


5-STEP THYROID DETOX

A 5 step challenge to take back your health



By Dr. Emily Lipinski

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INTRODUCTION

Welcome to the 5 Step Detox for your Thyroid Challenge!

To detox, in the most basic definition, means to “abstain from or rid the body of toxic or unhealthy substances”. Nowadays, there are countless forms of detoxification and different pills and potions to use detox your body.

This 5 Step Detox for the thyroid is simple: to challenge you to remove the most toxic thyroid substances from your lives and begin healthy daily practices to improve thyroid function. The challenges are designed to be done for 30 days. Many of us have no idea that even though we think we are leading healthy lives, we are still exposing ourselves to chemicals on a daily basis that could be harming the thyroid. Additionally, we may be following conventional wisdom to obtain a result, without actually moving closer to our goal. A perfect example is the theory that to lose weight we can follow a simple formula of “less calories + more exercise = weight loss”. Not only has science debunked this theory for the general public, individuals with thyroid disease may even gain more weight if the exercise they are practicing is too intensive.

In the next few pages, you will find the 5 Step Detox For Your Thyroid. These steps include: water, food, your environment, body care and movement. Each step outlines the main chemicals that need to be avoided or optimal thyroid function plus some easy, practical steps to follow for improved thyroid balance. These are lifestyle changes that I have incorporated in my daily life and have personally found they have made a huge difference.

Although the challenges are to be completed over 30 days, I have made these changes permanent in my life. If you feel better after the month long journey, I encourage you to make the same permanent changes for your health.

As always, I hope this information helps you as much as it has helped me.

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Step 1 - Water



Adequate water consumption and hydration is key for good Health. That said, there is no “ideal requirement” for water intake. Although many individuals believe 8 glasses a day is best, needs will vary widely and can change based on body size, age, gender, health status, and physical activity levels. Additionally, environmental factors, such as high temperature and humidity levels, also influence water needs.

There are 2 main chemicals that can be found in our water that are harmful for the thyroid: Perchlorate and BPA. Fluoride, another chemical that may be harmful to the thyroid will also be noted, however there is a lot of controversy over fluoride in water and it can be tricky to navigate.

Perchlorate

The thyroid gland is the primary organ of perchlorate toxicity in humans. High levels of perchlorate in the urine have also been associated with lower levels of the T4 hormone in the body. Perchlorate, used in the manufacturing of many man made materials including batteries, gun powder, paint and rubber can accumulate in the water and soil. If you are serious about avoiding as much perchlorate as possible, installing a reverse osmosis water filter in your home, or drinking reverse osmosis water ensures the perchlorate has been filtered out of the water. Additionally, it appears that when one has adequate levels of iodine in their bodies, the effect of perchlorate is lessened. As I always, it is a good idea to have your urinary iodine levels tested. If levels are low, work with a health care provider to safely supplement with iodine.

BPA

Bisphenol A (BPA) found primarily in plastic bottles (and the lining of many canned foods) has been found to alter thyroid structure and act as an antagonist to T3 at thyroid hormone receptors. Most plastic water bottles contain BPA, which leaches into the water you drink. Bring your own water instead of buying bottled water. Use filtered water from your home and pour into a stainless steel or glass reusable water bottle for on-the-go hydration.

Make sure that if you purchase canned foods, look for BPA free cans!

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Fluoride

Fluoride has been added to the water in North America since the 1950's in an effort to reduce cavities in teeth. However, many people have questioned this practice over the years and wondered if it is doing more harm than good. There is no doubt that there is good evidence for fluoride helping to prevent tooth decay. That said, in a recent study published in the Journal of Epidemiology and Community Health shows fluoridation may be linked to low thyroid function. Interestingly, some previous medical approaches to treat hyperthyroidism (overactive thyroid) utilize fluoride to lessen thyroid activity. However, some studies have found that the level of fluoride commonly found in our drinking water should not affect thyroid function.

However, I truly believe that if fluoride is known to harm the thyroid, the adverse effects must be dose dependant. If you are someone, like myself, that drinks A LOT of water, I would encourage you to consider reducing your exposure to fluoridated water (at least some of the time).

Although Canada and the US has some of the safest drinking water in the world other chemicals and contamination still find their way into our water. The Environmental Working Group (EWG) has identified 316 contaminants in the public water supply, 202 of which are unregulated. Some of the toxins of concern include:

- Pathogens (bacteria, parasites, viruses)
- Heavy metals (copper and lead)
- Nitrate (from chemical fertilizers and smoke)
- Radon (radioactive gas)

Ensuring access to clean drinking water is such a key step to reduce your toxin exposure. Both the EWG has a great guide to choosing a water filter.

The Water Challenge

Over the next month, try to avoid using ANY plastic bottles. Make sure to fill up stainless steel or glass water bottles from home before you leave the house. If you don't already filter your water at home, consider investing in a water filter.



Unfortunately, only reverse osmosis will filter out perchlorate, but by using even a carbon counter filter you can still reduce exposure to chemicals. Some counter-top water filters do actually filter out fluoride, you just need to do your research (Brita filters do not filter fluoride).

Additionally, keep yourself hydrated this month! Again, there is no “magic number” of an ideal amount of water to drink per day as it is dependent on multiple factors. Pay attention to how you feel. Common signs of dehydration include headaches and constipation.

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Step 2 - Food



It was Hippocrates, known as the father of medicine, who said “let food be thy medicine and medicine be thy food”. There is no doubt in my mind that what we eat (or don’t eat) contributes to our health and wellness on multiple levels. Changes in the diet can yield incredible health effects over time.

In today’s world, there is so much more to think about than just the type of food we are going to eat. We have to consider the chemicals and pesticides that have been added to our food. Some of these substances can be quite harmful to the thyroid gland and should be avoided at all costs.

PCBs

PCBs are also associated with disrupting the thyroid gland. PCBs have been shown to harm the thyroid in many ways, including increasing antibodies and enlarging the thyroid. PCBs are a group of synthetic organic chemicals that can cause a number of different harmful effects. The manufacture of PCBs was stopped in the United States in 1977 because there was enough evidence that PCBs accumulate in the environment and cause harmful health effects. However, PCBs are slow to degrade and still exist in our environment. Sadly, the most likely form of exposure now is from contaminated fish- which is primarily farm raised salmon!

A study in the scientific journal Science found that farmed salmon had 8 times more PCBs than wild salmon! The least contaminated farm-raised salmon came from Chile and Washington State, and the most contaminated came from Scotland and the Faroe Islands between Norway and Iceland. Farmed salmon are fed a diet that is laden with PCBs. Ideally, choosing wild salmon is best- if you don’t have access to wild, ask where the salmon came from and buy accordingly. If you are going to eat farm raised salmon, don’t eat the skin of the salmon or the fat directly underneath it. That’s where the pollutants are most concentrated.



Dioxins

Similar to PCBs and Perchlorates, Dioxins are a byproduct of the manufacturing process. Dioxin exposure has been linked with reduced thyroid function and reduced production of the T4 thyroid hormone. Specifically, dioxin appears to affect female’s thyroid more than males. More than 90% of human exposure to dioxins is through the food supply, mainly meat and dairy products. Additionally, herbicides and pesticides contain dioxins. You can limit your exposure to dioxins by choosing organic dairy and meat products- and/or by reducing consumption of these dairy and fatty meats. Bottom feeding fish, like shellfish, may also contain higher levels of dioxins. So again, choose your fish wisely.

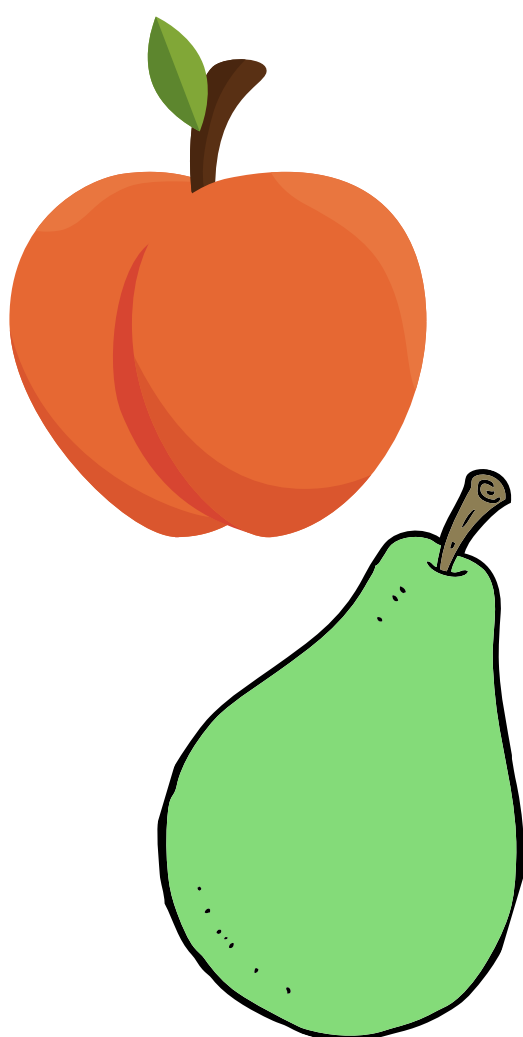
BPA’s

As discussed in yesterdays section of the Thyroid Detox, BPA’s are known to be harmful to the thyroid gland. BPA’s can be found in plastics and in the lining of canned foods. This means avoiding plastic water bottles is key, but it is also important to avoid storing foods in plastics, and especially re-heating our food in plastic containers! This allows the BPA to leach out into the food.

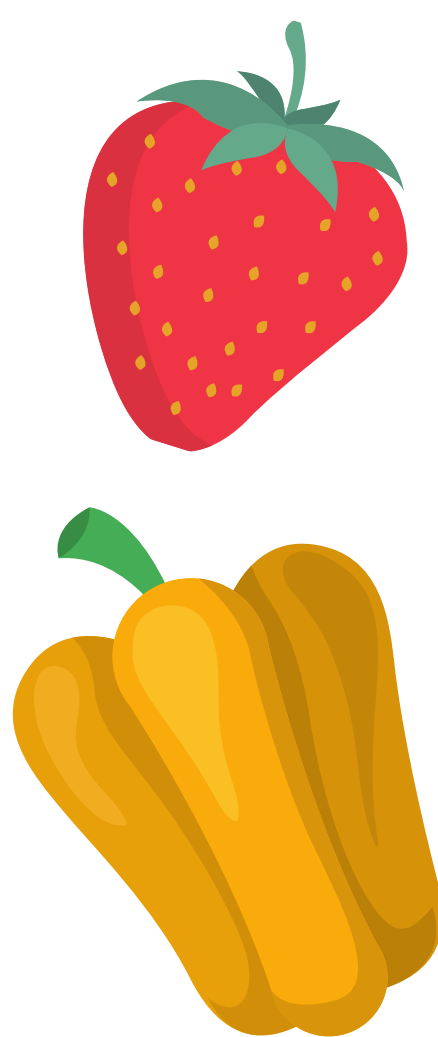
Pesticides

Not only do pesticides contain dioxins, but they also contain other chemicals that have been found to increase the risk of hypothyroidism in both woman and men. Eating a primarily organic diet is of course ideal, but if that is not an option for you then I would strongly recommend following “The Dirty Dozen” found on the Environmental Working Group’s Website. The 12 “dirtiest” foods are those that have been found to be most highly sprayed with pesticides and herbicides. By choosing to just purchase the organic option of these 12 foods, you will be significantly reducing your exposure to chemicals sprayed on foods.

The Dirty Dozen (2017)



- | | |
|--------------|--------------------|
| Strawberries | Cherries |
| Spinach | Grapes |
| Nectarines | Celery |
| Apples | Tomatoes |
| Peaches | Sweet Bell Peppers |
| Pears | Potatoes |



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Perfluorooctanoic acid (PFOA's)

PFOA's are primarily used in non-stick cookware. When you cook food in these non-stick pans, the chemicals are released into the food, interfering with thyroid function. PFOA's have been shown in studies to slow down the thyroid. Stainless steel, iron or copper coated pans are better options. There are also other non-stick cookware that is certified PFOA free. That said, my preference is stainless steel or cast iron as there may be other unwanted chemicals in the new non-stick cookware that we just haven't discovered yet!

The Food Challenge

Over the next month, commit to reducing your chemical exposure from food sources following these steps:

1. Buy as much organic produce as possible that is listed on “the dirty dozen list”.
2. Avoid farmed salmon
3. Chose organic meat and dairy and/or significantly reduce your dairy and meat consumption
4. Use “PFOA” free cookware, or better yet, a stainless steel or cast iron pan to cook the majority of your meals.
5. Store and reheat your food in glass or stainless steel containers. Avoid reheating your food in plastic at all costs!

Additionally, focusing on foods that benefit the thyroid can be helpful. You can find my article on “The Top 5 Beneficial Foods for Your Thyroid” on the Thyroid Truths blog!

Step 3 - Environment



Unfortunately, we are surrounded by toxins every day that can disrupt our hormones and health. We inevitably eat them, breathe them, sit on them and sleep in them. The good news is that there is so much we can do to reduce our toxic burden! First and foremost, it is important to learn about the chemicals that are most harmful to the thyroid and then eliminate them as much as possible from our living spaces.

The most essential chemical that needs to be known about for thyroid health and your home environment are Flame Retardants, also known as **polybrominated diphenyl ethers (PBDE's)**.

PBDE's have been suspected for years as a known thyroid disruptors. These chemicals are found in items such as mattresses, bedding, clothing (including baby clothes), computer and TV screens, furniture, carpet padding, and synthetic textiles. PBDEs contain bromine that has an affinity for the thyroid.

Flame retardants can mimic the structure of the thyroid hormone and therefore disrupt thyroid function. They displace T4 from the thyroid hormone binding proteins, preventing T4 from being transported in the blood.

It's not reasonable for most of us to effectively remove ALL the flame retardants in our home.

However, if we were to name one cheap, easy and top priority to change in your home, think of where you lay your head for 8 of every 24 hours, and consider investing in a **pillow made of natural materials**. Not only do we spend a large part of our time resting our head on our pillow, the pillow is also in direct contact with the thyroid/neck area. I have chosen a wool pillow, as they are comfortable and naturally fire retardant (so they do not require PBDE's being sprayed on them) however there are lots of different options to choose from.

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It is thought that it takes approximately 50-60 washes to effectively remove PBDE's from fabrics. Since I have learned this information, I have made even more of an effort to shop second hand clothing when possible. We live close to Toronto and there are a lot of fantastic second hand clothing stores around (for everyday and luxury items) but I have noticed many online second hand websites popping up as well.

Although PBDE's have been proven to negatively affect the thyroid, there are so many other toxins in our environment that are simply not great for the health. By reducing your toxic load in your home and removing the harmful chemicals, you can significantly reduce your exposure to these unwanted substances.

The Environment Challenge

Aside from potentially swapping your pillow for a flame-retardant free one, here are a few other ideas to detox your home environment to avoid other unwanted toxins in your home.

1. Take your outdoor shoes off at the door.

Removing your shoes actually decreases chemicals being spread around your home by reducing the spread of dust, lead and pesticides.



2. Keep some house plants in a few rooms in your home.

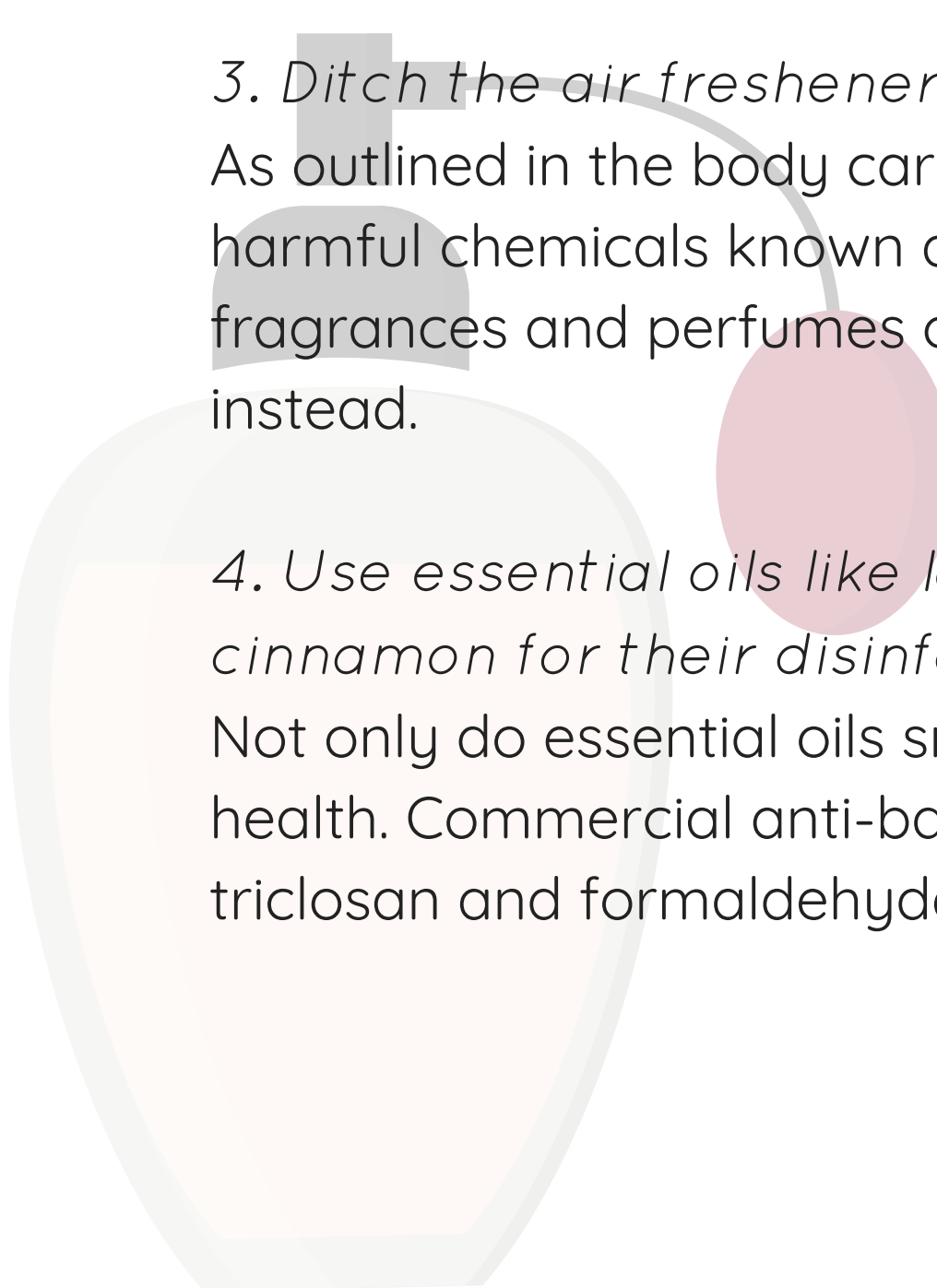
The soil bacteria that the plants sit in helps to reduce the volatile organic compounds (like formaldehyde) in the air. Additionally, some house plants may have additional air filtering abilities!

3. Ditch the air fresheners and other synthetic fragrances.

As outlined in the body care challenge of this detox, fragrances contain harmful chemicals known as phthalates. I recommend keeping all artificial fragrances and perfumes out of the home and using natural essential oils instead.

4. Use essential oils like lavender tea tree, eucalyptus, clove and cinnamon for their disinfectant properties.

Not only do essential oils smell great, they are so much better for your health. Commercial anti-bacterial products typically contain bad toxins like triclosan and formaldehyde.



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5. Switch to pure beeswax candles.

Most candles are coloured and scented, releasing chemicals when they are burned. Plus, many candles are petroleum based, containing and releasing toluene, benzene and ketones. Not exactly what I am going for when I am setting up candles for relaxing in the evening. Beeswax is natural, safe and smells great.

6. Use non-toxic DIY cleaning products.

Making your own cleaning products is super easy. I generally use baking soda, vinegar, soap, and essential oils.

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Step 4 - Body Care



Cosmetic and body care products like makeup, shampoos and fragrances may be more dangerous to the health than ever before. Health concerns due to the use of cosmetic products are at an all-time high. During the time period of 2004-2012, there were over 5000 health related complaints submitted to the FDA over the use of beauty products. Currently, cosmetics companies have no legal obligation to report health problems from their products.

Additionally, there are certain common chemicals that are found in body care products that are known to be harmful to the thyroid gland!

It is time to investigate what is in your beauty care products, and ditch the ones that contain triclosan and/ or phthalates. Here's why:

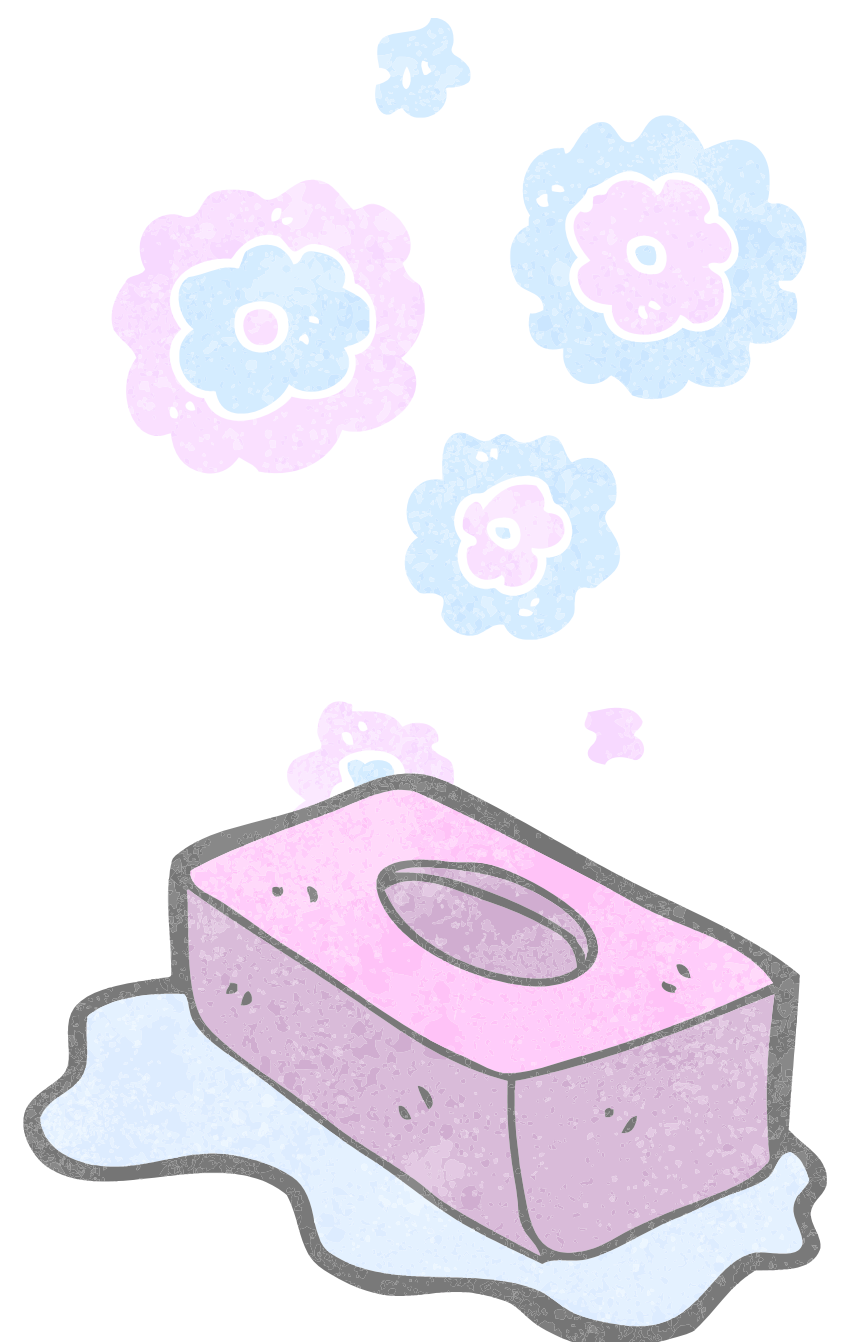
Triclosan

Studies have shown that Triclosan decreases the thyroid hormone T4, therefore lowering thyroid function.

Triclosan has actually been banned by the U.S. Food and Drug Administration (FDA) in certain products, after many years of controversy surrounding its safety. Although this chemical will no longer be present in a variety of soaps and body washes, it is still allowed in products ranging from hand sanitizers & toothpaste to sports helmets. Triclosan is not only found in many soaps and hand sanitizers but it is also disguised in many other consumer products. It is time to start reading your labels carefully!

Key terms to look for that should make you suspect triclosan:

- Antibacterial
- Odor-fighting
- "Keeps food fresher, longer"
- Triclocarban
- Biofresh
- Microban



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Phthalates

Found in many beauty products, Phthalates disrupt thyroid function by inhibiting the binding of the thyroid hormones to its receptors.

Fragrances or perfumes are often full of phthalates, but manufacturers aren't required to list the actual ingredients in fragrances because they're considered proprietary formulas. Perfume ingredients may smell good to some people (while giving headaches to anyone sensitive to the fumes), but studies are now revealing a slew of health issues due to exposure to phthalates. And for all you mom's out there- phthalate exposure has also been linked with Attention Deficit Disorder (ADD) and other behavioral issues in children.

Look for products instead that list the scents specifically, and those should be named as essential oils or labeled as "no synthetic fragrance" or "phthalate-free."

This means going through all your beauty products and ditching any of them that list "parfume" or "frangrance" in the ingredient list.

If you typically wear perfume, it's best to give it a rest, at least for the duration of this detox. Essential oils are a great alternative. I have used these exclusively for when I want to put on a little fragrance. Some of my favorites are lavender and rose.

Once you have effectively identified and removed any offending toxic products from your bathroom and replaced them with healthier alternatives, it is time to get the "lymph pumping" in your body to encourage detoxification.

Dry Skin Brushing

Dry skin brushing is a great way to help move some of the toxins out of your body. It is easy to do, and only takes about a minute or so before you hop in the shower.

How does dry skin brushing work?

The vessels of the lymphatic system parallels the cardiovascular system and exists between most cells in the body. The lymphatic system recycles a component from the blood known as plasma.



Additionally, it absorbs and transports fatty acids from the digestive system, transports white blood cells to and from the lymph nodes and bones and helps to REMOVE TOXINS from our body. Dysfunction in the lymphatic system can result in a blockage of lymph tissue and can lead to impair immune functioning and disease. DRY SKIN BRUSHING is a technique to assist the lymphatic system and increase circulation. Dry brushing is an excellent addition to your detox regime.

How do you dry brush?

Use a DRY natural bristle brush (can find these at a health food store or drug store) and gently brush it over your skin beginning at the extremities and brushing up towards your heart. It is best to dry brush before showering.

The Body Care Challenge

Over this next month, try out new “toxin-free” products that won’t stress the thyroid. Most health food stores or natural grocers will have many options to choose from that are much healthier than the typical products you find at the drug store.

Get dry brushing! Opt for a quick dry brush as many times as possible over the next month before you shower. Remember, it only takes a minute and it feels great!

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Step 5 - Movement



Most people don't like to talk about it, but one of the major way's our bodies eliminate unwanted substances is through bowel movements. Having at least 1 good (well-formed and easy to pass) stool is imperative not just for elimination but also for general wellness.

On the most basic level the essentials for good digestion have historically been (in both Eastern and Western Medicine) eating enough fiber, drinking enough water and moving the body.

Over the years I have seen many woman I know personally, as well as countless patients, committing themselves to an INTENSE exercise program that often contains a lot of cardio or running. I have found that patients with thyroid disease have particularly adopted these programs in hopes of losing the weight that they have gained with thyroid disease.

The problem is, research shows that intense cardiovascular exercise can reduce T3 levels in the body. The T3 hormone is responsible for metabolism. So, contrary to popular belief, too much rigorous cardiovascular exercise can actually make one GAIN weight (especially if already diagnosed with hypothyroidism).

That said, movement is essential to wellness and for detoxification. Exercise stimulates lymphatic flow, blood circulation and respiration- encouraging toxin removal from the body.

Additionally, sweating offers potential to assist with removal of harmful elements from the body.

The Movement Challenge

During this next month, the movement challenge involves ensuring that you are incorporating exercise 5 days a week that will be nourishing for your body.

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Given that intensive cardiovascular exercises have been shown to reduce thyroid hormones in the body, I am encouraging that during this time you choose activities that are gentler, still encouraging a slight elevation in heart rate and causing you to break a bit of a sweat but refraining from the “hard-core” exercise routines.

Some options for the movement challenge:

- Yoga
- Walking, Hiking or biking
- Swimming
- Weight training
- Dancing

Remember, not only does exercise have a myriad of benefits, moving your body is important for blood and lymphatic flow, helping to encourage the release of toxins from the body.



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CLOSING REMARKS

It is important to note that this information is not to be taken as medical advice, if you are experiencing symptoms of thyroid dysfunction, or you have thyroid disease, it is important that you are overseen by a health care professional.

After you have completed the challenge, I would love to know your experiences!

Feel free to reach out to me on:

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Wishing you health and happiness,

Dr. Emily

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