

THE DIRTY TRUTH

HIDDEN INDOOR TOXINS THAT ARE MAKING YOU SICK



THE DIRTY TRUTH

HIDDEN INDOOR TOXINS THAT ARE MAKING YOU SICK

Copyright © 2023 · Jonathan Otto and Health Secret, LLC

NOTICE OF RIGHTS: All rights reserved. Except as permitted under the United States Copyright Act of 1976, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of the author.

DISCLAIMER: The Author and Publisher have strived to be as accurate and complete as possible in the creation of this book. While all attempts have been made to verify information provided in this publication, the Author and Publisher assumes no responsibility for errors, omissions, or contrary interpretation of the subject matter herein. Any perceived slights of specific persons, peoples, or organizations are unintentional. In practical advice books, like anything else in life, there are no guarantees of results. Readers are cautioned to rely on their own judgment about their individual circumstances and to act accordingly. This book is an educational guide that provides general health information. The materials are “as is” and without warranties of any kind either express or implied. The book’s content is not a substitute for direct, personal, professional medical care and diagnosis. None of the protocols (including products and services) mentioned in the book should be performed or otherwise used without clearance from your physician or healthcare provider. The information contained within is not intended to provide specific physical or mental health advice, or any other advice whatsoever, for any individual or company and should not be relied upon in that regard. While every effort has been made to ensure accuracy, these contents should not be construed as medical advice, professional diagnosis, opinion, or treatment to you or any other individual, and are not intended as a substitute for medical or professional care or treatment.

THE DIRTY TRUTH

TABLE OF CONTENTS

Introduction	1
Toxic Personal Care Items	2
Baby Powder.....	2
Lipstick.....	3
Hair Dye.....	4
Sunscreen.....	5
Nail Products	7
Teeth Whitening Products	9
Facial Creams.....	10
Mouthwash	11
Skin Lightening Creams.....	12
Body Lotions & Moisturizers.....	13
Toxic Household Items.....	18
Bleach	18
Fabric Softeners.....	19
Mothballs	20
Toilet Bowl Cleaners	22
Air Fresheners.....	23
Toxic Kitchen Items.....	25
Oven Cleaners.....	25
Dishwashing Detergents.....	26
Non-Stick Cookware	27
Plastic Food Containers	31
Aluminum Cookware.....	33
Detoxing Your Body From Chemicals & Toxins.....	34
Getting Rid of Heavy Metals.....	34
Fulvic Acid: A Powerful Detoxifier	35
Studies on Fulvic Acid as a Powerful Heavy Metal Detoxifier.....	37
Conclusion.....	38
About Jonathan Otto	39

THE DIRTY TRUTH

INTRODUCTION



The current world that we live in is a dirty and toxic place, whether it be from food sold in supermarkets, the air that we breathe, or even within the walls of our very homes.

We are exposed to toxins on a daily basis, which in turn impairs our body's God-given natural ability to be able to regulate and heal itself. Daily exposure to these toxins lowers our quality of life.

Some toxins we can easily see and identify, but some are cleverly disguised as convenient items with toxic substances known to be linked to health risks.

Appearances can be very deceiving.

Common household and personal care items that we use or bring on a daily basis could actually be the underlying root cause of a chronic health condition such as chronic fatigue or shortness of breath.

These products or items often appear to be harmless to the naked eye, but they actually contain toxic ingredients or substances which is likely the root cause of chronic health conditions.

The information in this ebook is not meant to spread fear. I've compiled and written this information for you to equip you with the knowledge to be able to create better health decisions for your life.

In this ebook, we will dig deep and look into common kitchen, household, and personal care items that actually contain toxins that are harmful to you.

We will expose the toxic ingredients of each item, how it affects you and your health, and the possible alternatives which you can use.

TOXIC PERSONAL CARE ITEMS

Baby Powder

Baby powders are personal care products that can often be found in most travel, school, or office bags nowadays.

It is a soft, fine powder commonly made from talc or cornstarch along with other compounds that help keep the skin dry and comfortable, especially in areas of the body that are prone to moisture.

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

Baby powders have been reported to contain asbestos, a naturally occurring mineral that has been associated with serious health risks including lung cancer and mesothelioma.

Natural deposits of asbestos are occasionally found in close proximity to talc deposits. As such, baby powders have been reported to contain asbestos due to a lack of thorough processing or mining practices that neglect the careful segregation of talc and asbestos. The health risks and complications caused by asbestos are no joke, especially when the victim is an infant.

Prolonged inhalation of asbestos fibers can cause asbestosis, which is the scarring and inflammation of lung tissue. In the long term, asbestosis can significantly impact lung function and overall quality of life.

Mesothelioma is also a known health risk caused by prolonged inhalation of asbestos. Mesothelioma is an aggressive cancer that affects the lining of the lungs, abdomen, or heart.

SAFE AND NATURAL ALTERNATIVES

If you're looking for a natural alternative to baby powder, there are several options you can consider. Here are a few:

- 1. Cornstarch:** Cornstarch is a common natural substitute for baby powder. It has a soft and silky texture that can help absorb moisture and keep the skin dry.
- 2. Arrowroot powder:** Arrowroot powder is another excellent alternative to baby powder. It is derived from the roots of the arrowroot plant and has similar absorbent properties to cornstarch.
- 3. Baking soda:** Baking soda can be used as a natural alternative to absorb moisture and neutralize odors. However, it's important to use it sparingly and avoid applying it to broken or irritated skin.
- 4. Oat flour:** Ground oat flour can be soothing to the skin and provides a gentle, natural alternative to baby powder. It can help absorb excess moisture while also offering a calming effect.

- 5. Kaolin clay:** Kaolin clay, also known as white clay or China clay, is a natural mineral with absorbent properties. It can be used as a substitute for baby powder, providing a silky feel and helping to keep the skin dry.

Remember to do a patch test on a small area of your baby's skin to ensure they don't have any adverse reactions before using any alternative product. Additionally, consult with your pediatrician or healthcare provider for personalized advice and recommendations.

Lipstick

Nowadays, you'll find lipsticks in almost every single purse of a female, and some males even carry it around, too.

They come in various shades and colors and are primarily used to enhance one's personal appearance together with other makeup items.

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

Majority of lipsticks contain lead, a naturally-occurring heavy metal known to cause neurological, cardiovascular, and even reproductive damage.

Regarding the neurological aspect, studies have shown that lead, when ingested or absorbed by the skin, can impair cognitive function, decrease IQ levels, and can cause learning and behavioral problems among children.

The presence of this heavy metal in lipsticks was primarily due to its pigment and how its presence was able to achieve certain colors and opacity. Further, it also provided stability and contributed to the overall texture and appearance of lipsticks.

Although manufacturers have significantly decreased the amount of lead in lipsticks, it does not mean that it totally eliminated its use. Lead is still present in majority of lipsticks found in the market today.

Aside from lead, lipsticks have also been reported to contain mercury, another naturally-occurring heavy metal known to cause adverse health conditions.

The presence of mercury in lipsticks was due to mercury's chemical composition which allowed it to improve the texture and provide a smooth, glossy finish post-lipstick application. It was also used as a preservative that extended the shelf life of lipsticks.

Although the use of mercury is mostly banned in most countries, some manufacturers still include a small amount of mercury in their products.

SAFE AND NATURAL ALTERNATIVES

If you're looking for natural alternatives to traditional lipstick, there are several options available that provide color and nourishment without the use of synthetic ingredients. Here are some natural alternatives you can consider:

- 1. Lip stains:** Lip stains are a great natural alternative to lipstick. They typically contain plant-based pigments and botanical extracts that provide long-lasting color. Look for brands that use natural ingredients and avoid harsh chemicals.
- 2. Tinted lip balms:** Tinted lip balms offer a subtle hint of color while providing moisturization and protection for your lips. Look for products that use natural oils, waxes, and plant-based ingredients for hydration and a touch of color.
- 3. Lip oils:** Lip oils are gaining popularity as a natural alternative to lipstick. They are formulated with nourishing oils like jojoba, argan, or coconut oil, which help moisturize and add a subtle sheen to the lips. Some lip oils also provide a hint of color.
- 4. Homemade lip balm:** You can create your own natural lip balm using ingredients like beeswax, shea butter, coconut oil, and natural pigments such as beetroot powder or cocoa powder. This allows you to customize the color and ingredients to your preference.
- 5. Fruit or vegetable stains:** You can experiment with using the juice or pigment from fruits or vegetables as a natural lip stain. For example, beetroot or raspberry juice can provide a natural reddish tint, while carrot juice can offer an orange hue. Apply a small amount with a fingertip or brush and build up the color as desired.

Remember to read ingredient labels carefully, even for natural products, to ensure they meet your preferences and don't contain any potential allergens.

Hair Dye

Hair dyes are cosmetic products used to change the color of one's hair either permanently or temporarily. They are used primarily to enhance or change a person's overall appearance.

Although these cosmetic products may seem harmless from the perspective of the naked eye, they actually cause havoc at a cellular level.

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

A majority of hair dyes contain ammonia, a colorless gas that makes it possible for the color in hair dyes to penetrate the hair cuticle.

THE DIRTY TRUTH

Ammonia is dangerous to human health, especially when exposed to high concentrations either through inhalation or contact with the skin.

When inhaled, ammonia can cause irritation in the nose, throat, and lungs. Some symptoms include coughing, shortness of breath, and chest pain. When inhaled in high amounts, it can cause respiratory distress and damage to the airways.

Another toxic substance found in hair dyes is resorcinol, a chemical compound that is used as a colorant in hair dyes. Excessive or prolonged exposure to this substance on the skin or other parts of the body can cause endocrine disorders, skin irritation, and eye irritation.

Resorcinol is still present in a majority of hair dyes nowadays, particularly in permanent hair color formulations.

SAFE AND NATURAL ALTERNATIVES

- 1. Henna:** Henna is a natural plant dye that has been used for centuries to color hair. It comes in various shades, ranging from red to brown, and can provide a semi-permanent color. Henna is generally safe and can also condition your hair.
- 2. Herbal hair rinses:** Certain herbs, such as chamomile, sage, and rosemary, can be used to create hair rinses that may subtly enhance your hair color. These rinses are temporary and may require regular use to maintain the desired effect.
- 3. Tea or coffee:** Strong brewed black tea or coffee can be used as a natural hair dye. They can darken your hair or add subtle highlights. However, the effects may vary depending on your natural hair color.
- 4. Lemon juice:** Lemon juice can be used to lighten your hair naturally. Applying fresh lemon juice to your hair and exposing it to sunlight can create subtle highlights. However, lemon juice may have a drying effect, so it's important to condition your hair afterward.
- 5. Indigo powder:** Indigo powder, derived from the indigo plant, can be used in combination with henna to achieve darker shades like brown or black. It's a natural alternative that can provide longer-lasting results compared to henna alone.

Sunscreen

According to manufacturers, sunscreens are products designed to protect the skin from the harmful effects of the sun's ultraviolet rays (UV rays). They are usually available in the form of lotions, creams, powders, and sprays.

Further, they claim that sunscreens reduce the risk of sunburn, skin damage, and skin cancer caused by UV radiation.

THE DIRTY TRUTH

However, these alleged “protective” products also contain harmful toxic substances which can cause numerous skin issues.

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

Chemical UV filters such as oxybenzone and octinoxate are the main ingredients in sunscreens. These chemicals are designed to absorb UV radiation and convert it to a less harmful form.

However, studies have shown that excessive and prolonged exposure to chemical UV filters is likely to cause skin irritations and hormone disruptions. Specific adverse health effects include itching, rash, allergic reactions, and disruption of the endocrine system, thus interfering with the body’s natural hormone regulation process.

Further, world-renowned experts such as Dr. Adiel Tel-Oren stated that sunscreens severely impair the body’s natural ability to absorb thousands of nutrients from the sun.

SAFE AND NATURAL ALTERNATIVES

- 1. Clothing:** Wearing long-sleeved shirts, long pants, wide-brimmed hats, and sunglasses can provide physical protection from the sun. Opt for lightweight, tightly woven fabrics for better sun protection.
- 2. Shade:** Seek shade whenever possible, especially during peak sun hours between 10am and 4pm. Stay under umbrellas, trees, or other forms of shade to reduce sun exposure.
- 3. Natural oils with SPF:** Some natural oils offer low levels of sun protection. For example, coconut oil, raspberry seed oil, carrot seed oil, and wheat germ oil have been found to have natural SPF properties. However, their effectiveness can vary, and they may not provide adequate protection on their own.
- 4. Zinc oxide and titanium dioxide:** These mineral-based ingredients are commonly used in commercial sunscreens. You can find them in their pure form, as non-nano particles, and use them as a physical barrier to the sun. They may leave a white cast on the skin, so blending them with a moisturizer or carrier oil can help.
- 5. Antioxidant-rich foods:** Consuming foods rich in antioxidants, such as berries, green tea, tomatoes, and leafy greens, may help to protect your skin from the damaging effects of UV radiation. While they won’t act as a sunscreen replacement, they can provide some additional protection and support overall skin health.

AN EXPERT’S INSIGHT – **DR. JACK WOLFSON**

My name is Dr. Jack Wolfson. I am a board-certified cardiologist like my father before me. So, my father was a cardiologist. He was the first doctor of Osteopathic Medicine at the Cleveland Clinic, the first DO at the University

THE DIRTY TRUTH

of Iowa, and then he became the head of Cardiology at the Chicago College of Osteopathic Medicine. And I wanted to follow exactly in his footsteps, and I did that. I went to undergraduate at University of Illinois, and then I would do my medical training at Northwestern University, and then 3 years of Internal Medicine, 3 years of Cardiology in Chicago as well. After finishing up all that training, including being the Chief Cardiology fellow, so I headed up the program of cardiology trainees, I would then leave and join the biggest group in the State of Arizona as a hospital-based cardiologist. And I would be in that group for 10 years. In that 10 years, I would be recognized as one of Phoenix Top Doctors. I would be honored as the Director of Cardiac Rehabilitation, the Chairman of Internal Medicine, the Chairman of Cardiology.

I would again be a senior partner in a very large cardiovascular multi-specialty group with surgeons and cardiologists and nurse practitioners, and again, dealing with the sickest of the sick in the hospitals, doing angiograms and pacemakers and all the modern cardiology procedures. After 10 years in that, I would leave and start my own practice called Natural Heart Doctor, where the goal is to reduce and eliminate pharmaceuticals and dangerous procedures. The goal is to find the cause of why people get sick. The goal is the 100-Year Heart, and that's what we do at Natural Heart Doctor. My practice is currently located in Scottsdale, Arizona, but we also exist online virtually and consult with people from all over the world on all cardiovascular issues and more. The book called "The Paleo Cardiologist: The Natural Way to Heart Health" is my first book, and that was an Amazon bestseller.

When we don't get appropriate sunshine, that damages our immune system. When we are applying artificial toxic sunscreens and lotions to inhibit the sun's ability to come into our bodies, that's gonna lead to a problem on multiple different levels. Of course, the toxins and the sunscreen, the inhibition of Vitamin D absorption, the sun produces Vitamin D, highest levels of Vitamin D, lowest risk of everything including COVID. So you wanna make sure, again, that we are not listening to a lot of the people who tell us to avoid the sun because that is controlled opposition information where they are deliberately telling us information that will make us sick. The sun, we have been out in the sun since the dawn of human existence, whether you believe in the evolutionary version, the Biblical version or a combination thereof, the sun always came first. There was darkness and then there was light, and then humans came along a few days later. Again, don't listen to them regarding that. Physical inactivity is gonna weaken the immune system.

Nail Products

Nail products may be in the form of nail polishes, nail polish removers, base and top coats, nail treatment products, nail extensions, and nail care tools.

These products were designed either to keep our fingernails and toenails clean or to enhance their appearance by changing their shape or color.

Among these products, studies show that nail polishes contain toxic substances.

THE DIRTY TRUTH

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

Formaldehyde is a chemical that is found in most nail polish products. It is used either as a preservative to lengthen its shelf life or as a hardening agent.

The International Agency for Research on Cancer (IARC) has classified this substance as a human carcinogen, meaning that it is a substance that is known to cause cancer in humans.

Further, formaldehyde is also known to cause skin irritation, allergic reactions, and respiratory issues.

Another toxic substance found in nail products is a solvent known as toluene. This substance enables nail polishes to have a smooth finish and helps the color stick to the nails.

Inhalation or absorption of this solvent through the skin is known to cause neurological issues ranging from headache, dizziness, and fatigue. Long-term, it can cause neurobehavioral changes, including memory and concentration difficulties.

Pregnant women are also advised to avoid inhalation or skin contact with products containing toluene during pregnancy. Studies have shown that this solvent affects both the pregnant mother and the baby in several ways including increased risk of miscarriage, birth defects, and developmental delays, among other things.

Toluene can also be found in paints and paint thinners, adhesives, glues, cleaning agents, gasoline, spray paints, and aerosol.

SAFE AND NATURAL ALTERNATIVES

- 1. Water-based nail polish:** Water-based nail polishes are formulated without harsh chemicals like formaldehyde, toluene, and DBP (dibutyl phthalate). They are generally considered safer and have a milder odor. While they may not have the same long-lasting durability as conventional nail polish, they can provide a decent amount of color and are relatively easy to remove.
- 2. Peel-off nail polish:** Peel-off nail polishes are another alternative that can be gentler on your nails. They usually don't require nail polish remover to be removed. You can simply peel them off when you're ready for a change of color. However, keep in mind that frequent peeling can weaken your nails, so it's best to use this option sparingly.
- 3. Breathable nail polish:** Breathable nail polishes are designed to allow oxygen and moisture to pass through the polish to the nail bed. They can help promote healthier nails by reducing the risk of nail dehydration and brittleness. Look for brands that specifically advertise their nail polishes as "breathable" or "oxygen-permeable."
- 4. Natural nail polish brands:** Several brands specialize in producing natural and non-toxic nail polishes. These brands often avoid harmful chemicals and use more natural and plant-based ingredients. Look for

products labeled as “3-free,” “5-free,” or “10-free,” which means they are free from a certain number of harmful chemicals.

- 5. DIY nail treatments:** If you prefer a completely chemical-free option, you can try making your own nail polishes using natural ingredients like mica powder, beetroot juice, turmeric, or other plant-based pigments mixed with a clear base coat or a top coat.

Teeth Whitening Products

These products were designed primarily to lighten the color of teeth and remove stains or discoloration with the goal of improving the appearance of teeth by making them brighter and whiter.

They usually come in the form of whitening toothpaste, whitening strips, whitening gels, whitening pens, and even in-office whitening procedures performed by dentists.

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

Teeth whitening products generally contain bleaching agents as their primary ingredient, since these ingredients are responsible for the whitening effect. Examples of these include hydrogen peroxide, carbamide peroxide, and chlorine dioxide.

Gum irritation is one of the negative effects of using teeth whitening products. Signs of gum irritation include gums that appear to be redder than usual and inflamed, swelling, soreness, receding gums, and bleeding.

Enamel damage is another known side effect of exposure to the bleaching agents in teeth-whitening products. Enamel is the outer protective layer of the teeth. When exposed to bleaching agents, the enamel is damaged either by chemical erosion or dehydration of the enamel.

When the enamel is damaged, tooth sensitivity, discoloration, and even tooth decay are some of the known effects.

SAFE AND NATURAL ALTERNATIVES

- 1. Baking soda:** Baking soda has mild abrasive properties that can help remove surface stains on teeth. You can mix a small amount of baking soda with water to form a paste and brush your teeth with it. However, use this method sparingly as excessive use can wear down tooth enamel.
- 2. Hydrogen peroxide:** Hydrogen peroxide is a common ingredient in many commercial teeth whitening products. You can use a diluted solution of hydrogen peroxide (around 1.5% or 3%) as a mouthwash or mix it with baking soda to form a paste. However, it’s important to use it in moderation and avoid swallowing it.

- 3. Oil pulling:** Oil pulling involves swishing oil, such as coconut oil or sesame oil, in your mouth for several minutes. This practice is believed to help remove bacteria and plaque, which can contribute to teeth discoloration. However, the evidence supporting its effectiveness for teeth whitening is limited.
- 4. Fruit peels:** The peels of certain fruits, such as orange or banana peels, are believed to have teeth whitening properties. Rub the inner side of the peel on your teeth for a few minutes, then rinse your mouth thoroughly. The natural acids and enzymes in the peels may help remove surface stains.

Facial Creams

These skin care products are designed to help maintain the skin's moisture balance, improve overall texture, and resolve skin concerns such as acne.

In addition to hydrating the skin, some facial creams also promise to provide sun protection by adding to their formulations Sun Protection Factor (SPF) or chemical UV filters. A majority of these products also promise to add nourishment to the skin, alleging that their formulations include vitamins, antioxidants, peptides, and botanical extracts.

SAFE AND NATURAL ALTERNATIVES

- 1. Coconut oil:** Coconut oil is a versatile natural moisturizer that can be used on the face. It's rich in fatty acids that help lock in moisture and promote smooth skin. However, keep in mind that coconut oil can be comedogenic for some individuals, so it's best to patch test and see how your skin reacts before applying it to your entire face.
- 2. Shea butter:** Shea butter is a natural fat derived from the shea tree. It's rich in vitamins and fatty acids that can moisturize and nourish the skin. It's particularly beneficial for dry or sensitive skin and can be used as a facial moisturizer or as an ingredient in homemade creams.
- 3. Aloe vera gel:** Aloe vera gel has soothing and hydrating properties, making it suitable for various skin types. It can help calm inflammation, provide moisture, and promote healing. You can apply pure aloe vera gel directly to your face or look for products that contain high concentrations of aloe vera.
- 4. Jojoba oil:** Jojoba oil is a lightweight, non-greasy oil that closely resembles the skin's natural sebum. It can help balance oil production, moisturize the skin, and improve overall skin texture. Apply a few drops of jojoba oil to your face after cleansing for added hydration.
- 5. Rosehip seed oil:** Rosehip seed oil is derived from the seeds of rose bushes and is rich in vitamins, antioxidants, and essential fatty acids. It can help hydrate the skin, improve elasticity, and reduce the appearance of scars and wrinkles. It's best used as a facial oil, applied sparingly to damp skin.
- 6. DIY facial masks:** You can create your own natural facial masks using ingredients like honey, yogurt, mashed fruits, or oatmeal. These masks can provide hydration, exfoliation, and nourishment to your skin.

THE DIRTY TRUTH

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

Some facial creams on the market have been reported to have parabens, which are a synthetic group of preservatives largely used in cosmetics and skincare products to prevent microbial growth.

Studies reveal that Parabens are associated with contributing to weak estrogenic activity, breast cancer in some individuals who had long-term exposure to paraben, and decreased sperm production and function in males.

Petrochemicals are another known toxic substance that can be found in facial creams. These refer to chemical compounds derived from petroleum or natural gas.

Some facial creams contain petrochemicals due to their ability to reduce water loss and help lock in the moisture in the skin. Petrochemicals are the reason behind the silky smooth feeling of facial creams, making them easier to spread and apply to the skin.

Petrochemicals are known to cause skin issues, ranging from mild to moderate health effects such as skin irritation and inflammation to skin cancer in the long term.

Mouthwash

A liquid solution developed primarily for oral hygiene purposes. It is primarily used to freshen the breath and keep the mouth clean. Some common ingredients of mouthwashes include antiseptics, fluoride, antibacterial agents, breath fresheners, and astringents.

SAFE AND NATURAL ALTERNATIVES

- 1. Saltwater rinse:** A saltwater rinse is a simple and effective natural mouthwash alternative. Mix a half teaspoon of salt with warm water and swish it around in your mouth for about 30 seconds. Saltwater rinses can help reduce bacteria and inflammation in the mouth.
- 2. Herbal mouth rinses:** Certain herbs can provide natural antibacterial and antiseptic properties. You can make an herbal mouth rinse by steeping herbs such as peppermint, sage, thyme, or tea tree oil in warm water. Strain the mixture and use it as a mouthwash after brushing your teeth.
- 3. Baking soda rinse:** Baking soda has natural deodorizing properties and can help neutralize odors in the mouth. Dissolve a teaspoon of baking soda in warm water and use it as a rinse. However, be cautious with frequent use as baking soda can be abrasive and may affect the enamel if used excessively.
- 4. Hydrogen peroxide rinse:** Hydrogen peroxide can act as a natural disinfectant and can be used as a mouth rinse when diluted properly. Mix equal parts of 3% hydrogen peroxide and water, swish it around in your mouth for a short time, and then spit it out. Do not swallow the mixture.

- 5. Oil pulling:** Oil pulling is an ancient practice that involves swishing oil in your mouth to improve oral health. Coconut oil or sesame oil are commonly used for oil pulling. Swish the oil in your mouth for about 15-20 minutes, then spit it out and rinse your mouth with water.

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

Peroxide is an additional ingredient in some mouthwashes that promise teeth whitening as an additional effect. Although peroxide is considered generally safe, prolonged and continuous exposure to is known to cause tissue irritation, tooth sensitivity, and an upset stomach.

Phenol is an antiseptic agent found in most mouthwashes. It is a chemical compound that is also known as carbolic acid which has a distinct, sharp, and medicinal odor. Phenol should be used externally and should never be ingested.

Mouthwashes should be spat out after use. However, some individuals swallow the formulation, making them highly vulnerable to system toxicity.

Skin Lightening Creams

Skin-lightening creams are also known as skin bleaching or whitening creams.

These cosmetic products lighten or even out the skin tone by reducing the production of melanin, which is the pigment responsible for the color of the skin, hair, and eyes. Skin lightening creams are primarily used to address hyperpigmentation issues such as age spots, dark spots, acne scars, or melasma. They are also sometimes used for overall skin lightening to achieve a lighter complexion.

SAFE AND NATURAL ALTERNATIVES

- 1. Lemon juice:** Lemon juice contains natural citric acid, which has mild skin-lightening properties. Applying fresh lemon juice to dark spots or areas of hyperpigmentation can help lighten them over time. However, lemon juice can be drying, so it's important to moisturize your skin afterward and avoid excessive sun exposure.
- 2. Aloe vera:** Aloe vera gel has soothing properties and can help even out skin tone. It contains aloin, which has been shown to have mild skin-lightening effects. Apply pure aloe vera gel to the areas you want to lighten and leave it on for a few minutes before rinsing off.
- 3. Licorice root extract:** Licorice root extract is a natural ingredient that can help inhibit the production of melanin, the pigment responsible for skin color. Look for skin care products that contain licorice root extract or consider making a DIY face mask by mixing licorice root powder with aloe vera gel or honey.

THE DIRTY TRUTH

- 4. Turmeric:** Turmeric is a spice with skin-brightening properties. It contains a compound called curcumin, which has been shown to inhibit melanin production. You can mix turmeric powder with yogurt, honey, or aloe vera gel to create a paste. Apply it to your skin, leave it on for about 15 minutes, and rinse off.
- 5. Vitamin C:** Vitamin C is known for its antioxidant properties and its ability to inhibit melanin production. You can use a vitamin C serum or look for skin care products that contain vitamin C as an active ingredient. Regular use can help brighten the skin and reduce hyperpigmentation.

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

Some lightening creams on the market today contain harmful chemicals or metals, one of which would be mercury.

Mercury is a heavy metal found naturally in our environment. It has a silvery appearance and is the only metal that exists in a liquid state under normal conditions.

In some whitening creams, mercury is added due to its ability to inhibit melanin production.

When the production of melanin is inhibited, hyperpigmentation (such as dark spots, age spots, or melasma) is reduced. As a result, the skin tone lightens.

However, mercury is harmful to human health.

Among other things, mercury is known to be neurotoxic – meaning, it has a strong affinity to the nervous system and can damage nerve cells, impair cognitive function, and memory coordination, and can have long-lasting neurological impacts.

Another dangerous compound found in skin whitening products is a substance called hydroquinone.

Similar to mercury, hydroquinone is also used to reduce the production of melanin in the skin, reduce hyperpigmentation, and even out skin tone.

Among other things, hydroquinone has been linked to hypersensitivity reactions which may come in the form of allergic reactions, rash, hives, swelling, or severe itching.

Body Lotions & Moisturizers

These refer to skincare products formulated to moisturize and nourish the skin and are used primarily to address dryness, improve skin texture, and provide a smooth and supple feel to the skin.

Body lotions are available in various forms, including creams, lotions, gels, oils, and serums.

THE DIRTY TRUTH

They also leave a sweet fragrance behind when applied to the skin.

SAFE AND NATURAL ALTERNATIVES

- 1. Coconut oil:** Coconut oil is a versatile natural moisturizer that can be used on the body. It's rich in fatty acids that help lock in moisture and promote smooth skin. Apply a small amount of coconut oil to damp skin after showering for best results.
- 2. Shea butter:** Shea butter is a natural fat derived from the shea tree. It's rich in vitamins and fatty acids that can moisturize and nourish the skin. Shea butter is particularly beneficial for dry or sensitive skin and can be used as a body moisturizer.
- 3. Jojoba oil:** Jojoba oil is a lightweight oil that closely resembles the skin's natural sebum. It can help balance oil production, moisturize the skin, and improve overall skin texture. Apply a few drops of jojoba oil to damp skin and massage it in.
- 4. Aloe vera gel:** Aloe vera gel has soothing and hydrating properties, making it suitable for various skin types. It can help calm irritation, provide moisture, and promote healing. Look for pure aloe vera gel and apply it to your body as a moisturizer.
- 5. Cocoa butter:** Cocoa butter is a natural fat derived from cocoa beans. It's rich in antioxidants and has excellent moisturizing properties. You can use cocoa butter as a solid bar or in its melted form as a body moisturizer.
- 6. DIY body oils:** You can create your own natural body oils by combining different carrier oils like almond oil, olive oil, or avocado oil with a few drops of your favorite essential oils for fragrance. Mix them well and apply the oil to your body after showering.

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

Some body lotions contain parabens, which refer to a group of synthetic preservatives widely used in various cosmetic and personal care products.

Parabens help prevent the growth of bacteria, yeast, and mold while also extending the shelf life of these products.

Various studies have linked parabens to adverse health effects in humans including the hormonal imbalance, reproductive disorders, and an increased risk of cancer.

Further, although the fragrance in body lotions and moisturizers per se is not inherently toxic, world-renowned experts such as Dr. Trevor Cates have warned against using skincare products that are fragrant.

Accordingly, the synthetic ingredients that make the fragrance possible can cause skin irritation and allergic reactions. Even further, there is a lack of full ingredient disclosure among manufacturers.

THE DIRTY TRUTH

AN EXPERT'S INSIGHT – DR. TREVOR CATES

Dr. Trevor Cates: We can go more into the skin care products because it's probably something other people haven't been talking about as much.

Lori Otto: Yes, exactly. Okay, great. Wonderful.

Yes, I'd love that. It's just such a big situation and as women, we're very attached to our products whether it's makeup or skin care. I know that that was one of the last things I wanted to give up. Even perfume, that was a big one. It just feels so big. It feels so confusing, but it actually is a very simple process and it just takes this knowledge that you're about to give us. So, give us this knowledge.

Dr. Trevor Cates: Yeah, it's so true. As women we love our pampering. We love to have that process in the morning and the evenings and I don't think that we should have to give that up. I think that that is, if you enjoy, it keep doing it. We need to be mindful of what we're putting on our skin. I think there's been this misunderstanding, or just kind of maybe a blind eye to the fact that what we put on our skin it actually can get absorbed into the body. We see this when we look at tests and we see for example parabens which are in personal care products. We see parabens showing up in breast tumor tissue.

We see phthalates showing up in human samples and urine samples in most people tested. A lot of these come from the personal care products that we're using. Of course, we're exposed to toxins in our environment – in our water, in our food, in our homes, our cleaning products. There are a lot of different ways we're exposed to it, and our personal care products are one of the main ways we are. If you think about how many products do you use every day? Start thinking about it. The makeup, the sunscreen, the deodorant, the shampoo, the conditioner, the toothpaste, all of it. It becomes this sort of soup of ingredients and our bodies become this almost lab experiment. All these different things and how are they interacting?

And we do know there is research, more research coming out on endocrine-disrupting chemicals that are in personal care products. These hormone-disrupting chemicals that can actually bind hormone receptors and mimic or alter the way that they function. We really want to reduce our exposure to those. I mention parabens, that's one of the places, they have estrogen-mimicking effects. What you look for is on the ingredient label you want to avoid anything that has the word paraben at the end of the word. A lot of companies are actually taking these out which is really great news, but then what are they replacing it with? That's part of the problem.

Another big one to look for is fragrance. Anything with fragrance, unless it is made from organic essential oils or unless it's a natural fragrance, it's likely going to contain a number of different endocrine-disrupting chemicals. When the word fragrance is put on the label, they don't have to include all the things that are in ... But remember, there's a lot that goes into a fragrance. One of the examples I often time share with people is diethyl phthalate which is a type of phthalate. It's used in fragrance to help the smell last longer, but it is a known hormone-disrupting chemical and it does show up in human samples. This is one that we want to be particularly concerned of. You can definitely find products that are fragrance-free or they used organic essential oils instead.

THE DIRTY TRUTH

There are a lot of options out there now and I think those are two good places to start. I also want to talk about sunscreen because that's another big one that we're using. We're doing a good thing, we're trying to protect our skin from sun damage and protect from skin cancer. The problem is that a lot of these sunscreens have chemicals in them that have these endocrine-disrupting chemicals. For example, oxybenzone is an ingredient in a lot of sunscreens. Again, it's one that's starting to be pulled out so that's a good thing. But be aware of these ingredients and start looking at your labels. There are great resources. I talk about them in my book *Clean Skin from Within*. I talk about 20 different ingredients to avoid and the research behind that and then alternatives to those ingredients.

If you just start with the things that you use every day. I know you probably have a lot of things in your bathroom and maybe in your purse, too. Think about the things that you use every day because that's what your body is not getting a break from. Our bodies are really wise and its able to eliminate a lot of the toxins that we're exposed to. But when we're constantly being, we don't give our bodies a break from it that's when it becomes a problem.

Lori Otto: Problem, yes. Going back into the sunscreen, what is the reality with ... There's this, I guess, battle going on where we need the sun, we need to protect ourselves from the sun. The sun is bad, bad, bad. Wait, but it's really good because you get your Vitamin D. How much do we actually need sunscreen? Can you share about that?

Dr. Trevor Cates: Absolutely. I live in Park City, Utah which is high desert and we get a lot of sun exposure which means there's a high rate of skin cancer in Park City. I talk about this a lot because we love the outdoors, too. I love to run and ski and bike and do all these fun things outdoors. We do get health benefits from physical exercise, from being outdoors, the endorphins, and also like you mentioned the Vitamin D from getting that sun exposure and Vitamin D conversion in our skin, that's really beneficial for our health.

But we actually don't need a ton of unexposed skin in order to get Vitamin D. It depends on where in the world you live like how close to the sun are you? If you live closer to the sun, live closer to the equator, or you live high altitude like I do, you're going to need less sun exposure than somebody that doesn't. If you have darker skin you need a little bit more sun exposure than somebody that's fair-skinned. Typically, what I've seen from the research is that 3 or 4 days a week if you go out in the non-peak hours of the sun and you get 5, 10 minutes of sun exposure, just on your arms and legs without sunblock that's going to be enough to get Vitamin D.

Now, you could also get an easy blood work test. The 25-ydroxy Vitamin D is something easy that your doctor can add to your blood work and know if your Vitamin D level is low. If it's low, then you can take a supplement to get that extra Vitamin D. I do tell people because we get so much sun exposure on our face, our neck and the tops of our hands, especially for women, to go ahead and wear a hat, cover up as much as possible on those areas and use a zinc oxide-based sunblock. Even one with a tint is actually going to provide a little extra protection. If you have a tinted zinc oxide sunblock.

Choosing skin care products that are clean and made with natural organic ingredients is really important so you can avoid those hormone-disrupting chemicals. Even carcinogenic ingredients that are in skin care products.

THE DIRTY TRUTH

It's also important to remember, though, just because it's natural doesn't mean that it's going to work. You also want your skin care products to do things for you.

That was one of the things that my patients kept telling me when I was talking to them about, "Make sure you're using natural skin care products." And they would say, "But Dr. Cates, they don't work for me." Back when I started hearing this I started digging into the research and think, why aren't natural skin care products working because I know the healing powers of nature. I know there's some positive research, so what's going on? What is missing?

I realized that there are three things that are super important when you're looking for natural skin care products. First thing, they really do have to be clean. A lot of times products will call themselves natural. There's actually really no regulation around hypoallergenic or natural. These claims, they're just marketing claims. There's really no regulation around that for the most part. There is some around organic, but you have to really look at the products and make sure they truly are clean.

Then, the second thing is you want the natural ingredients to be active. A lot of times skin care manufacturers will throw in an ingredient and say it contains CoQ10, or it contains Vitamin E or argan oil. They're using that, again, for marketing and there's not actually enough of that product, or it's not in its pure form enough and supported by other natural actives to actually make a difference in your skin. You want there to be natural actives. Quality, quantity of ingredients, just like you'd want for your food or your supplements you want that for your skin care products, too. That's another big key why some of those natural products seem like they would work, but they don't.

The third thing a lot of people I think don't know about and that is the pH of skin care products. One of the biggest functions of our skin is to act as a barrier to the outside world. It has this mild acidity, this acid mantle that protects it from external invasion. When we're using skin care products, we actually want to use products that have a lower pH. The ideal pH range, research shows the ideal pH range for skin care products is 4.6 to 5. A lot of skin care products are actually over 5 and some are even much higher than that.



TOXIC HOUSEHOLD ITEMS

Bleach

A chemical agent common in household cleaning and laundry and used primarily for its disinfectant and whitening properties.

Sodium hypochlorite is its primary active ingredient. Bleach works by releasing chlorine, which acts as a powerful oxidizing agent. Through the oxidative process, it breaks down stains, dirt, and organic matter while also killing or inactivating many types of bacteria, viruses, or fungi.

Bleach is available in many forms including liquid, powdered, and tablets.

SAFE AND NATURAL ALTERNATIVES

- 1. Vinegar:** White vinegar is a versatile natural cleaner that can be used in various household cleaning tasks. It has mild antimicrobial properties and can help remove stains, odors, and mildew. Dilute vinegar with water in a 1:1 ratio and use it as a general cleaning solution. However, avoid using vinegar on porous surfaces like marble or granite.
- 2. Hydrogen peroxide:** Hydrogen peroxide is a natural disinfectant that can be used as an alternative to bleach. It can help kill bacteria, viruses, and mold. Use 3% hydrogen peroxide and apply it directly to the surface, or dilute it with water for milder cleaning tasks. Be cautious with colored fabrics, as hydrogen peroxide can act as a mild bleaching agent.
- 3. Baking soda:** Baking soda is a gentle abrasive and can be used as a scrubbing agent. It's effective in removing stains, deodorizing, and cleaning surfaces. Mix baking soda with water to create a paste and use it for scrubbing sinks, countertops, and other surfaces. It can also help absorb odors.
- 4. Lemon juice:** Lemon juice has natural bleaching properties and can be effective for stain removal and brightening surfaces. It's especially useful for removing stains from cutting boards, countertops, and fabrics. Dilute lemon juice with water and use it as a cleaning solution or apply it directly to the stain.
- 5. Essential oils:** Some essential oils, such as tea tree oil, lavender oil, and eucalyptus oil, have antimicrobial properties and can be used to freshen and disinfect surfaces. Dilute a few drops of essential oil in water and use it as a natural cleaning spray.

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

Bleach is a very dangerous substance to human health, regardless of whether the contact was through the skin, inhalation, or consumption.

THE DIRTY TRUTH

Regarding inhalation, bleach releases chlorine gas when it comes into contact with certain substances or other cleaning agents. When inhaled, it can cause adverse health conditions both short-term and long-term including pulmonary edema, asthma exacerbation, and irritation of the respiratory system.

Pulmonary Edema refers to a condition where fluid accumulates in the lungs which makes it difficult to breathe.

On the other hand, asthma exacerbation is an asthma attack or an asthma flare-up where symptoms of asthma worsen. When this happens, the respiratory tract narrows as a result of the inflammation.

Bleach also contains sodium hydroxide, also known as lye or caustic soda.

Direct skin contact with this substance is known to cause skin and eye irritations, burns, and even permanent tissue damage. When inhaled, caustic soda can cause permanent lung damage.

Fabric Softeners

Fabric softeners are common laundry products that are used to make clothes and other fabrics feel softer, have less static cling, and smell better.

Fabric softeners work by depositing a thin layer of chemicals that lubricates the fabric. And the chemicals that are most commonly used to achieve this effect are called quaternary ammonium compounds (quats). Quats are a type of cationic surfactants that carry a positive molecular charge, which enables them to cling to negatively charged surfaces, such as fabrics.

Through this process, the quats clinging and lubricating the fabrics reduce the stiffness and friction properties of the fabric, making it smoother to touch. Additionally, many fabric softeners today contain fragrance compounds that enhance the smell of fabrics.

Lastly, fabric softeners are typically available in two forms: in either liquid or dryer sheet form.

SAFE AND NATURAL ALTERNATIVES

- 1. White vinegar:** White vinegar is a versatile natural cleaner that can also act as a fabric softener. Add half a cup of white vinegar to your washing machine's rinse cycle or use it in a fabric softener dispenser. Vinegar can help remove soap residue, reduce static cling, and soften fabrics.
- 2. Wool dryer balls:** Wool dryer balls are an excellent alternative to fabric softener sheets. They help reduce static cling and soften fabrics by gently bouncing around in the dryer. You can use them with essential oils for a pleasant scent. Simply toss a few dryer balls into the dryer with your laundry.

THE DIRTY TRUTH

- 3. Baking soda:** Baking soda can help soften fabrics and reduce odors. Add half a cup of baking soda to your laundry during the wash cycle. It can help balance the pH of the water, resulting in softer and fresher-smelling clothes.
- 4. Homemade fabric softener spray:** You can create your own fabric softener spray using natural ingredients. Mix equal parts of water and white vinegar in a spray bottle and add a few drops of your favorite essential oil for fragrance. Shake well and lightly mist your laundry before drying.
- 5. Air drying:** One of the simplest and most natural ways to soften fabrics is to air dry them. Hang your clothes outside or on a drying rack, and they will naturally become softer as they dry. This method is particularly effective for delicate fabrics.

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

It is important to remember that fabric softeners use a combination of strong chemicals (quats, fragrances, preservatives, and colorants) to achieve its effects. And when these chemicals are combined, it can pose a serious hazard to human health.

First, the quaternary ammonium compounds or quats in fabric softeners are scientifically known to be associated with a broad range of health issues, such as skin and respiratory irritation and worsening allergy and asthma reactions.

Second, fabric softeners use a large amount of mixed artificial fragrances that can cause skin issues such as dermatitis and trigger respiratory issues like asthma and aggravate sinus conditions.

Third, the preservatives and colorants added to fabric softeners are also hazardous to human health. By definition, preservatives pertain to the chemicals added to prevent the growth of microorganisms, such as bacteria and fungi. Alarmingly, however, among all the preservatives added to fabric softeners, the most worrisome preservatives are methylisothiazolinone and glutaraldehyde, which are known to trigger skin asthma and skin allergies.

Meanwhile, colorants are additives used to give a specific color or tint to a product to enhance its visual appeal. Alarmingly, however, among artificial colors in fabric softeners, the colorant D&C violet 2 has been linked to cancer cases

Mothballs

Mothballs are small balls or tablets made from a combination of chemical substances that release a strong and distinctive odor, which is designed to repel insects and pests from damaging clothes, fabric, and other stored items that are prone to insect and pest infestation.

THE DIRTY TRUTH

Mothballs work by emitting a gas coming from the chemical called naphthalene, the most common active ingredient in mothballs. This works through what we call as sublimation, the process where a substance undergoes a conversion from a solid to gaseous state. Through this process, the naphthalene in mothballs sublimates into the air, releasing its distinctive and pungent odor that acts as a deterrent to pests and insects by overwhelming their olfactory senses.

Lastly, mothballs are available in several forms: solid balls, tablets, sachets, and powder.

SAFE AND NATURAL ALTERNATIVES

- 1. Cedar chips or blocks:** Cedar has a natural aroma that repels moths. You can place cedar chips or blocks in your closet or storage areas to deter moths from laying eggs on your clothes. Refresh the cedar periodically by sanding it lightly to release more of the natural oils.
- 2. Lavender sachets:** Moths are repelled by the scent of lavender. You can create sachets using dried lavender flowers and place them in your closets or drawers. Alternatively, you can use lavender essential oil on a cotton ball and place it in a small cloth bag.
- 3. Herbal repellents:** Other herbs like rosemary, thyme, mint, or cloves also have moth-repelling properties. You can create sachets using dried herbs or place small cloth bags filled with these herbs in your storage areas.
- 4. Vacuuming and proper storage:** Regularly vacuum your closets and storage areas to remove any moth larvae or eggs. Clean your clothes before storing them, as moths are attracted to dirt and stains. Store clothing in sealed containers or garment bags to prevent moth access.
- 5. Freezing:** If you suspect moth infestation in specific items, you can freeze them for a few days. Moth eggs and larvae cannot survive extreme cold temperatures, so freezing can help eliminate them. Place the items in a sealed plastic bag before freezing.

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

While naphthalene in mothballs is effective in repelling pests and insects, it is important to be aware of the hazards posed by naphthalene to human health:

Naphthalene is a chemical compound made from crude oil or coal tar. Furthermore, naphthalene is also found when things are burned, such as in cigarette smokes, car exhausts, forest fires, and so on. For that, naphthalene can be hazardous to human health. And the most common path that this chemical can be harmful to people is through our respiratory tract or by inhalation. When naphthalene is inhaled, it breaks down to alpha-naphthol, which is linked to the development of hemolytic anemia (a type of anemia characterized by the accelerated destruction of red blood cells, shortening its lifespan).

Additionally, the International Agency Research on Cancer (IARC) of the World Health Organization (WHO) concluded that naphthalene can possibly be carcinogenic to humans

Toilet Bowl Cleaners

These are common household cleaning items formulated to remove stains, grime, and mineral deposits from the inside of toilet bowls, leaving it disinfected and deodorized.

Toilet bowl cleaners have several ingredients that make the toilet bowl disinfected and deodorized, such as deodorizing agents, surfactants, and disinfecting agents. However, among all the ingredients, the most common and key ingredients are sodium hypochlorite (bleach) and hydrochloric acid (muriatic acid)

Scientifically, sodium hypochlorite is a strong disinfectant and stain remover that is effective against a wide range of bacteria, viruses, and fungi. Hydrochloric acid, meanwhile, is not a great disinfectant but is able to dissolve mineral deposits and tough stains.

As for how toilet bowl cleaners work, the active ingredients mentioned do the first work by chemically reacting with the unwanted substances, loosening their bond with the surface of the bowl. Afterwards, disinfecting agents kills the unwanted substances. Finally, deodorizing agents eliminate unwanted odors or scents from the toilet bowl, leaving behind a desirable odor.

Lastly, toilet bowl cleaners are available in several forms: liquid cleaners, gel cleaners, tablets or discs, and powder cleaners.

SAFE AND NATURAL ALTERNATIVES

- 1. Baking soda and vinegar:** Baking soda and vinegar can be used together to create a natural and effective toilet bowl cleaner. Sprinkle baking soda into the toilet bowl, then pour vinegar over it. The combination will create a fizzing reaction that helps to break down stains and mineral deposits. Use a toilet brush to scrub the bowl and then flush.
- 2. Borax:** Borax is a natural mineral compound that can be used to clean and deodorize your toilet bowl. Sprinkle some borax into the toilet bowl and let it sit for a while. Scrub with a toilet brush and then flush. Note that borax should be used with caution and kept out of reach of children and pets.
- 3. Lemon juice:** Lemon juice is a natural acid that can help remove stains and disinfect your toilet bowl. Squeeze fresh lemon juice into the bowl and let it sit for a few minutes. Scrub with a toilet brush and then flush. Lemon juice also leaves a fresh scent.
- 4. Hydrogen peroxide:** Hydrogen peroxide is a natural disinfectant that can be used to clean your toilet bowl. Pour hydrogen peroxide into the bowl, let it sit for a while, scrub with a toilet brush, and then flush. It helps to remove stains and kill bacteria.
- 5. Castile soap:** Castile soap is a natural and gentle soap that can be used to clean your toilet bowl. Add a small amount of liquid castile soap to the bowl, scrub with a toilet brush, and then flush. It helps to remove grime and leave the bowl clean.

THE DIRTY TRUTH

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

While toilet bowl cleaners are effective in accomplishing the purpose they were made for, it is also important to remember that as strong as it is to be able to clean a wide variety of unwanted substances, it can also be too strong and be hazardous to human health.

In fact, toilet bowl cleaners contain several potentially harmful chemicals to human health, such as hydrochloric acid, sodium hypochlorite, sodium hydroxide, cetrimonium chloride, and sodium lauryl ether sulfate.

All of these chemicals are corrosive chemicals that can be extremely dangerous if either inhaled, touched, or ingested.

It can cause irreversible damages to the eyes, skin, lungs, and other internal organs. And in severe cases, it can be fatal.

Air Fresheners

Air fresheners are common household products that are formulated to mask unpleasant odors.

It works by propelling volatile substances or molecules that easily change from liquid to gas into the air.

Volatile substances in air fresheners are composed of solvents that help dissolve and disperse fragrances in the air such as ethanol, isopropyl alcohol, and propylene glycol.

It is a common misconception that air fresheners kill the bad smells in the air. Instead, odor eliminators in air fresheners simply minimize the volatility of bad odors, making it harder to smell by masking it with pleasant fragrances.

The ingredient used to eliminate these odors is called cyclodextrin, a molecule that attracts and encapsulates odors, making them less likely to be smelled.

Air fresheners are available in several forms: aerosol sprays, solid or gel air fresheners, plug-in fresheners, reed diffusers, car air fresheners, and spray bottles.

SAFE AND NATURAL ALTERNATIVES

- 1. Open windows and ventilation:** One of the simplest and most effective ways to freshen the air is to open windows and allow fresh air to circulate. Ventilation helps remove stale odors and improves indoor air quality.

THE DIRTY TRUTH

- 2. Essential oils:** Essential oils are concentrated plant extracts that can be used to create natural air fresheners. You can add a few drops of your favorite essential oils to a diffuser or mix them with water in a spray bottle to create a room spray. Some popular choices for air freshening include lavender, citrus, eucalyptus, or peppermint essential oils.
- 3. Baking soda:** Baking soda is a natural deodorizer that can help eliminate odors in the air. Place an open container of baking soda in areas where odors tend to linger, such as near trash cans or in the refrigerator. Baking soda can absorb unpleasant smells and neutralize them.
- 4. Indoor plants:** Indoor plants not only add beauty to your space but also help purify the air. Certain plants, such as snake plants, pothos, or peace lilies, have air-purifying properties and can help remove toxins and odors from the air.
- 5. Homemade potpourri:** Create your own natural potpourri by combining dried flowers, herbs, and spices. Place the mixture in bowls around your home to release a gentle and natural fragrance.
- 6. Simmering spices:** Simmering a pot of water with aromatic spices can help infuse your home with a delightful scent. Combine ingredients like cinnamon sticks, cloves, citrus peels, or herbs in a pot of water and let it simmer on the stove. Be sure to keep an eye on the water level to prevent it from drying out.

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

Most air fresheners do not fully disclose the specific ingredients of their product. Most manufacturers label it vaguely as “fragrances” and “odor eliminators” because of an exemption from disclosure as a trade secret by the Food and Drug Administrator (FDA).

While there is nothing “illegal” with their actions, this prevents consumers from knowing the potential risks associated with these ingredients.

However, there are still ingredients known to be commonly used in air fresheners, such as 4-Dichlorobenzene, a volatile organic compound known to impair lung functions; acetaldehyde and formaldehyde, which are known to be carcinogenic and; parabens, which have been linked to breast cancer and hormone disruption.



TOXIC KITCHEN ITEMS

Oven Cleaners

Cleaning products designed to remove grease, grime, and baked-on food residues from the interior surfaces of an oven that regular cleaning methods might not be able to effectively remove.

The main ingredient commonly found in oven cleaners is a strong alkaline substance called sodium hydroxide, widely known as lye or caustic soda.

Sodium hydroxide is one of the strongest cleaning bases due to its high alkaline properties, which make it effective in dissolving fats, oils, proteins, and many other organic materials.

SAFE AND NATURAL ALTERNATIVES

- 1. Baking soda and vinegar:** Baking soda and vinegar are a powerful combination for cleaning various surfaces, including ovens. Make a paste by mixing baking soda and water, and spread it over the interior surfaces of your oven. Let it sit overnight to loosen dirt and grease. Then, spray vinegar over the baking soda paste, causing it to fizz and further loosen the grime. Scrub the surfaces with a sponge or brush, and wipe away the residue with a damp cloth.
- 2. Lemon juice:** Lemon juice is a natural acid that can help cut through grease and remove stains. Squeeze fresh lemon juice onto the dirty surfaces of your oven, focusing on areas with stubborn stains. Let it sit for about 30 minutes to an hour, then scrub the surfaces with a sponge or brush. Wipe away the residue with a damp cloth.
- 3. Vinegar and water:** A mixture of vinegar and water can be used as a general oven cleaner. Mix equal parts vinegar and water in a spray bottle and spray it onto the oven surfaces. Let it sit for a while to loosen dirt and grease, then wipe it away with a damp cloth or sponge.
- 4. Dish soap and water:** For lighter cleaning tasks, you can use a mixture of dish soap and water. Fill a sink or large container with warm water and add a few drops of dish soap. Remove oven racks and soak them in the soapy water. Wipe down the oven surfaces with the soapy water using a sponge or cloth. Rinse the racks and oven surfaces with clean water and dry thoroughly.
- 5. Steam cleaning:** Another natural way to clean your oven is to use the power of steam. Fill a heatproof dish with water and place it in the oven. Heat the oven to a high temperature (around 400°F or 200°C) for about 20 minutes. The steam generated will help loosen dirt and grime, making it easier to wipe away with a damp cloth or sponge.

THE DIRTY TRUTH

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

Sodium hydroxide is a strong alkaline substance, which makes it extremely corrosive.

To humans, it can cause severe burns and irritation to the skin, eyes, and respiratory system.

Another potentially harmful ingredient in oven cleaners is glycol ethers, such as ethylene glycol mono butyl ether or ethylene glycol monomethyl ether. These are solvents that dissolve grease and other residues.

However, prolonged and excessive exposure to these substances can lead to respiratory, liver, and kidney failure.

Dishwashing Detergents

Formulated for removing, cleaning, and deodorizing dishes, utensils, and cookware from food residues, greases, and other contaminants from its surfaces.

The main ingredient at work in dishwashing detergents is a surfactant. Surfactants are compounds that have a special property that enables them to interact with both water and oily substances.

Dishwashing detergents work by utilizing surfactants that allow detergents to carry both water and oils, making it easier to wash away oily and greasy substances.

Dishwashing liquids are available in various forms, whether it be liquid, tablets/pods, powder, or gel.

SAFE AND NATURAL ALTERNATIVES

- 1. Castile soap:** Castile soap is a gentle and natural soap made from vegetable oils. It can be used as a dishwashing detergent by mixing a few drops of castile soap with warm water. The mild formula is effective in cutting through grease and cleaning dishes.
- 2. Baking soda:** Baking soda is a versatile household ingredient that can be used for cleaning. It's mildly abrasive and can help remove stubborn food particles and stains from dishes. Sprinkle baking soda onto a damp sponge or directly onto your dishes and scrub gently.
- 3. Vinegar:** Vinegar is a natural acid that can help cut through grease and remove stains. You can mix equal parts vinegar and water in a spray bottle and use it as a pre-soak or rinse aid. Vinegar can also help remove water spots from glassware.
- 4. Lemon juice:** Lemon juice has natural antibacterial and grease-cutting properties. Squeeze fresh lemon juice onto your dishes or mix it with warm water to create a cleaning solution. Lemon juice can help remove stains and leave a fresh scent.

THE DIRTY TRUTH

- 5. Salt:** Salt can be used as a gentle abrasive to scrub dishes and remove stuck-on food. Sprinkle salt onto a damp sponge or directly onto your dishes and scrub gently.
- 6. DIY dishwashing detergent:** You can create your own homemade dishwashing detergent using natural ingredients. One simple recipe involves combining equal parts washing soda and borax. Mix the ingredients together and store them in an airtight container. Use a tablespoon or two of the mixture in your dishwasher's detergent compartment.

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

A common chemical found in dishwashing detergents is chlorine bleach, which is known for its disinfectant and whitening properties.

However, chlorine bleach is extremely corrosive. Prolonged exposure to this chemical can irritate and damage the skin.

Dishwashing detergents are also known to contain bleach or chlorine-based compounds to remove stains and sanitize dishes.

In small amounts, chlorine-based compounds and bleach do little to affect our health. However, prolonged exposure to this compound, especially on a daily basis, can cause health damage.

Non-Stick Cookware

Almost every household owns at least one non-stick cookware which may come in the form of pans, baking sheets, grill pans, woks, etc.

Non-stick cookware pertains to a type of cookware that has a special coating on its surface, a coating that prevents food from sticking during and after the cooking process. It makes food glide smoothly and the cleaning process more convenient.

This type of cookware is coated with a substance called polytetrafluoroethylene (PTFE), a synthetic fluoropolymer.

PTFE is a substance known for its non-stick properties, allowing easy flipping, tossing, and turning.

Non-stick pans are popular among consumers as the “healthier” option because using these pans requires little to no cooking oil.

SAFE AND NATURAL ALTERNATIVES

THE DIRTY TRUTH

- 1. Cast iron cookware:** Cast iron pans are a popular and durable choice. They are naturally nonstick when properly seasoned and can handle high heat. Seasoning involves coating the pan with a layer of oil and baking it, which creates a natural nonstick surface.
- 2. Stainless steel cookware:** Stainless steel pans are a versatile option and can be a safer alternative to nonstick cookware. They are durable, non-reactive, and don't release any harmful chemicals when heated. Although stainless steel may require some oil or cooking spray to prevent sticking, they can be a healthier choice for cooking.
- 3. Ceramic cookware:** Ceramic-coated pans provide a nonstick surface without the use of harmful chemicals. They are typically made from a clay base and coated with a ceramic glaze. However, it's important to choose ceramic cookware that is free from lead or other toxic substances.
- 4. Glass cookware:** Glass baking dishes and pans are a safe and non-toxic option for cooking and baking. They are non-reactive, easy to clean, and can be used in the oven or microwave. However, glass cookware may not provide the same level of nonstick properties as traditional nonstick pans.

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

All non-stick pans are coated with PTFE, often referred to as Teflon.

PTFE is a synthetic polymer that consists of carbon and fluorine atoms, which is responsible for the slippery layer non-stick pans are famous for.

PTFE, at very high temperatures (typically above 200 Celsius), begins to break down and release toxic fumes, specifically perfluorooctanoic acid, and other fluoropolymer particles. If inhaled, this can cause flu-like symptoms.

A telltale sign that your non-stick pan's coating is starting to break down is when you smell a distinct, chemical-like smell that may resemble a slightly acrid or synthetic scent that does not go away no matter how many times you wash it.

When this happens, the PTFE coating in your pans is most likely starting to break off and is also most likely mixing with your food.

THE DANGERS OF NON-STICK COOKWARE – EDDIE STONE

Eddie Stone: Well, when we think about toxins and those are critical issues right there. You've named some of the principal bad guys that we face. Let's make sure in addition to that list, we add cadmium, we add lead. So that we can make sure we're including those. And so for us as a company, in the research that we do and what we see, anything in this heavy metal category, but we can also add PFOAs. Those forever chemicals that we find in things like Teflon or anything that's non-stick or flame retardant, we can also add to that.

THE DIRTY TRUTH

Jonathan Otto: That's known as PFOA, is that the C8?

Eddie Stone: Yeah.

Jonathan Otto: PFOA C8 because I just got more educated through that movie, Dark Water.

Eddie Stone: Dark Water, that's right, Mark Ruffalo's movie.

Jonathan Otto: Yeah. And it was shocking to see that DuPont- I just did some more research on DuPont straight after watching the film. This was water off their back, they're still going, they have 39,000 employees. They're still going and they're still doing these things. And that movie ending was saying that PFOA C8 is estimated to be in 99% of the world's population. How's that even possible?

Eddie Stone: You fundamentally can't really find someone that you can test their blood or skin and not find C8. That's just the truth. You might find some super remote part of the globe, but considering how much this has gotten into the sort of the rainwater supply, it's just environmentally ubiquitous. And that story, I don't want to take us too far into this path, but that story, if you really look at the details, going back to the late 30s, early 40s, when DuPont was doing that research on creating a non-stick chemical, which ultimately became Teflon, they didn't even initially have all the necessary applications for what they wanted to use it for.

The non-stick cookware was sort of one of these items that came later. People don't even recognize that this non-stick environment is also utilized in the manufacturing of pharmaceutical products. They use it inside of the sleeves and tubing that feeds the powders that eventually become capsules and tablets. The exposure is so broad that it's just hard to think. Even someone like myself or yourself, that's educated on these matters, that tried to clean these things up out of our lives. It's just hard to imagine that we can.

And so in the case of DuPont, so I've gone down the rabbit hole of that quite extensively, I live reasonably close to Parkersburg, West Virginia, where this all initially started. And it was just denial for a decade upon decade about what this was doing, not just to plant workers, but also what was happening to the local communities and the water runoff and the rivers where the waste from manufacturing the Teflon was coming from.

And eventually when they lost their litigation, which is outlined in the movie, there's also books, papers, there's a lot of great information out there. They found a sweetheart political deal in the state of North Carolina, where I live, where they were able to basically change their name to Chemours and start another division that while they don't call it C8, it's called GenX. And lo and behold, decades later in my states, we have entire regions where the groundwater is so toxic that they're not allowed to use it or encouraged not to use it in their households even to flush their toilets.

And so they rely on the municipalities to supply them external water, but there's no work or no punitive legislative action being taken to force them to clean the water up, or even pay some type of penalty that would matter in the scope of the billions of dollars that they utilize. Now, listen, I appreciate the modern world we live in and flame

THE DIRTY TRUTH

retardant materials, that makes sense to me, we're talking about things associated with airplanes or whatever happens to be, but just the lack of management or control of these things is one of those things that's disturbing for me.

I'm not out here trying to change the world politically, that's not my focus. What I am focused on is awareness. And then having tools for myself, my family, and my company that we can use to sort of help manage our exposure. We can't eliminate it, but we can do some things to limit the damage and encourage and help—the human body's brilliant—and encourage the body to help dispense of these chemicals.

Jonathan Otto: That's a good point. So I think that the key there is to understand that these were so injurious, these types of toxins. For example, C8, PFOA C8, was used I believe to coat tanks in World War II.

Eddie Stone: And the inner barrels of rifles, any kind of gunnery materials, any kind of these. So, maybe there's a lot of applications if you're discharging high energy, high heat weaponry. You know, you can sort of understand these applications, but where it extended, where it got into our world, that has a limited exposure. You might understand how this might take place, but it became to the point, even when they knew the manufacturing of it was creating health challenges for the workers there and discharge in the local community, it was still allowed to be used on clothing for children, clothing for adults, pots and pans that we cook in. There was no limitation to the application. It was one of these chemical miracles that turned out to have a very, very dark side.

Jonathan Otto: Yeah, exactly. And it's really very sad the amount of suffering these types of chemicals and toxins have caused. Why don't you talk about- Yeah you were talking, I stopped you because you went to PFOA and that subcategory. But why don't you continue with where the different exposures are coming from?

Eddie Stone: Well, if we just focus for a moment just on the heavy metal side of things. And there's probably no one in the audience that's not familiar with the issues associated with lead. So if we think about what we learned in Flint, Michigan, several years ago and the impact on that community, we all understand that lead, even at modest levels can impact a child's development, their mental development, their ability to learn and not just for their youth, but it can carry on because it creates a damage and puts them behind the curve in terms of a learning cycle that they may never recover from.

So, we know that lead, we would all from a practical standpoint realize, "Hey, you wanna avoid lead at all possibilities." However, it isn't just Flint, Michigan. If you look at the EPA's own work and estimations of municipal water systems, not just urban areas, but rural areas, you're talking about thousands of municipalities, both small and large, where lead levels are above what is acceptable by the EPA or even at state levels

And so the challenge is so large and frankly can be overwhelming when you begin to think about the cost associated with cleanup that for a lot of people there's this sort of throwing up of their hands, which is unfortunate because we still need to think about how can we at least mitigate our exposure.

THE DIRTY TRUTH

So, I sort of have this idea that I try to teach people, one, think about the environment you're in. What can you do to sort of manage your own individual exposures? Those can be simple things like if you're using harsh chemicals to clean a kitchen, to clean a bathroom or whatever happens to be, what can you do to improve the circulation of the room that you're operating in? And are there respiratory devices that you might use when you have those types of noxious exposures?

What can you do? What can you afford on your own home water system? I'm not involved in the selling of air filtration or water filtration or anything of that kind. But I do recognize that good quality products to help with cleaning the air or your water supply can be quite beneficial for anyone trying to lower that toxic load or body burden.

And Jonathan, I really think that's the key here. It's about managing exposure. You're not going to eliminate it, but it's about managing that exposure. What can you do controlling your own environment to lower the toxic loads that you can, your body's got brilliant systems to help you manage toxins, but it can be overwhelmed.

And so when you think about this, it's that supporting of your body's own native systems to do these things by eliminating exposure as much as possible. And then, it's the types of foods that you choose. I'm a big advocate of organic food. I could argue about the nutritional density and the advantage of organic foods in that way.

But we can think beyond that because in an organic environment, at least when it's respected and we know that people are operating with good faith on organic practices, there's just gonna be less of these synthetic chemicals, herbicides, fungicides, pesticides that are used in the production of those crops. And so, that's just one more way we can eliminate or lower our exposure.

So, I'm an advocate of thinking about your environment. That's something we can all control. If you can afford to spend a little money on air filtration, water filtration, those are great ideas. If you can afford to buy organic, which is more and more affordable globally every day, these are all things you can do to support how your body natively helps to manage these toxins.

Plastic Food Containers

These refer to containers made from various types of plastic materials and are commonly used for storing and packaging food items.

The main ingredient used in the production of plastic food containers is typically petroleum-based plastic resins, such as polyethylene, polypropylene, polyethylene terephthalate, polystyrene, and polyvinyl chloride.

Plastic containers are a famous option among food containers because of their advantages: it is cheap, efficient to manufacture, lightweight, and durable.

THE DIRTY TRUTH

If compared to other available food container options, plastic containers are the most cost-efficient option to use.

SAFE AND NATURAL ALTERNATIVES

- 1. Glass containers:** Glass containers are a popular alternative to plastic. They are non-toxic, non-reactive, and do not leach any chemicals into food. Glass containers are durable, easy to clean, and can be used in the refrigerator, freezer, oven, and microwave. Look for containers with airtight lids to keep your food fresh.
- 2. Stainless steel containers:** Stainless steel containers are another safe and reusable option. They are non-toxic, durable, and lightweight. Stainless steel containers are great for packing lunches, storing leftovers, or carrying snacks on the go. Look for containers with silicone or food-grade silicone lids to ensure a secure seal.
- 3. Silicone containers:** Silicone is a flexible and food-safe material that can be used as an alternative to plastic. Silicone containers are lightweight, easy to clean, and microwave-safe. They are also collapsible, making them convenient for storage. Look for silicone containers that are BPA-free and meet food-grade standards.
- 4. Beeswax wraps:** Beeswax wraps are a natural and reusable alternative to plastic wrap. They are made by infusing fabric with beeswax, jojoba oil, and tree resin, creating a flexible and self-adhesive wrap. Beeswax wraps can be used to cover bowls, wrap sandwiches, or store fruits and vegetables.
- 5. Ceramic or porcelain containers:** Ceramic or porcelain containers are another safe option for storing food. They are free from harmful chemicals and can be used in the oven, microwave, and dishwasher. Ceramic containers often come with lids to keep your food fresh.

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

The biggest concern with plastic food containers is that some contain harmful additives like bisphenol A (BPA) or phthalates that can leak and seep into the food or beverages they come into contact with.

These chemicals are known for being endocrine disruptors, which means that they can interfere with hormonal systems and cause various health problems, such as increasing the risk of certain cancers, reproductive issues, and contributing to the development of metabolic disorders.

Another concern with plastic food containers has to do with contamination.

Plastic food containers can easily develop scratches or crevices that can be a place for microorganisms to thrive in.

And these microorganisms can pose a risk of food contamination, compromising human health if ingested.

Aluminum Cookware

Refers to any cooking utensil, pot, pan, and other kitchenware made primarily from aluminum, which is a light, durable, and silvery-white metal, and other metals like copper or stainless steel.

There are two types of aluminum cookware: pure aluminum cookware and aluminum alloys. The former is made out of purely aluminum, while the latter is made by mixing two or more metals or nonmetals to create a certain type of alloy. But regardless of what they are made of, these aluminum cookwares are famous for their ability to heat up quickly, distribute heat evenly, and ability to withstand high temperatures.

SAFE AND NATURAL ALTERNATIVES

1. **Stainless steel cookware:** Stainless steel is a popular alternative to aluminum cookware. It is durable, non-reactive, and does not leach any harmful substances into food. Stainless steel cookware is generally safe to use, and it provides excellent heat distribution and retention.
2. **Cast iron cookware:** Cast iron pans are another safe and durable option. They are known for their excellent heat retention and even heat distribution. Cast iron pans can be seasoned to create a natural nonstick surface and provide additional iron to your food, which can be beneficial for those with iron deficiencies.
3. **Ceramic-coated cookware:** Ceramic-coated cookware provides a nonstick surface without the use of potentially harmful chemicals. The ceramic coating is typically made from natural materials and provides excellent heat distribution. However, it's important to choose ceramic-coated cookware that is free from lead or other toxic substances.
4. **Glass cookware:** Glass baking dishes and pans are a safe and non-reactive option for cooking and baking. They are free from harmful chemicals and do not impart any flavors or odors to your food. Glass cookware is oven-safe, easy to clean, and provides even heat distribution.

WHAT TOXIC SUBSTANCES DOES IT CONTAIN?

Although aluminum cookware might seem harmless, there are health hazards that you should first consider.

It is a fact that aluminum is an excellent heat conductor. However, it is also highly reactive with acidic foods such as tomatoes, vinegar, and citrus juices. This is due to the fact that aluminum is a reactive metal that is easily oxidized by acids.

And when acidic foods come into contact with aluminum, acid corrosion happens. During the process, a compound known as aluminum salt is formed.

This can weaken the aluminum, causing it to break down and potentially seep into the food that we ingest.

If ingested, these metals can affect our brain tissue, thus increasing the risk of Alzheimer's disease.

DETOXING YOUR BODY FROM CHEMICALS & TOXINS



Getting Rid of Heavy Metals

- 1. Chlorella:** Chlorella is a type of freshwater algae known for its detoxifying properties. It binds to heavy metals and helps eliminate them from the body. Chlorella supplements are available in powder or tablet form.
- 2. Cilantro:** Cilantro, also known as coriander, has been traditionally used for detoxification. It may help mobilize and remove heavy metals from tissues. Adding fresh cilantro to your meals or consuming it in the form of juice or tincture can be beneficial.
- 3. Spirulina:** Spirulina is another type of algae that has shown potential in binding to heavy metals. It contains chlorophyll, which assists in detoxification. Spirulina is available as a dietary supplement in powder or tablet form.
- 4. Garlic:** Garlic has sulfur-containing compounds that can support detoxification processes in the body. It may help eliminate heavy metals and other toxins. Including fresh garlic in your diet or taking garlic supplements can be beneficial.

DR. JACK WOLFSON SHARES:

“When it comes to immune support in the plant world, all of these sulfur-based compounds are always gonna be our first choice when it comes to immune system support because they are the things that help to boost the molecule, glutathione and people, again, with the highest levels of glutathione, lowest risk of everything. There’s actually an article from 2020 that said people with endogenous glutathione deficiency, meaning lowest levels of glutathione, have the highest risk of morbidity and mortality from COVID.”

THE DIRTY TRUTH

“So, we wanna make sure that our glutathione levels are as high as possible and we can do so by eating sulfur-rich foods, garlic, onions, brassica vegetables such as brussel sprouts, broccoli, cauliflower, those are gonna be some of your best plant-based sources of sulfur to help to boost up levels of glutathione, which is ultimately a key strategy. Then different nuts and seeds and avocados and coconuts and olives, all of those plant-based polyphenols and compounds and vitamins and minerals, all help to support optimal immune system function.”

- 5. Curcumin:** Curcumin, the active compound found in turmeric, possesses antioxidant and anti-inflammatory properties. It may support detoxification pathways and protect against heavy metal toxicity. You can incorporate turmeric into your cooking or take curcumin supplements.
- 6. Apple and Citrus Pectin:** Fruit pectins are derived from the pits of apple and citrus fruits and have been shown to bind to heavy metals, preventing their absorption in the intestines. They're available as dietary supplements.

ACCORDING TO DR. BRYAN ARDIS:

“Inside of apples is this pectin. You know what pectin is? Is what they make jam and jellies out of fruits. It's like a sticky gum. It's also what they make gummies from all gummies, gummy bears, all kinds of, that's pectin. So apple pectin from apples was found at Chernobyl when that nuclear power plant exploded. The Russian scientists found that apple pectin powder was the only thing that protected all citizens from developing thyroid cancers after being exposed to the ionized radiation of Cesium-137. That's the type of radiation they were exposed to. Fukushima happened in 2012, is a leak from their nuclear power plant. And they actually looked at what the scientists used in Russia during Chernobyl's explosion and figured out that they would use the same thing. And sure enough, apple pectin powder was the only thing that protected all children, teenagers, adolescents, and adults from developing thyroid cancer as a reaction to being exposed to the radiation. So apple pectin powder, I would take a thousand milligrams in a capsule form. I have some at thedrardisshow.com, just take one capsule a day and that should be enough to bind any chemicals that we would primarily be worried about. If you're going to do something on a daily preventative basis, of course, if you're really sick, let's say, there was a fire you ran inside your house and got smoke mentioned your lungs, you might want to take 3 or 4 different capsules of apple pectin, take some bentonite clay and do that for a week just because of an acute overexposure to a poison. That's not the normal daily average, but that would be something you would want to try to do. If you had a dog or cat lick up antifreeze that's deadly to your cat out to your garage, you might want to give them some bentonite clay and give them extra for a few days in their water and help them detox.”

- 7. Milk thistle:** Milk thistle is a herb known for its liver-supporting properties. It can help enhance liver function, which is essential for detoxification. Milk thistle supplements are widely available.

Fulvic Acid: A Powerful Detoxifier

Fulvic acid is a naturally occurring compound found in soil, humus, and certain organic materials. It is known for its potential health benefits, including its ability to support detoxification processes in the body. Here's some information on how fulvic acid may be associated with detoxification:

THE DIRTY TRUTH

- 1. Chelation properties:** Fulvic acid has chelating properties, which means it can bind to heavy metals and other toxins. By forming complexes with these substances, fulvic acid may help facilitate their removal from the body.
- 2. Enhanced nutrient absorption:** Fulvic acid can improve the absorption and utilization of nutrients in the body. This can support overall health and aid in the body's natural detoxification processes.
- 3. Antioxidant effects:** Fulvic acid has antioxidant properties, which can help neutralize free radicals and reduce oxidative stress. By reducing oxidative damage, fulvic acid may indirectly support detoxification pathways.
- 4. Gut health support:** Fulvic acid may promote a healthy gut environment by supporting beneficial bacteria and reducing inflammation in the gut. A healthy gut is important for efficient detoxification and elimination of toxins.

DR. DANIEL NUZUM, ONE OF AMERICA'S LEADING NATURAL MEDICINE PRACTITIONERS, SHARES:

"I've been working with fulvic acid for a long time. I've been working with it clinically since 1997. The scientists that I work with have been working with fulvic since the early 1980s. So a lot about fulvic. Now, fulvic itself is a- There's nothing like fulvic. There's no antioxidant that even can be categorized similar to fulvic. Fulvic is in its own category as an antioxidant. And it is not just one level of antioxidant, it's an antioxidant on so many different levels that it's actually difficult to measure. Fulvic is also an excellent source of all those minerals that we were talking about earlier, all those nuts and bolts that our diet's completely devoid of. You can find those in fulvic. They're all present. They're there.

"Fulvic acid was something that was originally- It's been removed from our food chain. Originally, it was in our food chain back 120 years or so ago when we had about 3 feet of topsoil. Top soil used to produce fulvic, and fulvic would be in the fruits and vegetables people would eat. By the way we've farmed over the last 120 years, we've taken that 3 feet of top soil and whittled it down to about 6 to 8 inches. There's not a biomass in the top soil anymore to produce any fulvic. There's just not enough there, therefore, we have to mine it, and we find it in humic deposits all around the world, and we then have to extract it and everything. And what's interesting about fulvic is it's supposed to be there to enable us to absorb the nutrients in the food that we eat.

"So we talked about earlier how the food is so massively deficient in nutrients, but it's also deficient in the co-factors, fulvic acid being the co-factor, that enable us to absorb the nutrients that were in the food to begin with. So it's really, really bad. The food that's available, really, really bad. This is really bad. And so supplementing with fulvic acid replaces that, puts that back into your food chain so that you can actually pull the nutrients out of the food that you eat. Now, it has all kinds of other benefits. It has all kinds of other benefits. I mean, it has antiinflammatory effects. It's a growth factor for probiotics. So, if you're taking probiotics, and you take probiotics with fulvic acid, the fulvic acid massively increases how well your probiotics survive your gut.

THE DIRTY TRUTH

It's a really, really important piece. Fulvic acid, like I said earlier, provides all those vitamins and minerals, particularly the minerals. It has all your water soluble vitamins, but it's the minerals that it can really supply.

So, how fulvic fits in in the scheme of things is it is in and of itself an adaptogen. So, it enables the body to adapt to things better. So, it increases your ability to adapt. That's one thing. The next thing is it's a super dense source of nutrients, and not only is it a source of nutrients, it's a delivery system that can enhance your body's absorption of nutrients from other sources. So, let's say you take a vitamin, a mineral supplement, or a herbal supplement, and you take it with fulvic. Fulvic maximizes how much of that that your body absorbs. If you take the fulvic with your food, it's fulvic acid with food, it maximizes how much your body absorbs. Remember what we were talking about earlier, and how our body has to have nutrients in order to rebuild itself as things break down. As cells break down, your body has to have raw materials to rebuild those.

And that's one of the things that fulvic really- that it supplies. And not only does it supply them itself, it enables the rest of what you're consuming to be absorbed properly. The fulvic also has a property to it where it's really interesting. It can basically recycle nutrients. So, as your body uses a particular nutrient, it goes in the cell. The cell metabolizes it, uses those nuts and bolts, those parts, and then it has waste. You got used parts afterwards, right? Well, fulvic has the ability to take those used parts, and repair them, and make them usable parts again. So, even if you're not getting optimal nutrition, and you start putting fulvic into your system, it helps you recycle the nutrients that you do have. So, it's just a fantastic miracle molecule."

Studies on Fulvic Acid as a Powerful Heavy Metal Detoxifier

"Effect of Fulvic Acid on Accumulation of Copper in Rice Seedlings under Hydroponic Conditions"

Published in 2014, this study investigated the effects of fulvic acid on the copper accumulation in rice seedlings. The results indicated that fulvic acid reduced copper uptake and accumulation in the plants, suggesting a potential role in mitigating heavy metal toxicity.

"Evaluation of Fulvic Acid for Its Potential to Chelate Lead"

In this in vitro study published in 2009, researchers examined the ability of fulvic acid to chelate lead, a toxic heavy metal. The findings suggested that fulvic acid demonstrated some capacity to complex with lead, potentially reducing its bioavailability and toxicity.

"Fulvic Acid as a Natural Antidote for Heavy Metals Poisoning"

This review article published in 2013 discussed the potential protective effects of fulvic acid against heavy metal toxicity. It highlighted the ability of fulvic acid to form complexes with heavy metals, preventing their absorption and facilitating their elimination from the body.

THE DIRTY TRUTH

CONCLUSION

Appearances can be very deceiving. What we see as useful, necessary, and safe products that many of us use frequently, may actually contain harmful and toxic substances.

We have learned that baby powders contain asbestos, lipsticks that have lead, sunscreens that impair our body's natural ability to absorb Vitamin D, non-stick cookware that contains PTFE, and so much more.

And while it may not seem like these things are doing much damage to your body now. Over time, they are leading to a build-up of toxins that may lead to serious diseases. It also doesn't help to do frequent detoxes but continue living a life where you're being bombarded with toxins.

It may be difficult to change out many of these things, but we highly recommend you swap out all of the harmful cleaning products, kitchen items and personal hygiene items that you can.

As you start seeing the benefits of doing this, hopefully you'll get to the point where you use little to none of these - and other toxic items.

Remember this list included in this book is not exhaustive and I encourage you to continually research everything you use, encounter and plan to use. At the end of the day, this will lead you to become more conscious of what you are allowing to get into your body.

This is a powerful step to take toward ensuring you are the healthiest version of yourself, and to use this knowledge to protect your family too.

After all, some of these alternatives are tons of fun to make, and you may even find yourself making a hobby out of them!

THE DIRTY TRUTH

ABOUT JONATHAN OTTO



Jonathan Otto is an investigative journalist, natural health researcher, documentary filmmaker, and humanitarian.

In addition to serving as a producer for *The Truth About Cancer* and *The Truth About Vaccines*, Jonathan has created several highly-acclaimed, groundbreaking docuseries — *Depression, Anxiety & Dementia Secrets*, *Autoimmune Secrets*, *Natural Medicine Secrets*, and *Autoimmune Answers* — covering innovative, effective natural remedies for autoimmune disease, neurodegenerative disease, mental health, cancer, and heart disease.

These docuseries — watched by millions around the world — represent Jonathan’s unceasing quest to discover the root causes of debilitating diseases by interviewing over 120 world-renowned natural medicine doctors, scientists, natural health experts, and patients.

In response to this life-saving knowledge, Jonathan created **Well of Life**, a line of doctor-formulated, 100% natural supplements specially designed to detox and fortify the body.

When the global elite took away the human and medical rights of people around the world — and coerced billions into taking the toxic, experimental COVID “vaccines” — Jonathan was determined to get the truth out, despite being repeatedly censored and deplatformed.

He interviewed the world’s top medical doctors, health experts, and legal experts on vaccine injuries who risked their own careers to expose the lies behind the deadly COVID “vaccines” — which have caused deaths and injuries to millions of people — to create his newest docuseries, **Vaccine Secrets**, **COVID Secrets**, and **Unbreakable: Destined to Thrive**.

Jonathan’s greatest reward has been hearing the testimonials from people whose lives have literally been saved with the protocols he developed.

His work has been featured in international TV broadcasts, print media, national news, and radio broadcasts. He received the awards, **Young Citizen of the Year** and **International Volunteer of the Year**, by the Australian government for international humanitarian contributions, which he continues to support.

Jonathan and his wife, Lori, welcomed their first son, Asher, in January 2019 and their second son, Arthur, in May 2021.