains", but are often listed alongside whole grains, because their nutritional profile and preparation are so similar.*

WHOLE GRAIN COOKBOOKS

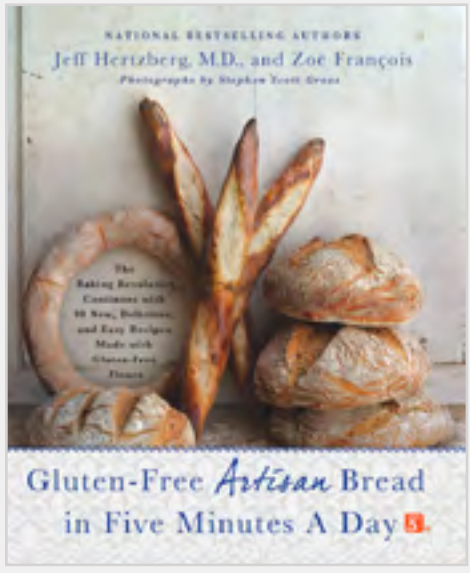


Simply Ancient Grains

VIEW ON AMAZON

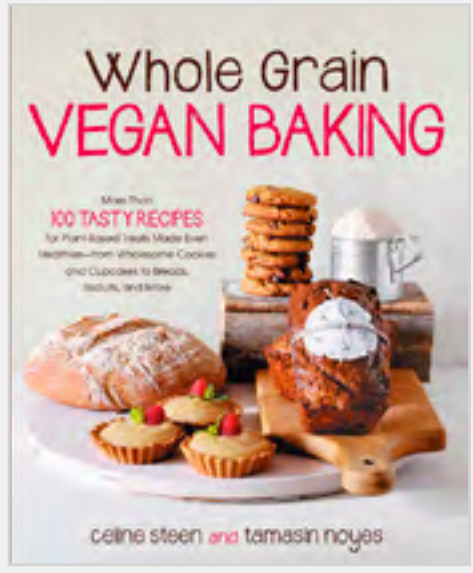
Whole Grain Mornings

VIEW ON AMAZON



Gluten-Free Artisan Bread

VIEW ON AMAZON



Whole Grain Vegan Baking

VIEW ON AMAZON

EXAMPLE: 1 CUP OF RICE

BROWN (WHOLE) VS. WHITE (REFINED)

NUTRIENT	BROWN RICE	WHITE RICE
Calories	216	205
Carbohydrates (g)	44.8	44.5
Omega-3 fatty acids (mg)	27.3	20.5
Omega-6 fatty acids (mg)	603	98
Protein (g)	5	4.2
Thiamin (mg)	0.2	0
Niacin (mg)	3	0.6
Vitamin B6 (mg)	0.3	0.1
Folate (mcg)	7.8	4.7
Pantothenic Acid (mg)	0.6	0.6
Calcium (mg)	19.5	15.8
Iron (mg)	0.8	0.3
Magnesium (mg)	83.9	19
Phosphorus (mg)	162	68.8
Potassium (mg)	83.9	55.3
Zinc (mg)	1.2	0.6
Copper (mg)	0.2	0.1
Manganese (mg)	1.8	0.7
Selenium (mcg)	19.1	11.9

http://nutritiondata.self.com/facts/cereal-grains-and-pasta/5707/2

http://nutritiondata.self.com/facts/cereal-grains-and-pasta/5813/2

The brown rice (whole grain) is far more nutrient-rich than the (refined) white rice.

EXAMPLE: WHEAT FLOUR (1 cup)

WHOLE GRAIN VS. REFINED

NUTRIENT	WHEAT FLOUR (WHOLE)	WHEAT FLOUR (REFINED)
Calories	407	455
Carbohydrates (g)	87.1	95.4
Omega-3 fatty acids (mg)	45.6	27.5
Omega-6 fatty acids (mg)	886	489
Protein (g)	16.4	12.9
Thiamin (mg)	0.5	0.1
Niacin (mg)	7.6	1.6
Vitamin B6 (mg)	0.4	0.1
Folate (mcg)	52.8	32.5
Pantothenic Acid (mg)	1.2	0.5
Calcium (mg)	40.8	18.7
Iron (mg)	4.7	1.5
Magnesium (mg)	166	27.5
Phosphorus (mg)	415	135
Potassium (mg)	486	134
Zinc (mg)	3.5	0.9
Copper (mg)	0.5	0.2
Manganese (mg)	4.6	0.9
Selenium (mcg)	84.8	42.4
Vitamin A (IU)	10.8	0
Vitamin E (mg)	1	0.1
Vitamin K (mcg)	2.3	0.4
Riboflavin (mg)	0.3	0
Choline (mg)	37.4	13
Betaine (mg)	87.4	0
	http://nutritiondata.self.com/facts/cereal-grains-and-pasta/5744/2	http://nutritiondata.self.com/facts/cereal-grains-and-pasta/5821/2

The whole grain wheat flour is far more nutrient-rich than the refined wheat flour.

HEALTHIER SWEETS AND SNACKS

Everyone loves a treat! But snacks and desserts are yet another challenge for the chemically and food sensitive. This is because folks with sensitivities are encouraged to avoid wheat, eggs, milk, and sugar - the very ingredients that make up most cakes, cookies, and other desired desserts.

These days, there are plenty of gluten- and sugar-free alternatives out there. Some even taste good. :)

Here are a few ingredient alternatives and some recipes to get you going.

PURE maple syrup as an alternative to sugar

While the chemically sensitive sometimes report an allergy or sensitivity to maple syrup, it isn't clear whether they're talking about the fake maple syrup or the real stuff. As a result, I've seen some websites recommend avoiding maple syrup, while others recommend using it as a substitute for sugar.

A quick clarification...

"Fake" maple syrup (e.g., Log Cabin, Mrs. Butterworth, and other popular brands) are made from corn syrup, artificial colors, preservatives, and other "put it back on the shelf" ingredients.

By contrast, real maple syrup is tapped directly from a maple tree. The real stuff is full of healthy micronutrients and has only ONE ingredient: pure maple syrup.

If you already know that you are NOT allergic to PURE maple syrup, then here are some quick, easy, and delicious recipes for you to try at home. If you ARE allergic to PURE maple syrup, you might try substituting** certified organic yacon syrup, coconut nectar, brown rice syrup, or honey. (Sustainably harvested honey is preferred over 'regular' honey).

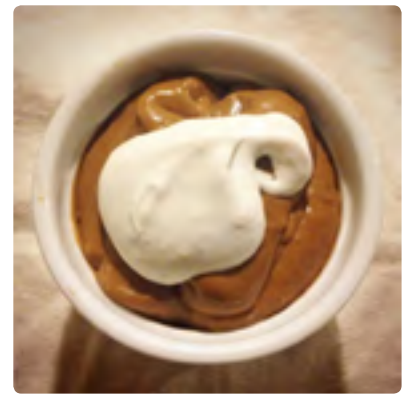
*** If you've never tried these sweeteners before and aren't sure whether you are sensitive to them, please visit your doctor to test before eating them.*

Sweet Treats

Click for recipes. (**Credit**: FoodbyBri.com)

Chocolate bark with goji berries

Easy no-bake Brownies



Chocolate avocado pudding

AN INTERESTING NOTE ON SUGAR

Believe it or not, most sugar in the United States does not come from sugarcane; it comes from sugar beets. And to be more specific, most sugar in the U.S. comes from **genetically modified** sugar beets.

Genetically modified plants are engineered to tolerate chemical herbicides (usually glyphosate) and pesticides. This means that farmers can spray their crops with weed killers such as Monsanto's glyphosate-rich RoundUp without harming their crops. As the weeds build their resistance to glyphosate and other herbicides - and as the pests build resistance to the pesticides - the farmers need to spray in higher quantities to get the job done.

While I don't know for sure, I wouldn't be surprised if this increased need for agricultural chemicals is at least one reason white sugar is a common problem for the chemically sensitive. (The other being that white sugar has been chemically processed from raw sugar.)

Alternative Sweeteners

While no sweetener is considered healthy, the following are health**ier** alternatives to white sugar and are not genetically modified. Still, if you know you are sensitive to white sugar, you may want to get tested before trying the alternatives.

Sustainably harvested honey

- Coconut palm sugar *(you may see this labeled as just coconut sugar)*
- Palm sugar
- Date sugar
- Coconut nectar
- Maple syrup
- Brown rice syrup *(organic)*
- Barley malt
- Yacon syrup
- Monk fruit *(check the label to ensure no dextrose, maldextrin, or other unwanted additives)*
- Organic stevia *(liquid stevia tends to be less processed than powdered)*

BRAND SPOTLIGHT

REALLY RAW HONEY

100% Raw Hive-to-Jar Honey

Unfiltered, Unadulterated, Ethical.

Really Raw Honey is gathered from wildflowers in the US and minimally processed to keep the healthy propolis, pollen and honeycomb intact. Built on unwavering ethics and purity, Really Raw collaborates with other family-scale apiaries (bee farms) to offer only raw, unfiltered, unpasteurized, unadulterated honey.

Commercial brands often heat their honey to make it thinner and more visually appealing on supermarket shelves. But this high heat kills the honey's beneficial enzymes. These supermarket brands often filter out the nutrient-rich pollen as well, and may dilute the honey with sugar, corn syrup, and/or chemicals to enhance its flavor, color, and texture.

By contrast, Really Raw is the real stuff, straight from hive to jar with nothing lost* or added in between. To further support their life-giving pollination activities, Really Raw and their partners host their hives only on environmentally sound farms that do not toxify the fields or the water that bees frequent.

SHOP RAW HONEY

** They do lightly filter the honey only to remove wax chunks. The nutrient-rich pollen, propolis, and royal jelly are never filtered out.*

"I can't begin to tell you how much I love your honey! And I appreciate the quality that clearly goes into making it. "

Really Raw HONEY
STRAIGHT FROM THE HIVE!

HEALTHY VS. BAD FATS

These days, it's fairly common knowledge that not all fat is bad and that our bodies require the good fats in order to function as it should. **Bad fats** lead to clogged arteries, heart disease, and obesity. **Good fats** protect our organs, keep our brain healthy, fight fatigue, and help our bodies to absorb vitamins.

Replacing bad fats with good fats is a healthy choice for everyone. But because fat is high in calories, it is especially helpful for the chemically sensitive - and others seeking to boost their immune system - to make this change.

Why? Because shifting your calories from bad to good is kind of like gifting your body with a bunch of little energy makers that give your immune system the boost it needs to battle fatigue and other effects from a chemically overloaded body.

Here's a quick breakdown of which foods are, or contain, the good vs. bad fats.

Bad Fats (avoid)

If you could only remember one type of fat to avoid, make it **trans fat**. It is bad. It used to be everywhere, but it's thankfully been banned in several countries, including the US. That said, this stuff has a loooong shelf life, so check your cabinets to make sure you don't have any in there.

Trans fat is a byproduct of hydrogenation, which is a process that transforms oils into solid fats in order to prevent them from going rancid, thereby giving them this longer, more stable shelf life. Trans fats were easy to recognize as margarine and vegetable shortening (I'm not sure what these recipes now use in their place), but they were also a key ingredient in most packaged goods and fast foods.

Sometimes you'd see it clearly listed on the ingredients label as "trans fat", while other times you'd see it as "partially hydrogenated oil". Either way, avoid.

Not Great Fats (limit intake)

Saturated fats were on the most hated list until trans fats took center stage. And while they're not considered as evil a villain as they used to be, saturated fats are still not your buddy. Like trans fats, saturated fats can raise levels of bad LDL cholesterol and significantly increase the risk of heart disease.

You'll find saturated fats in meat and dairy products, poultry skins, and tropical plant based oils such as coconut* and palm oil**.

** There is ongoing debate around whether the saturated fat of coconut oil is good or bad. I don't go into the debate here. Personally, I use coconut oil often.*

*** I avoid palm oil for ethical reasons (rain forest decimation & brutal killing of orangutans) unless it is certified humane or can otherwise show it has been responsibly harvested.*

Good Fats (Eat more!)

Unsaturated (good) fats help to fight inflammation in our bodies. They also help to lower levels of bad cholesterol, while increasing levels of good cholesterol, which helps to reduce the risk of heart disease and stroke.

Good fats can be bucketed into two main categories: monounsaturated and polyunsaturated fats. Good sources of **monounsaturated fats** include avocados, nuts, and unrefined oils such as olive, sesame, avocado, sunflower, and high oleic safflower oils.

In addition to getting these fats from foods, our bodies can also manufacture monounsaturated fats from the saturated fats that we eat.

Polyunsaturated fats are needed to build cell membranes, clot our blood, move muscles, and reduce inflammation. Our bodies cannot synthesize polyunsaturated fats, so we need to actively include them in our diet.

The two main types of polyunsaturated fats are omega-3 and omega-6 fatty acids. Most of us get enough **omega-6** without thinking too much about it, because it's found in foods we eat regularly. Good sources of omega-6s include nuts, seeds, olives, whole grains, leafy vegetables, and unrefined vegetable oils such as hemp, safflower, sesame, and sunflower oils.

By contrast, getting enough **omega-3** may require some planning, unless you regularly eat (and your body can tolerate) fish - specifically fatty fish such as anchovies, sardines, salmon, tuna, mackerel, herring, trout, and halibut, as well as mussels and oysters.

The bad news is that fish is a high allergen food and many chemically sensitive folks cannot tolerate it. It's also worth noting that wild caught fish (particularly larger species) are often contaminated to varying degrees with environmental toxins, including mercury.

Unfortunately, industrially farmed fish are typically not any safer, as they are commonly tainted with growth hormones and antibiotics, as well as disease from living in extremely tight quarters that limit their movement and promote illness.

Each of these factors may trigger a reaction, so you may find your body prefers non-fish (vegetarian) sources of omega-3.

Good non-fish sources of omega-3 include walnuts and walnut oil, ground flaxseeds* and flaxseed oil, chia seeds, sesame seeds, pumpkin seeds, sunflower seeds, safflower oil, avocado oil, (organic, non-GMO) edamame, and algae (usually as a supplement).

Omega-3 is also found in smaller amounts in beans, nuts, whole grains, and vegetables.

** Aim to consume one teaspoon of (unheated) flaxseed oil or one tablespoon of (unheated) ground flaxseed each day. Flaxseeds have a nice nutty flavor and can be added to salads, smoothies, breakfast cereals, or drizzled over whole grains. Flaxseeds need to be ground in order for your body to absorb all their nutrients. Flaxseeds and flaxseed oil should be kept cool in the fridge or freezer to prevent damage from heat and oxygen.*

Toasted pumpkin seeds are also known as pepitas. Yum!!

BAD FAT – ELIMINATE	REPLACE WITH
Margarine and vegetable shortening	Olive oil is a great margarine replacement for sandwiches and other savory foods. High oleic safflower and sunflower oil are a healthy replacement for margarine for baked goods. Applesauce, pureed prunes, or mashed banana can take the place of shortening, since they will make the baked goods light and flaky. (Just be sure to reduce the amount of sweetener in the recipe, when using fruit to replace shortening.)
Fried foods, from a fast food chain or packaged from the store, including fried chicken (both parts and nuggets), fried fish, french fries, onion rings, hash browns, and hush puppies	Make these foods yourself and, instead of frying them, try baking or lightly sautéing in unrefined olive oil, avocado oil, sesame oil, grapeseed oil, safflower oil, or virgin coconut oil.
Most packaged & commercially prepared dough-foods including breads, cookies, cakes, pastries, donuts, and muffins	Healthier options are typically baked with unrefined virgin coconut oil, high oleic safflower oil, or sunflower oil.
Most packaged snack foods such as chips, crackers, packaged and microwave popcorn	Healthier packaged options are typically baked with unrefined virgin coconut oil, high oleic safflower oil, or sunflower oil. You can also make them yourself.
Other foods that list hydrogenated or partially hydrogenated vegetable oil on the label	Any of the oils listed above.

NOT GREAT FAT – LIMIT INTAKE	REPLACE WITH
Red meat and poultry with skin	Plant-based proteins such as beans, legumes, nuts, and seeds. High-fiber carbohydrates such as whole grains... not refined grains.
Dairy products such as milk, cheese, butter, yogurt, ice cream	Milk and butters made from nuts and seeds. Common examples of non-dairy milks and butters found in healthier food stores (or easily made at home) include those made from almond, cashew, walnut, and pumpkin seeds.
Palm oil	Unrefined (virgin) coconut oil and unrefined vegetable and seed oils (e.g., avocado, olive, flax seed, walnut, sunflower, and safflower oils).

HEALTHIER CONDIMENTS

Salt

Regular table salt is chemically processed and stripped of its valuable minerals. It's then bleached (gross) and mixed with harmful ingredients such as aluminum and talc (also gross) to prevent clumping, so the salt flows more cleanly from the shaker.

By contrast, unrefined salts maintain their healthy trace minerals, are not chemically processed, and have no harmful additives. They also boast a more intense, robust flavor.

Examples of healthier, unrefined salts:

- **Himalayan salt** is generally considered the healthiest choice, as its contains all 84 essential trace elements required by our bodies. The pink color comes from its rich iron content.
- **Grey sea salt** is mined from the sea. Well, kinda. It actually comes from clay-lined, mineral-rich seawater ponds on the coast. Like Himalayan salt, grey sea salt is naturally infused with dozens of healthy trace minerals.
- And if you wanna get fancy... **black and red salts** both come from Hawaii. Red salt comes from volcanic clay ('alaea') and is exceptionally high in iron and other trace minerals. Black salt comes from volcanic lava and gets its color from the activated charcoal, which is helpful with digestion and detoxification.

By the way, when you see just "salt" as an ingredient on packaged food labels (i.e., it doesn't specify "Himalayan salt" or "sea salt"), it is usually processed table salt. Processed table salt is also the type of salt used in fast food kitchens and most chain restaurants.

Ketchup

Commercial ketchups contain large amounts of sugar. If that wasn't bad enough, that sugar is usually in the form of high fructose corn syrup, which is typically derived from genetically modified corn.

Many brands also contain artificial flavors. This two-word ingredient actually contains hundreds, sometimes thousands, of chemicals. One common additive hidden within "artificial flavors" is MSG, which is a common trigger for the chemically sensitive.

When possible, opt for ketchup made from "real food" ingredients, as opposed to synthetic ingredients. Also, ketchup that is certified organic contains no GMO ingredients. Plus, it is typically sweetened with cane sugar or real maple syrup in place of heavily processed white sugar.

Steak and BBQ Sauce

Commercially sold steak and BBQ sauces suffer from pretty much the same issues as ketchup. Ditch the commercial brands and choose the organic versions instead.

Mayonnaise

Most commercially sold mayonnaise is full of hydrogenated and otherwise unhealthy fats, such as genetically engineered soybean oil. It's also high in sugar (usually GM beet sugar or high fructose corn syrup) and contains eggs (a common allergen), as well as synthetic preservatives.

While many healthier brands use olive oil or other healthier fats, they often still use eggs and (non-GMO) soy in their recipe. So if you are sensitive to eggs or soy, you have to read the label carefully, even for these more thoughtful brands.

The good news for mayo lovers is that it is really easy to make your own.

Most mayo recipes include only a few basic ingredients: olive oil, egg yolks**, lemon juice, mustard, and (healthier) salt.

Even if the recipe calls for eggs, you can just swap them out with flax seed eggs or chia seed eggs.**

**Flax or Chia Seed Eggs

- 1Tbsp ground flax or chia seeds
- 3Tbsp water

Grind the flax or chia seeds in a coffee grinder, or buy flax seeds that have already been ground. Mix the seeds with the water and stir well.

Let it set for 10 minutes, then use it in a recipe as you would an egg. (You wouldn't make a scramble with these eggs - they're just for baking.)

CLOSING TIPS & REMINDERS

Organic & biodynamic

To avoid chemical pesticides, eat organically or biodynamically grown produce as much as you're able to afford and have access to. If you can't buy *everything* organic, try to buy organic for produce that tends to require more biocides.

These include:

- Strawberries
- Spinach
- Nectarines
- Apples
- Grapes
- Peaches
- Cherries
- Pears
- Tomatoes
- Celery
- Potatoes
- Sweet bell peppers & hot peppers

BIODYNAMIC FOODS

Biodynamically grown foods are farmed in a similar way to organically grown foods, but with even more attention to ensuring a healthy and flourishing ecosystem. Biodynamics is a holistic, regenerative, and mostly closed-loop farming approach that aims to contribute (vs. take from) the earth's natural resources.

Farms may be certified as biodynamic by the Demeter Association. Like the organic certification, conscientious farmers sometimes grow to biodynamic standards without incurring the expense of becoming formally certified.

Animal products

To avoid growth hormones and antibiotics in animal products, avoid them altogether. Or choose meat, dairy, and eggs that come from animals that were raised naturally on a pasture (label will say "pasture-raised"), instead of from animals raised on a factory farm (the label won't mention this).

Additionally, look for the words organic and humane on the label, as humanely raised animals also tend to be healthier.

Real food ingredients

Eat meals made from fresh foods vs. processed packaged foods as much as possible. And eat at home, where you can control the ingredients, or at thoughtful restaurants that focus on healthy, organic ingredients.

Home cooked soups are a great way to eat delicious home cooked meals without a ton of fuss. And you can make several days' worth in advance, freezing the portions you won't eat right away.

Try to eat as many of your vegetables in their raw form, 3 to 4 servings per day, if your stomach can handle it, in order to consume the most amount of nutrients. If you're not able to eat that many veggies, juicing is a great way to boost your nutrient intake.

Ditch the microwave and cook your food the old fashioned way. Steam, blanch, bake, roast, simmer, stew, lightly sauté... They may take a little longer, but the food will retain more nutrients. And maybe it's just my opinion, but they taste better too.

Digestion begins in the mouth. Our saliva contains enzymes that help to break down our food, so slow down and chew your food thoroughly. (p.s. That advice is easier to give than to take. I just inhaled a veggie burrito like it was vapor, literally as I was writing this section. #PerfectionIsAMyth)

BRAND SPOTLIGHT

TEATULIA

Award-Winning Tea that is Beyond Organic

Healthy. Ethical. Transformative.

Teatulía is a pretty incredible company. They completely transformed 3,000 acres of barren wasteland into a thriving, regenerative tea garden at the base of the Himalayan mountains in Northern Bangladesh. Their thoughtful measures introduced to the world a new tea growing region and a unique, award-winning flavor profile.

In place of synthetic chemicals and machinery, Teatulía cultivated its now lush garden using only healthy, natural inputs and restorative farming methods. For example, in place of chemicals, they use Ayurvedic herbs, such as neem oil, to naturally repel pests. And they use cover crops and mulch to prevent weeds.

Their sustainable efforts have paid off, as water sources that had long dried up have returned. And once-endangered plant and animals species now fill their gardens.

Teatulía didn't just rejuvenate the soil and its ecosystem, they also rejuvenated the region's economy by employing over 600 workers and supporting countless more through its local education and cattle-lending programs.

SHOP ORGANIC TEA

Teatulía
ORGANIC TEAS

BRAND SPOTLIGHT

THRIVE MARKET

A Healthy Pantry at Wholesale Prices

Online Supermarket of Carefully Curated Products

Thrive is an online market that offers carefully curated foods made from 'real food' ingredients, as well as chemical-free bath, body, and beauty products.

They make it easy to find products that fit your dietary needs (e.g., nut-free or gluten-free), as well as your values (e.g., vegan or women-owned) with simple filters. And if the best version of a particular product doesn't exist, they make it.

While healthier products can often be more expensive, Thrive skips the middlemen, selling direct to consumer. This means they can offer prices that are near (or at) wholesale.

They do ask for a low monthly subscription of less than $5/month. But with an average savings of $30 per order, most folks cover the full year after just two orders. And if you don't make back your whole membership in savings, they refund you the difference. No questions asked.

GO GROCERY SHOPPING

THRIVE
— MARKET —

BRAND SPOTLIGHT

VEG´D KETCHUP

Ketchup Packed with Real Vegetables

Deliciously Flavored without Artificial Ingredients

Veg'd Ketchup is a delicious ketchup made with real vegetables, including tomatoes, butternut squash (organic), sweet potatoes (organic), carrots, beets, and maple syrup.

It contains NO high fructose corn syrup and no artificial ingredients or colors. And it has 50% less sugar and calories than leading organic brands. It is also certified gluten free and you can buy it in either a plastic or glass bottle, which is a nice option.

And, of course, it tastes like regular ketchup... just healthier.

"My husband and children love the taste. I love the 50% less sugar and all the good vitamins!"

SHOP KETCHUP

BRAND SPOTLIGHT

ZEGO FOODS

Tasty Allergen-Free Fruit & Seed Snacks

Specifically Designed to not Trigger Sensitivities

ZEGO is a brand born from necessity, as its founder, Colleen Kavanagh, and her family were juggling a variety of conditions from celiac disease and lactose intolerances to food allergies. Unable to find healthy snacks that accommodated more than just one or two common dietary restrictions, she decided to make her own. And she isn't stopping there.

ZEGO (Zest On the Go) currently offers a line of nutrient-filled snack bars and mixes that are specifically designed **not** to trigger food allergies or intolerances. They are also expanding into more oganic products that meet some pretty strict standards.

Their fruit and seed snacks are made from organic ingredients without things like peanuts, tree nuts, soy, dairy, egg, or gluten And all ZEGO foods are manufactured in a dedicated, gluten-free facility that is also free from the top 8 food allergens.

Despite taking such care with their ingredients and machinery, they still batch test their products to ensure there hasn't been any cross contact with allergens or gluten. They also test their entire product line to ensure it is free from glyphosate residue (Round Up)! They then post the test results on their website and link them to a QR code on the product's packaging for complete food safety transparency. Pretty cool, right?

SHOP HEALTHY SNACKS

"I LOVE these!! We have several allergy restrictions in our family and are so grateful for safe food options."

ZEGO
CONTAINS PEACE OF MIND

IN THIS CHAPTER

DETOXIFYING NUTRIENTS

DETOXIFYING NUTRIENTS

In the earlier food chapter, we mainly discussed the types of foods to remove from your diet and the healthier alternatives to replace them. But if you're trying to boost your immune system and help your body to lighten its toxic load, you'll also want to increase your intake of, or at least be sure you're consuming enough of, certain nutrients.

Because each person's body and diet are unique, the nutrients in which each person is deficient will vary. As a result, your body may need additional nutrients that are not discussed here. Conversely, you may not need to increase the nutrients that are.

That in mind, the chemically sensitive commonly find (through testing) that they are deficient in one or more of the nutrients we discuss.

Please work with your doctor or nutritionist to learn specifically the nutrients that are too low or high in your body, and the related foods you should remove from, or incorporate into, your diet.

SUPPLEMENTS VS. FOOD

Generally speaking, our bodies best absorb nutrients when they come from foods, rather than from supplements. There are a few reasons for this.

For starters, most supplements in the U.S. are made from synthetic ingredients, as opposed to real food ingredients. They often contain unhealthy fillers and additives. And they are often sold as "isolates", which means the nutrient has been separated (isolated) from its natural context.

Real foods naturally contain a complex mix of vitamins, minerals, enzymes, antioxidants, fat, fiber, micronutrients, etc. Nuts and seeds, for example, are naturally rich in B-vitamins and vitamin E, as well as iron, magnesium, potassium, zinc, calcium, and healthy fat.

By contrast, an isolate contains **only** the vitamin E or **only** vitamin B6, for example. It's missing everything else. But that "everything else" provides nutritional synergies that benefit our bodies and help us to digest and assimilate the nutrients.

In addition, when vitamins are consumed from synthetic supplements, instead of from food, they need to be broken down by the liver and converted to a natural form. If your body's immune system is already compromised and does not easily absorb certain nutrients (as is often the case for MCS sufferers), this transformation can increase the body's detox workload and may cause the chemically sensitive to react to the supplement.

And because supplements are highly concentrated with certain nutrients it is much easier to overdo it by taking in more than your body can handle. Super-dosing on zinc

or vitamin C can leave you chained to your bathroom with diarrhea and nausea, for example. But consistently super-dosing on vitamin D can lead to serious heart problems over time.

By contrast, it is pretty difficult to overdose on vitamins, minerals, or other nutrients with food alone.

It's also worth noting that for many of us, it can be difficult to get all the nutrients we need from food alone, so supplements **are** important. This is especially true when our bodies are compromised and our digestive system is overtaxed. This brings us to **whole food supplements**.

As the name implies, whole food supplements are made from real whole foods**. They are not isolates. You will never find a whole food supplement that contains only vitamin C, for example, because there does not exist a food on earth that contains only vitamin C.

All this to say, supplementation is helpful, even necessary. If you can get all the nutrients you need from food, great. But if you need supplements, choose whole food supplements over isolates, whenever possible.

*** Despite their source, whole food supplements are not a replacement for a healthy, balanced diet. They are, as the name suggests, supplemental.*

*As much as possible, try to consume nutrients in their natural form, meaning from whole foods rather than from supplements. Otherwise, **whole food** supplements, as opposed to **isolates**, are generally preferred.*

SEE THE DIFFERENCE?

Compare the nutrients from the vitamin B-3 isolate on the left to the vitamin-B complex from whole foods on the right. See the difference?

DETOXIFYING NUTRIENTS

Detoxification happens in two phases. In Phase 1, enzymes in our body neutralize toxins by converting them into less harmful ones. If these toxins, less harmful as they may be, are allowed to accumulate in the liver, they can still cause harm.

As a result, the job of Phase 2 detox is to further neutralize the toxins, converting them into a water-soluble form so they can be eliminated from the body.

With that context out of the way, let's talk about the nutrients that can help you to detoxify and strengthen your immunity.

B VITAMINS

B-vitamins are needed to support the pathways in Phase 1 detoxification. Foods rich in detoxifying B-vitamins include:

- **B1 (thiamine)**: nuts, seeds, beans, lentils, and nutritional yeast (which I sprinkle over salads, cooked veggies, rice, and popcorn. Yum!!)
- **B2 (riboflavin)**: broccoli, cabbage, brussels sprouts, spinach, asparagus, almonds
- **B3 (niacin)**: sunflower seeds, tahini (sesame seed paste), split green peas, brown rice
- **B5 (pantothenic acid)**: mushrooms (shitake & crimini), avocados, sunflower seeds, lentils, sweet potatoes, dried peas, broccoli, fatty fish
- **B6 (pyridoxine)**: spinach, avocados, potatoes, dried plums, bananas, sunflower seeds, sesame seeds, hazelnuts, pistachio nuts, amaranth
- **B7 (biotin)**: walnuts, almonds, oats, sweet potatoes, raspberries, cauliflower, onions, tomatoes
- **B9 (folate)**: beans, lentils, asparagus, spinach, broccoli, turnip greens
- **B12 (cobalamin)**: Best source is from animal products, but if you are vegetarian or sensitive to meat, dairy, and fish, consider supplementation.

  (The methylcobalamin form of B12 is easier for the body to assimilate.)

VITAMIN C

Vitamin C is a powerful antioxidant, helping our bodies to boost the immune system, fight disease-causing free radicals, and minimize damage to our cells.

Great sources of vitamin C include citrus fruits (oranges, grapefruits, lemons, limes) as well as kiwi fruits, pineapple, papaya, mango, and strawberries.

Vegetables high in vitamin C include bell peppers, broccoli, spinach, and tomatoes. (Yeah, tomatoes are technically a fruit, but we eat them more like veggies.)

VITAMIN E

Vitamin E is another a powerful antioxidant that helps to protect our cells and prevent chronic disease. It also helps to reduce inflammation in the body and strengthen our immune system. It's found in so many commonly eaten foods that boosting your intake should be pretty easy to do.

Great sources of vitamin E include: sunflower seeds, almonds, hazelnuts, beet greens, swiss chard, spinach, turnip greens, mustard greens, asparagus, chili peppers, butternut squash, pine nuts, olives, avocados, mango, sweet potato, and tomatoes.

CAROTENOIDS

Like vitamins C and E, carotenoids are a powerful antioxidant that help to boost our immune system, reduce inflammation, and protect against disease. Carotenoids are also a phytonutrient (a natural chemical within plants that protects them from germs, fungi, and pests) and give fruits and vegetables their yellow, orange and red colors.

Most of us immediately think of carrots as a great source of carotenoids. And we'd be right. However others include yellow and orange veggies such as butternut squash, pumpkins, sweet potatoes, as well as (yellow, orange and red) tomatoes.

Despite their color, dark leafy greens such as kale, collard greens, turnip greens and spinach are also a good source of carotenoids.

MAGNESIUM

Magnesium is an important mineral for our health and plays a role in flushing toxins from our body. Unfortunately, magnesium levels can easily be depleted when suffering from a chronic condition, such as MCS.

Great food sources of magnesium include almonds, pumpkin seeds, avocado, figs, spinach, chard, black beans, and bananas.

Beyond food, the chemically sensitive often report feeling an immediate decrease in symptoms after taking magnesium-rich Epsom salt baths.

While there is scientific debate surrounding the assimilation of magnesium through the skin (some say it works and others say the results are inconclusive), the bottom line is that if you feel relief from your symptoms after an Epsom salt soak, then it works for you. And if you don't consistently feel better after a soak, then perhaps it doesn't. No debate needed.

To give it a try, add 1 to 2 cups of Epsom salt to a hot bath (full-body or feet-only) and soak for 20 to 40 minutes. Epsom salt is inexpensive and can be found in most drug stores, supermarkets, health food stores, and (of course) online.

ZINC

Zinc is best known for fighting colds, but it is also an effective, immune-boosting antioxidant. Additionally, zinc helps to breakdown the carbohydrates we eat.

As carbs are a key source of energy for our body, low levels of zinc can affect our energy levels and contribute to chronic fatigue.

To help prevent colds and energy depletion, it's important to include zinc in our diets consistently - not when we're already feeling under the weather.

Great sources of zinc include whole grains, legumes (such as chickpeas and lentils), pumpkin seeds, cashews, and mushrooms.

SELENIUM

Selenium is another mineral that plays a key role in detoxification. While a deficiency in selenium is rare for most, it can be more common in those with chronic illnesses that hinder nutrient absorption, such as MCS.

Great sources of selenium include brazil nuts, chia seeds, sunflower seeds, pinto beans, navy beans, spinach, mushrooms, and oats (whole grain, not fortified).

BRAND SPOTLIGHT

DR. RYDLAND´S HERBAL FORMULAS

Herbal Remedies for Kids & Adults

Certified Organic & Wildcrafted

Parents often have a difficult time getting their kids to take an herbal remedy (or even taking it themselves) because they can taste pretty terrible. They often contain alcohol as well, which isn't ideal. Plus, herbs can be expensive to buy individually and, once you have them on hand, it's not easy to figure out how to mix and dose them.

Dr. Rydland, a board certified pediatrician and holistic practitioner, has formulated a line of pleasant tasting herbal remedies that are potent, safe, and consistently effective in treating common ailments.

His herbs are organic or wild crafted, ensuring they are free from pesticides and other chemical inputs. His formulas are also free from sugar, dairy, soy, gluten, fillers, and unwanted additives.

Dr. Rydland's herbal remedies are formulated to work in harmony with the body and to aid the healing process. And while they were crafted with children in mind, they are equally as effective for adults.

Immune Support, Detox, Digestive Issues, Cold & Flu, Ears & Eyes

SHOP REMEDIES

"Like always, Dr Rydland's stuff works like a charm. My 6 month old started having flu like symptoms and by day 3, he is back to his normal self."

Dr. Rydland's HERBAL FORMULAS by KidsWellness

BRAND SPOTLIGHT

NEW CHAPTER

Organic Whole Food Supplements

Fruits, Vegetables, Herbs & Mushrooms

New Chapter formulates all its supplements from real, whole food ingredients - fruits, vegetables, herbs, and mushrooms.

Each whole food supplement has been designed by a holistic practitioner and validated by a team of scientists. The products are all tested for heavy metals, adulterants, pesticides and residual solvents. They never add sweeteners and they are completely additive-free, meaning they don't use synthetic binders or fillers.

New Chapter's fish oil is 100% wild, sustainably caught Alaskan salmon. And all their multivitamins (including the vitamin complex formulas) are fermented with whole foods and beneficial probiotics, making them easier to digest and assimilate.*

** These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.*

NEWCHAPTER
Delivering the Wisdom of Nature

CoEnzyme B-Complex

VIEW ON AMAZON

Activated C Complex

VIEW ON AMAZON

Alaskan Salmon Fish Oil

VIEW ON AMAZON

IN THIS CHAPTER

DIGESTIVE ENZYMES

TROPICAL FRUITS

PROBIOTIC FOODS

PROBIOTIC SUPPLEMENTATION

PREBIOTICS

DIGESTIVE ENZYMES

As mentioned in the previous chapter, the chemically sensitive often have difficulty with digestion and, in turn, absorbing the nutrients from their diet. If you cannot absorb nutrients, your body will have a difficult time assimilating them, not to mention using them for detoxification.

Digestive enzymes help the body to break down proteins, fats, and starches, so we can more easily absorb their nutrients. While our bodies do make their own digestive enzymes, it's a tough job and if our system is overworked (which is not uncommon, even for the "healthy"), we may not produce enough.

Luckily, there are both foods and supplements that facilitate the process. These *consumable* digestive enzymes help to make nutrients more bio-available, while alleviating some of the digestive system's heavy burden.

***NOTE**: Not all MCS'ers can tolerate supplements, but based on several discussions I've read in the Facebook groups, digestive enzymes seem to be a welcome exception - particularly probiotics - and are widely used by the MCS community.*

In this chapter we will, ever so quickly, touch on tropical fruits as a digestive enzyme; however, we'll spend most of the time talking about food-based and supplemental probiotics, which tend to be the more common discussion on the MCS Facebook forums.

We'll then finish off with a quick chat about prebiotics, which are essentially the nutrients that feed the good bacteria (i.e. the probiotics) living in our gut.

TROPICAL FRUITS

Simply put, papaya, mango, pineapple and other tropical fruits contain enzymes that digest proteins. You'd have to eat quite a lot of the fruit to benefit from these enzymes, so supplements are helpful.

Most of the fruit-based digestive enzyme supplements that I've encountered during my research tend to be made from papaya or pineapple.

Do heed the warnings on the label, as these enzymes should not be taken when pregnant and can also interfere with certain medications.

PROBIOTIC FOODS

A healthy gut is key to a healthy immune system. Probiotics are live microorganisms that help to restore and maintain the balance of beneficial vs. harmful bacteria in the gut, keeping it healthy.

Fermented foods are a great source of probiotics. You'll find them in most health food stores and you can also make a few of them pretty easily yourself.

Here are the more popular fermented probiotic foods that are recommended for a healthy gut.

Sauerkraut

Most commercial brands pasteurize their sauerkraut (which kills the probiotics) and also add unwanted sugar, vinegar, and preservatives.

By contrast, the main ingredients in the beneficial (and OMG, so delicious) probiotic sauerkrauts are typically just cabbage and sea salt. Some brands may also throw in vegetables, such as carrots or onions, which is great. As a purist, I just love plain ol' cabbage and salt sauerkraut, but whatever floats your boat.

Kimchi

Kimchi is similar to sauerkraut, but is usually spicy. It also tends to include more veggies such as carrots, radishes, onion, garlic, ginger, and often fish sauce. If you're vegetarian or sensitive to fish, worry not. There are plenty of veg versions as well.

Kombucha

Kombucha is a lightly carbonated drink fermented from black or green tea - not from mushrooms, as commonly believed.

A main ingredient that is key to the fermentation process is yeast. Yeast is a distant cousin to mushrooms - both are fungi - and it's believed that this fungi connection may be what prompted this association with mushrooms. Some even call kombucha "mushroom tea". It is not.

All that to say, if you've been dismissing kombucha because you don't like the taste of mushrooms, it neither contains nor tastes like mushrooms.

Do note that some brands pasteurize their kombucha. As mentioned earlier, pasteurization kills probiotics, so again, check the label to make sure it says it is unpasteurized.

Miso

I looove miso. I use it to make soup all the time, but it's also amazing in salad dressings.

To make the soup, just dissolve 1-tbsp of miso paste in hot water. So simple.

Notice I said "hot water" and not "boiled water". This is because boiling will kill the beneficial bacteria in the miso. I usually bring the water to an almost-boil -- or accidentally to a full boil, if I'm being honest. (I can't help it, I'm a multi-tasker.)

Turn off the heat and let the water cool until it's still hot, but not "kill the bacteria" hot. (Will your burn your mouth on it?) Once cooled a bit, ***then*** add the miso and stir until dissolved.

I also use miso for full-on veggie soups, adding the miso at the very end. There's a little trick to this.

First, I toss the veggies into a soup pot, cover them with water, then bring it to an almost boil (or an accidentally full-on boil). Lower the heat and let the veggies simmer on low for about 20 minutes, then turn off the heat, so it cools a little, before adding the miso.

Here's the trick: I throw the miso paste into a coffee mug, dip the mug into the hot water, trying not to capture too many veggies in the process. I'll then dissolve as much of the miso as I can in the mug by stirring it and carefully pouring only the liquid bit back into the soup. I repeat this a couple times, until the paste is fully dissolved. (It only takes a minute or two.)

For those trying to avoid soy, you should know that miso is most often fermented from soy. You can find soy miso that is non-GMO at most health food stores. However, if you want to skip soy altogether, these same stores usually offer miso fermented from barley, rice, or chickpeas. Just be sure to check the ingredients, because (oddly) some of these alternatives still include soy, even if they're called "rice miso" on the label.

Kefir

For those who can tolerate dairy, kefir is similar to yogurt but with more beneficial bacteria. In fact, I eat kefir the same way I do yogurt: I mix it with fruit and nuts.

Most commercial kefir brands - and this goes double for yogurt - contain sugar and preservatives, so always check the label or consider making your own. If you do buy kefir, also check the label to see that it's made from unpasteurized milk, as the pasteurization will kill the probiotics.

It's also worth noting that while all kefir is probiotic, not all yogurt is. Further, many commercial yogurt brands often contain high fructose corn syrup and other unsavory ingredients. So at the risk of sounding like a broken record... always check the label, check the label, check the label.

Coconut kefir

Coconut kefir is a dairy-free alternative to milk-based kefir. The coconut version has some of the same bacteria as regular kefir, but with fewer probiotic strains.

Kefir recipes are just a Google search away, so you can make it pretty easily at home. Or just look for brands that do not contain added sugar or preservatives and have some of the more beneficial strains.

Kvass

Kvass is a drink fermented from barley or rye and it is definitely an acquired taste. I can barely handle the smell, but I've met people who swear by its benefits and by the fact that it's "not so bad once you get used to it."

I'm trying, I really am.

Those sensitive to grains can also find kvass fermented from carrots, beets, or other root veggies. I haven't tried root veggie kvass yet, but I'm guessing you may not need to hold your nose quite as tightly to take a shot of it.

PROBIOTIC SUPPLEMENTATION

In addition to fermented foods, you can also get your probiotics from a supplement.

You'll often see probiotic brands bragging about how many strains they include in their product. They'll say things like "most other brands use only 5 or 6 strains, but we have over a dozen!". As is often the case, this "more is better" mentality misses some very key points.

When it comes to probiotics, it's the **quality** of the strains that count, as well as **how well the strains interact with each other** (vs. compete with each other) in the gut.

So having billions of bacteria over a dozen strains can be great. Or not. It depends on the strains.

Think about this: If those bacteria are not strong and healthy, or have not been properly fermented, or the quality of how they are manufactured has otherwise been

compromised, or the strains compete with each other, then they are not going to support your gut in the way you need them to. **Strains and quality matter.**

Whether a probiotic requires refrigeration is not a determining factor of its quality. Many high quality brands can be found on the shelf in the non-refrigerated section of the supplements aisle.

A few highly-regarded brands in terms of quality manufacturing and strains include Bio-K, Dr. Ohhiria, and Natren. Some of their products are refrigerated and some are not.

Good to know

My online research suggests that you can't overdose on probiotics, but you can experience some pretty uncomfortable symptoms if you take too much, or when you're just starting out. People typically report temporary reactions such as: gas, bloating, diarrhea, constipation, headaches, an acne breakout, and/or a rash.

These side effects, as unpleasant as they may be, are often a sign that the probiotics are starting to work. The good bacteria are overtaking the bad bacteria and the battle can be a little intense at first.

If the symptoms are mildly uncomfortable, the recommendation is typically to ride it out. If they last longer than a couple weeks or are too uncomfortable, the advice I've seen says to lower the dosage until your gut acclimates, then slowly increase to the recommended dosage.

PREBIOTICS

Prebiotics are a type of soluble fiber that pass through our digestive system without being digested. The undigested fiber ends up in our colon, where it becomes food for our beneficial micro-flora, including the probiotics we consume.

In other words, the beneficial bacteria we add to our gut are **pro**biotics. The fibers that feed and nourish those probiotics, are **pre**biotics.

Prebiotic fibers are found in vegetables (usually raw) such as: chicory root, garlic, onions, leeks, dandelion greens, jicama, asparagus, and Jerusalem artichokes, which are also known as sunchokes or lovingly referred to as "fartichokes" thanks to their high fiber content. :)

***Side note**: If you've never had a Jerusalem artichoke, you are missing out, my friend. They look almost like ginger root, but taste like potatoes. So if you're diabetic or otherwise looking to curb your sugar intake, they are an excellent substitute for taters. Roast, boil, or sauté them - just like potatoes. I also put the in soups all the time... unless I'm cooking for a cute guy, in which case, I omit them. :)*

Prebiotics are also found in psyllium husk, in whole grains such as wheat, corn and barley, in under-ripened bananas and plantains, prunes (dried plums), the skin of apples, and in yacon syrup.

Depending on your diet, you may get enough prebiotics from food. But you can also supplement to increase your intake and promote even stronger gut health.

Good to know

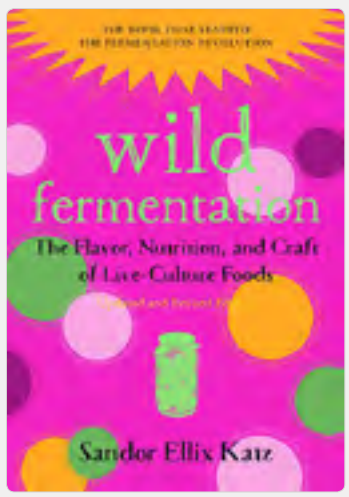
Fermented foods often contain both prebiotic fibers and a variety of probiotic strains. Some supplements, such as Dr. Ohhiria's, also have both prebiotics and probiotics, so you don' t have to buy them separately.

Dr. Ohhira's Probiotics Professional Formula

VIEW ON AMAZON

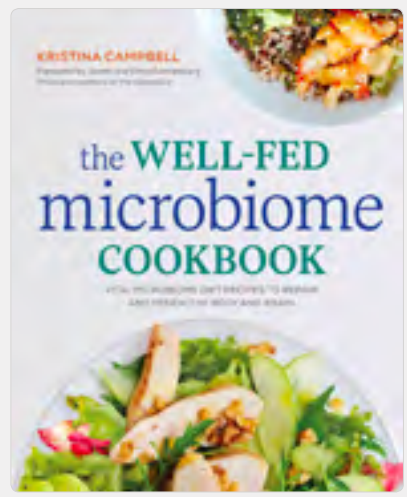
Dr. Ohhira's Probiotic Bar Soap

VIEW ON AMAZON



Wild Fermentation: The Flavor, Nutrition, and Craft of Live-Culture Foods

VIEW ON AMAZON



The Well-Fed Microbiome Cookbook: Repair and Renew the Body and Brain

VIEW ON AMAZON

IN THIS CHAPTER

DETOX SUPPORT

DETOX SUPPORT

BAKING SODA

Too frequently, I'll see posts in the MCS Facebook groups by folks who have just returned from a toxic environment and feel awful and don't know what to do. A common recommendation from other members is to drink some baking soda, diluted in water.

This easy concoction seems to help neutralize the reaction to some degree and alleviate at least some, if not most, of the discomfort.

When I first read this, my immediate thought as to why this works was because many toxins have an **acidic effect** on our bodies, thus lowering our blood pH. Conversely, baking soda has a strong **alkalizing effect** on the body, which would raise our pH and bring the body back into balance.

While there is plenty of information out there on the acid-alkaline diet, I couldn't find scientific evidence to back up my theory on why this helped to relieve MCS symptoms, as well as prevent its triggers.

However, I did come across some interesting and fairly recent research that indicates a daily dose of baking soda helps our body (specifically our spleen) to promote an anti-inflammatory environment and prevent our body from overreacting to **perceived** intruders (i.e. **perceived** toxins).

The study was focused on reducing "*the destructive inflammation of autoimmune diseases like rheumatoid arthritis*" and did not mention MCS, yet the results seem relevant.

Apparently, drinking the baking soda solution triggers the stomach to produce more acid in preparation for digesting the next meal. It simultaneously communicates to the mesothelial cells covering the spleen to not launch an immune response, when one isn't warranted.

These mesothelial cells, as it turns out, cover the outside of our organs like little spies, taking note of what's happening in the environment and letting the body know when it's being invaded. It's these cells that tell the body, "*Hey, the bad guys are here!*" and then trigger the body to preemptively retaliate with an immune response to fight the invaders.

The scientists who studied the effect believe that therapeutically drinking baking soda helps to keep an overtaxed body from responding more aggressively than it needs to. And this isn't just for those afflicted with various health issues; they have also shown positive anti-inflammatory effects in healthy people as well.

Their research has additionally shown that the response lasts roughly 4 hours.

The research didn't specify how much baking soda to drink. But discussions on the MCS Facebook groups indicate that folks tend to find relief from 1-2 teaspoons of baking soda in a regular 8-ounce glass of water.

I've also read blogs and Facebook posts by folks who swear by a super-dosing of vitamin C (sometimes intravenously with the help of their healthcare practitioner) alongside their baking soda concoction to help alleviate symptoms.

Many chemically sensitive also carry oxygen (by prescription) for both quick relief and preventative measures.

Regarding the baking soda, while some don't mind the taste, others can only handle it if they toss it back like a shot of tequila.

For those who cannot handle the taste or texture, you might opt for bi-carb tablets, which combine sodium bicarbonate and potassium bicarbonate in a vegetarian capsule. I have read some pretty rave reviews by those who have found this to be extremely effective.

IMPORTANT: People with hypertension or compromised heart or kidney should avoid alkaline salts.

And as a reminder, I'm just a research nerd, not a doctor, so please consult with your health practitioner before trying any new remedy.

Bi-Carb Supplements

VIEW ON AMAZON

Activated Vitamin C

VIEW ON AMAZON

Dr. Schulze's Bowel Detox

VIEW ON AMAZON

Dr. Schulze's Kidney Detox

VIEW ON AMAZON

SAUNA DETOXIFICATION – DOES IT WORK?

We humans have been sweating it out for therapeutic benefit since ancient times. From Roman and Turkish baths to the modern day sauna, we go to ease pain in both our bodies and our minds.

Beyond relaxation, the use of saunas for induced sweating has also been linked to improvements in cardiovascular health, as well as some skin and respiratory issues, such as the itching from psoriasis and wheezing from asthma, respectively.

While the use of saunas to improve various aspects of health and wellbeing is undisputed, there is at least one popular claim that isn't sitting well with many scientists and that is, detoxification.

The argument is that while, yes, small amounts of toxic metals are excreted through sweat, the majority of our toxins and other bodily waste is processed by the liver and kidneys, and then eliminated through our urine and stool. Since only a relatively small amount of waste is excreted through sweat, their argument continues that the use of saunas for detoxification is bunk. But this isn't the end of the story.

Those on the other side of the debate, who do believe in using saunas for detoxification, are not claiming that sweat itself is the main vehicle for toxin elimination. Instead, their argument is (essentially) that heating the body boosts detoxification efforts by the liver and kidneys.

Cutting through the technical details, here's a simplified version what they say happens:

1. Saunas raise our body temperature fairly quickly.
2. Our cardiovascular system responds to the stress by raising our resting heart rate, metabolic rate, and oxygen consumption. The effect is similar to how our bodies respond to moderate exercise. (On a related note, I'm guessing this is why sauna manufacturers also claim that saunas help with weight loss.)
3. This cardiovascular response triggers an increase in blood flow that, in turn, helps to release toxins that are stored in our fat cells.
4. The toxins are then transported by our blood to be metabolized by the liver, kidneys, and gastrointestinal (GI) tract.

While most studies focus on the cardiovascular benefits of saunas, there seems to be quite a bit of anecdotal evidence to support these effects of sauna detoxification. Naturopaths and western doctors alike regularly prescribe sauna therapy for detoxification with (anecdotally) positive results.

In addition, a quick search of "sauna" in the MCS Facebook forums will surface countless testimonials of people who rely on regular sauna therapy to keep their chemical sensitivities at bay. People who could barely leave the house after years of progressive MCS found they could finally go back to work and to other activities that help them to enjoy life again.

By the way, some chemically sensitive also use activated charcoal and/or zeolite clay (as tablets or mixed with water) after a sauna session to aid in drawing toxins from the

blood and eliminating them through the GI tract.

Do note that any medicines or supplements taken around the same time, may bind to the charcoal or clay and be eliminated. Therefore, you may want to take the charcoal or zeolite a few hours before or after taking your medication. (Which means you'll need to time your sauna session accordingly.)

It should also be noted that sauna therapy is typically part of a larger effort to detoxify the body and boost the immune system. Avoiding toxins around the home, in body products, and in food helps to lessen the burden placed on the body in the first place.

Simultaneously eating foods higher in nutritional value helps to boost the immune system, as does nutritional supplementation for those who can handle it. Exercising regularly is also recommended for those who are able.

The chemically sensitive may want to super dose with vitamin C and/or drink a baking soda solution after a sauna session to deal with any release of toxins during the session.

Will a traditional dry sauna work as well as an infrared sauna?

The research I've read indicates that, so long as the body is sufficiently heated, the cardiovascular system will respond.

Given this, it's safe to deduce that both the traditional dry sauna and the more modern infrared sauna provide similar benefits, including the possible promotion of detoxification. The difference seems mainly to be around the comfort level in doing so.

Dry saunas use a stove to heat the air to roughly 150 to 200°F. This ambient air warms our skin from the outside, so it takes a little extra time to raise our internal temperature and produce a vascular response.

By contrast, the radiant energy of infrared technology can penetrate our skin by as much as 1.5 inches (nearly 4cm), warming us from the inside and using only about 120 to 140°F to do so. The heat produced by infrared technology can, therefore, make us sweat faster and at a lower temperature than a traditional dry sauna, making it a more comfortable experience.

Ultimately, both types of saunas elicit profuse sweating and a cardio response, so whichever you have access to will be the best choice for you. That said there are some considerations to keep in mind if you're in the market to buy a new sauna or you are choosing which spa or gym to join.

Specifically, you'll need to keep in mind the materials from which the sauna is constructed, as well as the EMF (electromagnetic fields) it puts out.

Let's take a look.

CHOOSING A SAUNA

While saunas are sought for their copious health benefits, they are often made from materials that emit toxic fumes or harmful EMF. Obviously, that's not good, as you want to sit in a healthy sauna.

Through a bit of research, I was able to find a few brands that seem to be more thoughtful in the construction of their saunas. Here's what they use.

Wood saunas

Cedar and basswood are commonly used to build healthy sauna walls. Both are durable woods that resists cracking and warping from frequent heating up and cooling down of a sauna. And both are beautiful.

Cedar has been traditionally used, because it is highly durable and its oils are naturally anti-fungal and antibacterial, which is helpful for this hot, sweaty environment. Cedar wood is slightly aromatic, which most people enjoy. However the chemically sensitive may not be able to tolerate the light scent, so basswood saunas are sometimes offered as the alternative.

Native to North America, basswood is also durable and has nearly no scent. It is known to be hypoallergenic and non-reactive for the chemically sensitive.

Nordic spruce, pine, and hemlock are also commonly used sauna woods, as they tend to be more affordable. The chemically sensitive typically cannot tolerate the natural VOC emissions from pine, however I had a difficult time finding evidence that spruce and hemlock posed an issue.

In addition, I found contradictory claims regarding whether hemlock was or was not hypoallergenic and non-sensitizing. I wouldn't say this rules out hemlock, rather just be sure to ask plenty of questions of the manufacturer until you feel satisfied that their sauna is (or is not) the right purchase for you.

Beyond the wood itself, you want to make sure there is no chemical coating or glue that can off-gas as the sauna heats up.

Also, cheaply made saunas can emit high amounts of EMF (electromagnetic fields), so you'll want to make sure the one you choose uses low-EMF and/or EMF-canceling materials.

Portable saunas

Wooden saunas are wonderful, but they are large and may not work for every home. They can also be cost prohibitive.

Unfortunately, if you're looking for a smaller, portable at-home solution that is made from entirely non-toxic materials, you may be out of luck. After extensive research, I could not find a portable unit that I would feel safe to recommend, as most were made from polyurethane, PVC plastics, and other undesirable materials.

If you are aware of any portable units made from non-toxic, non-leaching, low/no-EMF materials, please let me know via email or social media and I will be happy to update this section.

SAUNA SAFETY

Regular sauna sessions, whether in an infrared or traditional sauna, are generally considered safe for most people and when used properly. That said, there are a few common sense precautions that everyone should follow.

Precautions

- Alcohol and saunas don't mix. Avoid alcohol before and after your session.
- Water and saunas **do** mix. Drink your usual 8+ glasses of water each day, plus an extra glass or two for each

15-minutes in the sauna to avoid dehydration.

- More is not better. A 15 to 30 minute sauna session is reasonable for most.
- Some people like to jump back and forth from a hot sauna to a cold pool. This can be stressful on your circulatory system and it's best to cool down gradually and not jump between hot and cold.
- If you begin to feel dizzy, nauseous, or otherwise unwell **during** your sauna session, don't tough it out. Your body is telling you to exit the heat. Please listen.
- Similarly, if you are feeling dizzy, nauseous, or otherwise unwell **before** a session, skip it. You can go tomorrow or the next day instead.
- Avoid the sauna if you have a rash or an open wound, as the heat can further irritate your skin.

Like any therapy, consult your healthcare professional before using saunas to treat any illness or condition.

Also, I've seen some websites say that saunas are safe for pregnant women, except in the early stages, where it may interfere with fetus development. Personally, that would make me wary to use a sauna at any stage of pregnancy. Please check with your doctor first.

Studies suggest that saunas can improve vascular function in patients with mild heart issues (as well as with no heart issues). However those with any degree of heart issue should check with their doctor before putting additional stress on their cardiovascular system.

For example, if you've had a recent heart attack or your body has a difficult time regulating your blood pressure, you're likely a no-go for the sauna.

BRAND SPOTLIGHT

HEAVENLY HEAT SAUNAS

Saunas for the Chemically Sensitive

FAR Infrared & Traditional Options

Heavenly Heat has been thoughtfully building saunas for the chemically sensitive since 1988. Their FAR infrared and traditional saunas are crafted with high quality, non-toxic materials and construction methods that are more demanding than for ordinary saunas.

Rather than focus on fast or mass production, Heavenly Heat focuses entirely on "purity".

Each sauna is hand-built in Arizona, using untreated white poplar (Aspen) for all wood parts. The framing is screwed together, rather than nailed and glued. And for the extremely sensitive, they offer mostly-glass units at no added charge.

The window gaskets are made of custom-milled poplar rather than synthetics. And the lights are made from metal and glass.

Each sauna uses a passive venting system for a constant air-change and a carbon filter to purify the air that leaves the sauna.

Many "low-EMF" carbon heaters are plastic with black cloth glued on. By contrast, Heavenly Heat's far-infrared heaters are made from ceramic-coated stainless steel and tested to minimize electromagnetic field (EMF) radiation. (The ceramic is a natural blend of clay and minerals.)

Since each sauna is made to order, you'll need to call Heavenly directly to discuss your particular needs and subsequent pricing: 1-800-697-2862.

Mention code greenopedia150 for $150 off

VIEW SAUNAS

THANK YOU

HELPFUL RESOURCES

APPENDIX

ABOVE ALL ELSE

1. Listen to Your Body

Every person is different and what may be completely tolerable for one can quickly trigger a harsh reaction for someone else. If you experience any discomfort or an indication that a particular product, ingredient, or practice isn't right for your body, discontinue use. Only you know your body and what it can handle.

2. Be Good to Yourself

When we're in pain, we'll often do just about anything and everything we can to relieve it. We might adopt a strict, even militant approach across every aspect of our lives. And in doing so, we may see results in our physical bodies. But we may also increase our mental stress in the process.

There is almost nothing more toxic and destructive to our long term health than stress. Obviously, do what works for your body. But don't forget to give yourself a break and enjoy life along the way.

Joy, pleasure, and peace are pretty powerful healers. Make time for you. Go for a walk, meditate, dance, treat yourself to an extra dessert, invite some friends over for brunch. Whatever floats your boat. Just be sure to do at least one thing a day that makes you happy!

ABOUT

GREENOPEDIA

In an ideal world, every product on store shelves would nurture our bodies and the environment. Each would be designed and manufactured in a way that protects the wellbeing of the workers and animals that created it. Every label would be explained clearly and simply. And every industry would be properly regulated to ensure the health, safety, and longevity of its stakeholders.

Unfortunately, we don't live in an ideal world and we can't wait for governments or brands to keep us safe. We need rely on our own knowledge and common sense to make safer, healthier and more sustainable choices. But there is a ton of information out there and it takes time to sift through it and figure it all out. And as important as it is, it isn't easy to set aside the time from our busy schedules to do it.

I started Greenopedia.com a few years ago to help busy people like you (and me) to better understand the foods we eat and the products we bring into our homes. My goal was to figure out how to navigate the endless stream of confusing labels and marketing claims that compel us to buy products... products that unfortunately harm our health, the environment, and the animals and workers who make those products possible.

Through my time and research, I found that there are plenty of safer, healthier and more sustainable alternatives that are just as convenient and effective as their unhealthier counterparts. Often times these smaller brands don't have the same budgets as multinationals, so their products just aren't as well-marketed or as widely available in stores. Luckily, most are available online with a bit of hunting.

So until the ideal world is a reality, I hope that you take advantage of my research efforts and enjoy what you learn. Please share the important stuff with friends and family, and connect with us on social media to contribute your knowledge, experience, and any questions you may have.

Wishing you the best in your healthy endeavors,

Sheryl Ryan

Founder & main contributor to Greenopedia.com

CONNECT

FACEBOOK GROUPS

You may find it helpful to join one or more of these Facebook groups to discuss challenges and share solutions.

Multiple Chemical Sensitivity: a place to share personal stories, find solutions, and help each other to cope

MCS Herbal and Nutritional Remedies: a group focused on nutrition, supplements, protocols, and holistic healing modalities for MCS recovery

EI Safe Housing: a network of people with environmental intolerances that try to help place others in safe housing

MCS Housing Community Discussion: general discussion of multiple projects for building MCS community housing developments

RESOURCES

INTRO / GENERAL INFO

https://www.aafp.org/afp/1998/0901/p721.html

http://discovermagazine.com/2013/nov/13-allergic-life

https://aehf.com/articles/treatment_options_mcs.html

http://www.ei-resource.org/articles/multiple-chemical-sensitivity-articles/the-seven-essentials-of-recovery-from-multiple-chemical-sensitivity-mcs/

https://www.ncbi.nlm.nih.gov/books/NBK234795/

http://www.chemicalsensitivityfoundation.org/pdf/What-Is-MCS-by-Ann-McCampbell.pdf

HOUSEHOLD CLEANERS

http://www.ewg.org/guides/cleaners/content/cleaners_and_health

http://www.cdc.gov/hicpac/disinfection_sterilization/3_3inactivbioagents.html

http://www.epa.gov/pesticides/factsheets/chemicals/bleachfactsheet.htm

http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=10&tid=2

http://www.ncbi.nlm.nih.gov/pubmed/16030526

http://www.ncbi.nlm.nih.gov/pubmed/22103288

http://health.state.tn.us/environmental/ammonia.shtml

http://householdproducts.nlm.nih.gov/index.htm

http://www.poison.org/poisonpost/feb2012/laundryprods.htm

http://www.health.ny.gov/environmental/emergency/chemical_terrorism/ammonia_tech.htm

http://earth911.com/news/2013/04/15/cleaning-vinegar-baking-soda-lemon/3

http://www.armandhammer.com/solutions.aspx

http://oconto.uwex.edu/files/2011/02/Baking-Soda.pdf

http://www.stanford.edu/dept/humbio/chem/pH.html

http://www.nytimes.com/health/guides/poison/baking-powder-overdose/overview.html

http://ipcblog.org/2010/01/05/the-top-5-things-you-didn%E2%80%99t-know-can-be-poisonous-to-children/

http://www.ewg.org/guides/substances/67

http://www.co.guilford.nc.us/planning_cms/docs/greentip/GreenTip18_cleaning.pdf

http://eartheasy.com/live_nontoxic_solutions.htm

http://www.ecoevaluator.com/lifestyle/cleaning/vinegar-is-an-amazing-green-cleaner.html

http://www.versatilevinegar.org/faqs.html

http://www.almanac.com/content/household-uses-vinegar

DEODORIZING YOUR HOME

https://www.ncbi.nlm.nih.gov/pubmed/18388369

http://www.epa.gov/ttn/catc/dir1/fzeolite.pdf

http://www.achooallergy.com/learning/why-winter-makes-indoor-air-quality-worse/

http://www.lung.org/our-initiatives/healthy-air/indoor/at-home/ventilation-buildings-breathe.html

http://www.lung.org/our-initiatives/healthy-air/indoor/at-home/how-to-know-if-your-air-is-unhealthy.html

http://www.lung.org/our-initiatives/healthy-air/indoor/at-home/keep-pollution-out-home.html

http://www.lung.org/our-initiatives/healthy-air/indoor/indoor-air-pollutants/

http://www.cpsc.gov/en/Safety-Education/Safety-Guides/Home/The-Inside-Story-A-Guide-to-Indoor-Air-Quality/

http://www2.epa.gov/indoor-air-quality-iaq/carbon-monoxides-impact-indoor-air-quality

http://www2.epa.gov/sites/production/files/2014-08/documents/moldguide.pdf

http://www2.epa.gov/indoor-air-quality-iaq/improving-indoor-air-quality

http://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/19930073077.pdf

http://www.aham.org/consumer/ht/d/sp/i/1074/pid/1074

http://www.nrdc.org/health/home/airfresheners/fairfresheners.pdf

http://oconto.uwex.edu/files/2011/02/Baking-Soda.pdf

http://iaspub.epa.gov/tdb/pages/treatment/treatmentOverview.do?treatmentProcessId=2074826383

http://www.care2.com/greenliving/exposed-the-shocking-truth-about-air-fresheners.html

http://greenbuildtv.com/resources/do-you-have-an-off-gassing-problem/

http://greenhomeguide.com/askapro/question/how-long-does-offgassing-continue-after-applying-normal-paint

http://www.epa.gov/iaq/voc.html

http://www.epa.gov/iaq/homes/hip-painting.html

http://www.epa.gov/radiation/docs/cleanup/nanotechnology/chapter-2-zeolites.pdf

CLOTHING & TEXTILES

http://sitn.hms.harvard.edu/flash/2015/gmos-and-pesticides/

http://global-standard.org/the-standard.html

http://www.apparelsearch.com/Education/Ohio_State_Clothing_Education/rayon_multi-faceted_fiber.htm

https://oecotextiles.wordpress.com/2013/01/10/chemicals-used-in-textile-processing/

https://www.kemi.se/files/8040fb7a4f2547b7bad522c399c0b649/report6-14-chemicals-in-textiles.pdf

https://www.sciencedaily.com/releases/2015/10/151023084508.htm

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.522.2436&rep=rep1&type=pdf

https://www.researchgate.net/publication/247782661/download

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5456784/

http://www.worldscientificnews.com/wp-content/uploads/2016/11/WSN-612-2017-98-109.pdf

https://d1cqrq366w3ike.cloudfront.net/http/DOCUMENT/SheepUSA/CharacteristicsOfWool.pdf

https://csiropedia.csiro.au/wp-content/uploads/2015/01/6229343.pdf

https://study.com/academy/lesson/textile-properties-of-linen.html

https://www.researchgate.net/publication/237548338_THE_FUNCTIONAL_PROPERTIES_OF_TENCELR_-_A_CURRENT_UPDATE

https://www.sciencedirect.com/topics/materials-science/hemp-fibers

https://oecotextiles.wordpress.com/2010/06/02/characteristics-of-hemp/

http://www.fabriclink.com/University/Hemp.cfm

TRULY CLEAN LAUNDRY

https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OPP-2005-0062-0004&contentType=pdf

https://youtu.be/F-FRpcyA8Qw

https://www.ewg.org/enviroblog/2016/05/watch-out-borax#.Wx7GFTNKjOQ

https://toxnet.nlm.nih.gov/cgi-bin/sis/search/a?dbs+hsdb:@term+@DOCNO+328

https://www3.epa.gov/pesticides/chem_search/reg_actions/reregistration/fs_PC-011001_1-Sep-93.pdf

http://www.co.guilford.nc.us/planning_cms/docs/greentip/GreenTip18_cleaning.pdf

http://www.ewg.org/guides/subcategories/53-FabricSoftener

http://eartheasy.com/live_nontoxic_solutions.htm

http://www.ecoevaluator.com/lifestyle/cleaning/vinegar-is-an-amazing-green-cleaner.html

http://www.versatilevinegar.org/faqs.html

http://www.realdiaperassociation.org/real-diaper-news/quarterly_article_sanders_our-in-house-cloth-diaper-washing-routine.htm

http://www.heinzvinegar.com/tips/laundry-room

http://www.ewg.org/enviroblog/2011/11/dont-get-slimed-skip-fabric-softener

http://eartheasy.com/live_nontoxic_solutions.htm

http://toxnet.nlm.nih.gov/cgi-bin/sis/search/a?dbs+hsdb:@term+@DOCNO+547

http://www.atsdr.cdc.gov/mmg/mmg.asp?id=304&tid=55

http://www.atsdr.cdc.gov/toxfaqs/tfacts174.pdf

http://www.dhs.wisconsin.gov/eh/chemfs/fs/chlorine.htm

http://www.ecoevaluator.com/lifestyle/cleaning/vinegar-is-an-amazing-green-cleaner.html

http://www.education.nh.gov/instruction/school_health/documents/disinfectants.pdf

http://www.heinzvinegar.com/tips/laundry-room

http://www.nlm.nih.gov/medlineplus/ency/article/002652.htm

http://www.versatilevinegar.org/faqs.html

HOME GOODS

http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1807-86212014000200014

https://earthdata.nasa.gov/user-resources/sensing-our-planet/volatile-trees

https://www.ncbi.nlm.nih.gov/books/NBK447098/

https://www.ncbi.nlm.nih.gov/pubmed/12079415/

http://www.aafa.org/page/dust-mite-allergy.aspx

https://entriways.com/2017/08/13/proven-ways-to-clean-thrift-store-and-other-pre-owned-furniture/

http://articles.chicagotribune.com/2012-12-28/news/ct-met-flames-test-mattress-20121228_1_tdcpp-heather-stapleton-chlorinated-tris

http://chej.org/wp-content/uploads/Documents/PVC/2009/Fact-Sheets/110909%20Our%20Health%20and%20PVC.pdf

http://healthychild.org/assets/WebinarSafeNurseryPPT_LoRes.pdf

http://healthychild.org/healthynurseryebook/

http://healthychild.org/pvc-unsafe-for-our-childrens-health-and-schools/

http://healthychild.org/sleep-safely-buy-pvc-free-mattress-covers/

http://watoxics.org/publications/hidden-hazards

http://www.nrdc.org/international/cleanbydesign/files/CBD_FiberFacts_Bamboo.pdf

http://www.ewg.org/enviroblog/2013/01/chitrib-finds-toxic-fire-retardant-crib-mattresses

http://www.greensciencepolicy.org/frequently-asked-questions#4

http://www.healthychild.com/safe-non-toxic-organic-crib-mattresses/

http://www.mercurynews.com/news/ci_22548340/calif-publish-new-flame-retardant-regulations

http://www.womensvoices.org/wp-content/uploads/2011/11/Mattress-Matters-11.2.11-final.pdf

POTS & PANS

https://www.drkarafitzgerald.com/2017/07/10/safest-cookware-choices-for-your-family/

http://whfoods.org/genpage.php?tname=dailytip&dbid=92

https://www.sciencedirect.com/science/article/pii/S1319610309000751

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3056430/

https://www.researchgate.net/publication/221971690_Risk_Assessment_of_Using_Aluminum_Foil_in_Food_Preparation

http://www.isca.in/rjrs/archive/special_issue2012/12.ISCA-ISC-2012-4CS-93.pdf

http://tibbs.unc.edu/ask-a-toxicologist-is-it-safe-to-use-teflon-pans/

http://www.porcelain-industries.com/sol-gel-thermolon-coatings

https://www.npr.org/sections/thesalt/2017/12/08/563808879/can-your-ceramic-cookware-give-you-lead-poisoning

http://www.environment.gov.au/protection/chemicals-management/lead/lead-in-ceramic-crockery-pottery-making

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5135532/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3685880/

http://www.madehow.com/Volume-1/Stainless-Steel.html

https://www.scientificamerican.com/article/why-doesnt-stainless-stee/

http://www.worldstainless.org/Files/ISSF/non-image-files/PDF/200seriesstainlesssteel.pdf

http://appft1.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&

Sect2=HITOFF&d=PG01&p=1&u=/netahtml/PTO/srchnum.html&r=1&f=G&l=50&s1=20070218297.PGNR.

http://www.productknowledge.com/intro-nonstick-coatings-kinds-of-coatings.html

https://www.electrochem.org/dl/interface/sum/sum08/su08_p31-34.pdf

https://www.calstatela.edu/sites/default/files/dept/chem/07summer/158/25-words-silica.pdf

http://www.essentialchemicalindustry.org/polymers/silicones.html

https://www.researchgate.net/publication/224938333_Determination_of_siloxanes_in_silicone_products_and_potential_migration_to_milk_formula_and_liquid_simulants

https://safbaby.com/is-silicone-in-baby-products-and-bakeware-really-safe/

https://ehp.niehs.nih.gov/1003220/

HAIR & BODY CARE

http://scienceline.org/2014/01/how-does-hair-conditioner-work/

https://www.hsph.harvard.edu/news/features/harmful-chemicals-in-personal-care-products/

https://www.ewg.org/skindeep/ingredient/701520/COCAMIDOPROPYL_BETAINE/#

https://www.ewg.org/skindeep/ingredient/705204/POTASSIUM_HYDROXIDE/#.W047oTNKhbh

https://www.drbronner.com/about/our-customers/making-the-best-soap/

http://botaniesoap.com/blog/the-truth-about-lye-and-organic-soap/

SALT: https://www.scientificamerican.com/article/how-do-salt-and-sugar-pre/

SALT: https://www.cell.com/cell-metabolism/fulltext/S1550-4131(15)00055-8

http://www.ewg.org/research/teen-girls-body-burden-hormone-altering-cosmetics-chemicals/cosmetics-chemicals-concern

http://safecosmetics.org/article.php?id=290

http://www.breastcancerfund.org/clear-science/chemicals-glossary/phthalates.html

http://www.fda.gov/downloads/Drugs/GuidanceCompliance%20RegulatoryInformation/Guidances/UCM294086.pdf

http://www.fda.gov/Cosmetics/ProductsIngredients/Ingredients/ucm128250.htm

http://www.niehs.nih.gov/research/supported/assets/docs/j_q/phthalates_the_everywhere_chemical_handout_508.pdf#search=phthalates

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4114011/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3545237/

FEMININE HYGIENE

https://www.forbes.com/sites/kavinsenapathy/2017/06/28/everyone-calm-down-about-chemicals-in-tampons/#2f5638615f00

https://www.womensvoices.org/feminine-care-products/detox-the-box/always-pads-testing-results/

https://www.nytimes.com/2017/05/24/well/live/period-activists-want-tampon-makers-to-disclose-ingredients.html

https://tampax.com/en-us/tips-and-advice/period-health/tampon-ingredients

https://www.rt.com/usa/319524-tampons-cotton-glyphosate-monsanto/

https://www.cnn.com/2015/11/13/health/whats-in-your-pad-or-tampon/index.html

http://time.com/4422774/tampons-toxic-cancer/

https://www.womensvoices.org/wp-content/uploads/2013/11/Chem-Fatale-Report.pdf

https://www.fda.gov/ICECI/ComplianceManuals/CompliancePolicyGuidanceManual/ucm123803.htm

https://www.seaspongecompany.com/pages/what-is-a-sea-sponge

https://menstrualcupreviews.net/sea-sponge-menstrual-soft-tampons-product-reviews/

https://drjengunter.wordpress.com/2016/05/18/glamour-gives-risky-period-advice-recommends-dangerous-sea-sponges/

CHEMICAL-FREE SEX

https://pubchem.ncbi.nlm.nih.gov/compound/Nonoxynol_9#section=Toxicity

https://www.npr.org/sections/health-shots/2012/02/06/146343080/what-spermicide-users-should-know-but-often-dont

https://badvibes.org/whats-in-your-lube/the-science-of-lubricants/

https://badvibes.org/whats-in-your-lube/other-common-lubricant-ingredients/

https://badvibes.org/whats-in-your-lube/lubes-effect-on-the-body/

https://www.ada.org/en/publications/ada-news/2018-archive/may/fda-warns-consumers-against-using-benzocaine-products

https://jamanetwork.com/journals/jama/article-abstract/387473

https://www.aasect.org/what-you-need-know-about-personal-lubricants

https://cen.acs.org/articles/90/i50/Studies-Raise-Questions-Safety-Personal.html

https://kinseyconfidential.org/safety-dance-sex-toy-safety-generation/

https://www.womensvoices.org/lubricants-womens-health/

https://jamanetwork.com/journals/jama/article-abstract/387473

https://www.ewg.org/skindeep/ingredient/703685/MAGNESIUM_CARBONATE/#.W0eomjNKhbg

http://ourlittleplace.com/multiple-chemical-sensitivity/jacki-s-story-of-multiple-chemical-sensitivity

http://www.mcsresearch.net/causes.htm

https://www.ncbi.nlm.nih.gov/pubmed/6153839

http://www.aafa.org/page/latex-allergy.aspx

https://cen.acs.org/articles/90/i50/Studies-Raise-Questions-Safety-Personal.html

https://www.ncbi.nlm.nih.gov/pubmed/2535978

https://scholarship.law.umn.edu/cgi/viewcontent.cgi?article=1093&context=lawineq

http://www.differencebetween.net/business/product-services/differences-between-lucite-and-plastic/

ESSENTIAL OILS

http://hopewelloils.com/safety.php

https://naha.org/assets/uploads/The_Quality_of_Essential_Oils_Journal.pdf

https://www.attia.org.au/get_library.php

https://www.doterra.com/US/en/essential-oil-safety-and-application-sensitivity-reactions-assess-sensitivity

https://www.doterra.com/US/en/essential-oil-production-distillation-solvent-extract

http://tisserandinstitute.org/safety/irritation-allergic-reactions/

http://info.achs.edu/blog/debunking-dangerous-myths-about-essential-oils

https://hopewelloils.com/chemical-sensitivity.php (testimony #2 at the bottom)

https://naha.org/explore-aromatherapy/about-aromatherapy/how-are-essential-oils-extracted

http://tisserandinstitute.org/highs-lows-gc-ms-essential-oil-analysis/

https://onlinelibrary.wiley.com/doi/pdf/10.1111/1541-4337.12006

https://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0032518/

https://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0032645/

https://www.mayoclinic.org/healthy-lifestyle/consumer-health/expert-answers/aromatherapy/faq-20058566

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5206475/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4483703/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3346404/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4170112/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3854496/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1360273/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5435909/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5327916/

http://www.scielo.br/pdf/rbca/v18n4/1516-635X-rbca-18-04-00629.pdf

https://www.oilsandplants.com/solventextraction.htm

https://scdlifestyle.com/2010/04/phenols-and-salicylates-what-they-are-and-why-it-matters/

http://authorscott.com/salicylate-sensitivities-essential-oils-need-know/

https://bmccomplementalternmed.biomedcentral.com/articles/10.1186/1472-6882-6-39

ELECTRICITY / EMF

http://www.who.int/peh-emf/publications/facts/fs296/en/

https://www.ncbi.nlm.nih.gov/pubmed/19398310

https://www.niehs.nih.gov/health/topics/agents/emf/

http://bemri.org/publications/natural-fields/427-natural-and-human-activity-generated-electromagnetic-fields-on-earth/file.html

http://www.who.int/peh-emf/about/WhatisEMF/en/

https://www.ncbi.nlm.nih.gov/pubmed/22315933

https://www.aao.org/eye-health/tips-prevention/should-you-be-worried-about-blue-light

https://www.degruyter.com/downloadpdf/j/phys.2012.10.issue-5/s11534-012-0094-z/s11534-012-0094-z.pdf

CLEAN DRINKING WATER

https://www.cdc.gov/nceh/lead/tips/water.htm

http://www.ei-resource.org/treatment-options/treatment-information/water-filtration-and-home-water-filters/

https://news.harvard.edu/gazette/story/2016/08/unsafe-levels-of-toxic-chemicals-found-in-drinking-water-of-33-states/

https://www.nrdc.org/stories/whats-your-drinking-water

https://www.ewg.org/research/mapping-contamination-crisis#.Wyw9RzNKhbg

https://www.ewg.org/release/toxic-nonstick-chemicals-contaminate-drinking-water-15-million-americans#.Wyw9VTNKhbg

http://wellowner.org/water-quality/arsenic/

https://www.atsdr.cdc.gov/toxprofiles/tp.asp?id=1117&tid=237

https://www.atsdr.cdc.gov/toxprofiles/tp200-c1.pdf

https://www.ewg.org/tapwater/bottled-water-resources.php#.Wy_MXjNKhbg

https://www.theseus.fi/bitstream/handle/10024/145601/Pham_Tung.pdf?sequence=1

https://www.ncbi.nlm.nih.gov/pubmed/24901634

https://www.ncbi.nlm.nih.gov/pubmed/24901634

https://www.cdc.gov/healthywater/drinking/public/water_quality.html

FOOD & DIET

https://drpompa.com/diet/basic-diet-plan

http://www.doctoryourself.com/mcs.html

http://www.ctds.info/mcs_nutrition.html

https://www.mcs-aware.org/food-intolerance/135-elimination-diets

https://www.mcs-aware.org/chemical-sensitivity/123-an-allergy-free-bedroom

https://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/food-labeling/additives-in-meat-and-poultry-products/additives-in-meat-and-poultry-products

http://diet.mayoclinic.org/diet/eat/whole-grains-vs-regular-grains?xid=nl_MayoClinicDiet_20160421

https://wholegrainscouncil.org/whole-grains-101/whats-whole-grain-refined-grain

https://wholegrainscouncil.org/definition-whole-grain

https://michaelpollan.com/reviews/how-to-eat/

https://www.hsph.harvard.edu/nutritionsource/carbohydrates/carbohydrates-and-blood-sugar/

https://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/whole-grains/

https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/refined-grains

https://draxe.com/elimination-diet/

https://nowleap.com/food-sensitivity/chemicals-and-additives/

https://www.diet-and-health.net/Diseases/ChemicalAllergies.html

https://www.helpguide.org/articles/healthy-eating/choosing-healthy-fats.htm

https://www.health.harvard.edu/staying-healthy/the-truth-about-fats-bad-and-good

https://www.health.harvard.edu/staying-healthy/coconut-oil

http://bmjopen.bmj.com/content/8/3/e020167.full

https://medlineplus.gov/ency/patientinstructions/000785.htm

http://www.pcrm.org/health/health-topics/essential-fatty-acids

https://healthyforgood.heart.org/eat-smart/articles/monounsaturated-fats

https://healthyforgood.heart.org/eat-smart/articles/polyunsaturated-fats

http://chronicfatigueandnutrition.com/vitamins-and-minerals/when-b-vitamin-metabolism-goes-wrong%E2%80%A6/

https://www.greatplainslaboratory.com/gpl-blog-source/2016/6/6/your-bodys-detoxification-pathways

https://www.diet-and-health.net/Diseases/ChemicalAllergies.html

http://www.whfoods.com/

https://draxe.com/

http://www.ctds.info/mcs.html

http://www.organicconsumers.org/Toxic/safe-fish.cfm

http://seafood.edf.org/common-questions-about-contaminants-seafood

http://worldwildlife.org/industries/farmed-seafood

http://animalwelfareapproved.org/consumers/health-benefits/

http://www.animalwelfareapproved.org/consumers/health-benefits/

http://www.sustainabletable.org/859/industrial-livestock-production

https://www.medicalnewstoday.com/articles/322769.php

DETOXIFYING NUTRIENTS

http://chronicfatigueandnutrition.com/vitamins-and-minerals/when-b-vitamin-metabolism-goes-wrong%E2%80%A6/

https://www.todaysdietitian.com/newarchives/030314p34.shtml

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4488002/

https://draxe.com/vitamin-b6-benefits/

https://draxe.com/vitamin-c-benefits/

https://www.fxmedicine.com.au/blog-post/nutrients-detoxification

https://www.sciencedirect.com/science/article/pii/S0925443904002807

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3942711/

http://health-matrix.net/2011/01/04/magnesium-the-spark-of-life/

https://www.westonaprice.org/health-topics/abcs-of-nutrition/magnificent-magnesium/

https://www.medicalnewstoday.com/articles/321627.php

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3654245/

https://draxe.com/zinc-benefits/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4303853/

https://link.springer.com/chapter/10.1007/978-1-4613-2529-1_9

https://www.oxfordvitality.co.uk/vitamin-b12-methylcobalamin-vs-cyanocobalamin

https://www.linkedin.com/pulse/20141030134109-209684125-cyanocobalamin-vs-methylcobalamin

DIGESTIVE ENZYMES

https://onlinelibrary.wiley.com/doi/full/10.1034/j.1398-9995.1999.00103.x

https://probiotics.mercola.com/probiotics.html

https://draxe.com/probiotics-benefits-foods-supplements/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4053917/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3424311/

https://www.ncbi.nlm.nih.gov/pubmed/9042042

https://chhs.source.colostate.edu/the-10-best-food-sources-of-prebiotics/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3705355/

https://isappscience.org/prebiotics/

https://www.youtube.com/watch?v=xjxYauok94Q&feature=youtu.be

https://www.health.harvard.edu/staying-healthy/gut-reaction-a-limited-role-for-digestive-enzyme-supplements

https://thewholejourney.com/do-digestive-enzymes-help-or-hurt/

https://www.biokplus.com/blog/en_US/bacteria--you/less-is-more-why-we-only-put-three-probiotics-strains-in-bio-k_1

https://drohhiraprobiotics.com/probiotics-research/

https://www.natren.com/probiotic-manufacturing.html

https://www.oncologynurseadvisor.com/colorectal-cancer/prunes-may-help-prevent-colon-cancer/article/654200/

DETOX SUPPORT

http://observer.com/2017/11/studies-prove-infrared-saunas-do-detox-body-contrary-to-wall-street-journal-claims/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3699878/

https://www.sciencedirect.com/science/article/pii/S073510970101467X

https://www.nature.com/articles/s41371-017-0008-z

https://www.health.harvard.edu/staying-healthy/saunas-and-your-health

https://www.hindawi.com/journals/jeph/2012/184745/

https://www.ncbi.nlm.nih.gov/pubmed/1007827

https://www.greatplainslaboratory.com/gpl-blog-source/2016/12/12/how-to-maximize-the-benefits-of-sauna-for-detoxification

https://articles.mercola.com/sites/articles/archive/2014/05/04/detoxification-program.aspx

http://www.altmedrev.com/archive/publications/16/3/215.pdf

https://www.ncbi.nlm.nih.gov/pubmed/22089658

https://www.researchgate.net/profile/Karin_Granstroem/publication/40760203_Underestimation_of_Terpene_Exposure_in_the_Nordic_Wood_Industry/links/563a3a3a08aeed0531dcabef/

Underestimation-of-Terpene-Exposure-in-the-Nordic-Wood-Industry

www.sciencedaily.com/releases/2018/04/180425093745.htm

http://www.pannaturopathic.com/multiple-chemical-sensitivity/