

Poisoned by Design – Clothing, Plastics, and Artificial Environments

Exploring how modern materials and spaces may suppress our vibrational energy and well-being

In our daily lives, we are wrapped in clothes, sheltered by walls, bathed in artificial light, and enveloped in electronic signals. Each of these modern conveniences—while useful—may carry hidden costs to our physical health and spiritual harmony. Ancient cultures taught that humans are beings of energy and vibration, deeply affected by our environment. Today, science is catching up, revealing that many synthetic materials and engineered comforts can disrupt our body's natural balance. This section shines light on how **clothing fibers, household chemicals, indoor air quality, lighting, and electromagnetic fields** might be quietly **dampening our “vibrational” energy**, and consequently, our well-being. We'll journey from the clothes on our backs to the invisible waves swirling around our smart homes, uncovering a design of everyday toxicity. By understanding this, we prepare to reclaim control—restoring both spirit and body with conscious action.

The Synthetic Second Skin: Clothing and Chemical Absorption

Our skin is our largest organ and a natural shield, but it's also a sponge. Every day, it's in direct contact with the fabrics we wear. Modern wardrobes are dominated by **synthetic fibers** like polyester, nylon, spandex, and acrylic. These materials are often derived from plastics and treated with chemicals during manufacturing. As we wear them, especially for long hours, **trace chemicals can leach out** of the fabric and into our skin. For example, **benzothiazole**, a common residue in synthetic textiles, has been shown to **penetrate through the skin and enter the body**, raising health concerns. Researchers found that in just 24 hours, significant amounts of such chemicals can transfer from clothing into a skin-like membrane.

Why does this matter? The chemicals in synthetic clothes aren't benign. Many are **dyes, fixatives, and finishing agents** that can include heavy metals, formaldehyde, and even microplastics. **Microplastic fibers** shed from our clothes (especially during washing) are so small they can infiltrate not just the environment but potentially **our pores**. Alarming new research showed that toxic additives in microplastics (like flame retardants from plastic-based fabrics) can **leach into human sweat and be absorbed through the skin**. In fact, about **8% of such chemicals on microplastics were absorbed through sweaty skin in experiments**, directly entering the bloodstream. Over time, this continuous trickle of toxins can add to our body's burden—affecting hormones, nerves, and overall vitality.

Ancient wisdom hints that this is more than just chemistry. Many spiritual traditions maintain that **natural fibers** (cotton, wool, silk, hemp) support the body's energy field, whereas **synthetic fabrics** disrupt it. For instance, practitioners of Kundalini Yoga often wear natural white clothing, believing that **synthetic fibers and chemical dyes can interfere with the body's magnetic field (aura), disrupting energy flow**. They claim natural fabrics "breathe" with the skin and allow energy to circulate freely. Science might frame it differently, but the concept overlaps: natural fibers are generally more breathable, less allergenic, and free of industrial chemicals that could irritate or penetrate the skin. In contrast, wearing a "second skin" of plastic might block not only physical perspiration but also subtle energetic exchange. One could say **our modern apparel is by design slightly poisonous**, dosing us with microscopic chemical hits and possibly dampening the subtle vibrations that keep us feeling vibrant.

Homes as Chemical Cocoons: Off-Gassing and Indoor Toxins

When we step into our homes, we expect safety and comfort. Yet, the air inside a typical modern home can be a **chemical cocktail**. The sources are hidden in plain sight: the couch we relax on, the carpet under our feet, the paint on our walls, and the very building materials around us. **Volatile organic compounds (VOCs)** are chemicals that easily evaporate at room temperature. They are released ("off-gassed") from many household products and furnishings. According to the U.S. EPA, levels of several common VOCs are **2–5 times higher indoors** than outdoors because of limited ventilation. Products made from pressed wood (like cheap furniture and cabinetry) often use off-gas **formaldehyde**, a known irritant and potential carcinogen. Upholstery, carpets, mattresses, and electronics may release **toluene, benzene, acetone, and other VOCs**. These substances can cause headaches, dizziness, fatigue, and irritate the eyes, nose, and throat. Over the long term, chronic exposure has been linked to more serious issues like liver and nervous system damage.

Another major group of indoor pollutants is **flame retardant chemicals**. For decades, manufacturers have treated furniture foam, textiles, and electronics with flame-retardant additives to meet fire safety standards. While the intention—reducing fire risk—is good, the unintended result is a layer of toxins in our home environment. Flame retardants such as **PBDEs (polybrominated diphenyl ethers)** and newer replacements like **OPFRs (organophosphate flame retardants)** don't stay bound in products. They slowly migrate into house dust and air, where we breathe them in and ingest them via settled dust on hands and food. The National Institute of Environmental Health Sciences (NIEHS) notes that **organophosphate flame retardants, now common in textiles and electronics, may pose risks to bone and brain health**. PBDE flame retardants (mostly phased out but still found in older furniture and carpets) have been linked to developmental and neurological issues, including potential **neurodevelopmental**

disorders in children. Another flame retardant, TBBPA (used in some plastics and fabrics), has been found to **cause cancer in animal studies.** These chemicals can also act as endocrine disruptors, interfering with thyroid hormones and other hormonal functions. In essence, our sealed modern dwellings often marinate us in low levels of industrial chemicals—part of a grand experiment in convenience over health.

Sealed Buildings and the Mold Within

Modern building practices, aimed at energy efficiency, often create airtight spaces with poor ventilation. We insulate and seal every crack to keep temperatures comfortable, but in doing so, we sometimes trap moisture and prevent fresh air exchange.

Dampness can accumulate inside walls, crawl spaces, and HVAC systems. Where there is persistent moisture, **mold** and other microbes will flourish. Unlike the natural outdoor environment where sun and wind keep fungus in check, a closed, dark indoor space with drywall and dust is heaven for mold. The **World Health Organization (WHO)** has warned that indoor dampness and mold are serious public health issues. Occupants of damp or moldy buildings have been found to have a **75% greater risk of respiratory symptoms and asthma** compared to those in dry buildings. In one analysis, the WHO estimated that about **1 in 5 cases of asthma in the U.S. may be attributable to residential dampness and mold** – a staggering statistic linking home environments to chronic illness.

Mold doesn't just sit harmlessly on the wall. It releases spores and fragments into the air, along with microbial **volatile organic compounds (mVOCs)** – essentially mold farts – that contribute to that musty odor. When we inhale these, our immune system can get agitated. Symptoms of mold exposure range from nasal stuffiness, throat irritation, coughing, and wheezing to skin rashes and in susceptible individuals, severe asthma attacks or fungal infections. There's also a psychological effect: people often report brain fog, fatigue, or even depressive symptoms when living in a mold-infested space, possibly due to inflammation or toxins produced by certain molds. In an energetic sense, being in a **moldy, stale environment “lowers” our vibration** – ancient traditions would say it creates negative energy or stagnation. Science would say it impairs oxygen flow and burdens our immune system, leading to fatigue and low vitality. Both perspectives agree on the remedy: **improve airflow, sunlight, and cleanliness.** Historically, homes were designed with breathable materials and lots of ventilation (think of open-air dwellings or houses with windows on all sides). By contrast, our modern artificial environments sometimes prioritize efficiency and security at the cost of our breath of life. A sealed home with mold growth is essentially a **suppressive environment** – it keeps us alive and sheltered, but not truly *well*.

Artificial Light: Disturbing the Body's Clock

For most of human history, our daily rhythms were governed by the sun. **Natural light** meant day, darkness meant night and time to rest. This cycle is so embedded in our biology that even our cells follow a roughly 24-hour cycle, known as the **circadian rhythm**. However, the advent of **artificial lighting** – first incandescent bulbs, now fluorescent and LED lights – radically changed our evening environment. We banished the dark and extended our productivity and entertainment into the late night. Unfortunately, our bodies are paying a price for this convenience. Exposure to **light at night**, even modest amounts, can confuse our brain's central clock (the suprachiasmatic nucleus) and suppress the release of **melatonin**, the hormone that signals relaxation and sleep. Harvard medical researchers have reported that **exposure to room light during usual hours of sleep can shorten melatonin duration by about 90 minutes**. Even a very dim light of 8 lux (about twice the brightness of a night light) can have a measurable impact on circadian rhythm. When melatonin is suppressed, sleep quality suffers – and poor sleep is linked to a cascade of health issues, from depression to impaired immunity to weight gain.

Blue-rich light, which is abundant in LEDs and device screens, is particularly disruptive at night. Blue wavelengths stimulate our circadian alertness strongly. Studies comparing blue light to other colors found that **blue light at night suppresses melatonin twice as much as green light of comparable brightness**, shifting the body's internal clock by hours. This is why staring at a phone or laptop before bed can make it hard to fall asleep – our brain is tricked into thinking it's still daytime. Beyond just sleep, chronic circadian disruption has been **associated with higher risks of cancer, diabetes, and heart disease** in shift workers, leading the International Agency for Research on Cancer (IARC) to classify night-shift work as a possible carcinogen.

Then there's the issue of **flicker**. Many LED lights (and the screens they backlight) don't emit a steady glow; they flicker imperceptibly fast as they modulate power. While we might not consciously detect this, sensitive individuals and even those without obvious sensitivity can experience effects. Researchers have noted that some people develop **headaches, eyestrain, or migraine symptoms under LED lighting**, likely due to subtle flicker or high blue content. One study found office workers had **50% fewer headaches under older non-flickering fluorescent lights compared to modern LED lights**, highlighting a real physiological response. Ancient flame light (like candles or oil lamps) had a warm spectrum and gentle, natural flicker that our brains evolved with. In contrast, today's artificial lights are qualitatively different. They extend daylight artificially (altering hormonal cues), often saturate our evenings with unnaturally high blue content, and can flicker in ways biological systems don't like. In short, **artificial lighting, when misused (particularly at night), can suppress our natural biological rhythms**. It's an engineered convenience that, without mindful use, ends up dimming our inner light.

Electromagnetic Fog: Wi-Fi, Bluetooth, and 5G All Around

In the 21st century, we are literally **swimming in electromagnetic fields**. Where once there was only sunlight, geomagnetism, and an occasional lightning strike, now our environment pulses with **man-made frequencies** from every wire and wireless device. Our homes and offices are “smart” and constantly connected: Wi-Fi routers beaconing 24/7, cell phones by our side, Bluetooth gadgets, microwave ovens, and cell towers (now including 5G small cells in neighborhoods) relentlessly emitting radiofrequency (RF) signals. These technologies bring unimaginable convenience and connectivity, but what about their subtle impact on our biology and energy? Human bodies evolved in a much quieter electromagnetic background. The proliferation of EMFs is another experiment that we’re part of, whether we consent or not.

Scientists have been studying potential health effects of radiofrequency EMFs for decades. In 2011, the **World Health Organization’s International Agency for Research on Cancer (IARC)** reviewed the evidence and classified RF electromagnetic fields (like those from cell phones and Wi-Fi) as “**possibly carcinogenic to humans**” (**Group 2B**). This decision was based on epidemiological studies showing an increased risk of brain tumors (glioma) and acoustic neuromas associated with heavy cell phone use. Since then, further animal and cellular research has **strengthened the evidence** of a link. For example, large rodent studies have found higher rates of certain tumors after long-term RF exposure, and many lab studies show that even low-level EMFs can cause changes in cells. A prominent effect noted is **oxidative stress**: a state where harmful free radicals accumulate in cells. A 2021 review of research found that **most animal and cell studies reported increased oxidative stress from RF exposure**, which can damage DNA and disturb cellular function. This oxidative stress mechanism is troubling, because it suggests that even if EMFs don’t directly ionize molecules (like X-rays do), they might still be triggering cellular imbalances that, over time, could contribute to diseases like cancer, neurological disorders, or reproductive issues.

Moreover, our **nervous system** is an electrical organ – our brain cells communicate via electrical impulses. It’s no stretch to think that artificial external fields might interfere in subtle ways with our own electrical signaling or brain waves. Some people report symptoms of **electromagnetic hypersensitivity**: headaches, fatigue, poor sleep, or anxiety in high-EMF environments (though scientific consensus on this condition is not settled). Even for those who feel nothing, the long-term question mark remains. If we are energetic beings at our core, living in an “**electromagnetic fog**” could act like a weight on our vibrational state, potentially keeping us agitated, unfocused, or just subtly “down.” Interestingly, ancient spiritual teachings often emphasize **grounding** – connecting with the Earth (which has its own gentle electromagnetic field) – as a way to stabilize and heal. In contrast, our modern lifestyle lifts us off the ground (insulated by

rubber soles and high-rise buildings) and bombards us with chaotic signals. Until technology evolves to be more bio-conscious, it's wise to minimize unnecessary EMF exposure: turn off devices when not in use, keep routers away from sleeping areas, favor wired connections when possible, and step outside into nature's field regularly. Our ancestors had only the natural Schumann resonance (the Earth's heartbeat at ~7.8 Hz) and maybe a drum around the campfire. Now our airwaves are jam-packed. **Reducing this invisible noise** can help our bodies tune back into their natural frequency.

Breaking Free: A Call to Action for Body and Spirit

We've journeyed through the hidden hazards woven into the fabric of modern life—from the clothes that touch our skin to the very air we inhale and the signals around us. It can feel overwhelming to realize how **engineered our environment** has become, often not in our best interest. But knowledge is power. Rather than responding with fear, we can respond with **purposeful action** and reclaim our well-being. On a practical level, this means making conscious choices to **detoxify our surroundings**: choose natural fiber clothing (organic cotton, linen, hemp) whenever possible; air out new furnishings and opt for low-VOC or organic materials; address any moisture issues at home promptly to prevent mold; turn lights low or off at night and embrace candles or warm lighting in the evenings; and create an EMF-conscious home by unplugging devices when you can and keeping electronics out of the bedroom. Small changes add up, reducing the constant stressors on your body.

Equally important is the **spiritual and energetic cleanse**. As we remove external interferences, we naturally become more attuned to our inner state. Many ancient traditions suggest that by simplifying our environment, we **strengthen our life force (chi, prana, or bio-energy)**. Spend time outdoors to recalibrate your body's rhythms—sunlight and fresh air are profound healers. Practice grounding: walk barefoot on grass or earth to literally reconnect with the Earth's energy. Use mindfulness or meditation to center yourself; this helps purge the psychological noise that builds up from living in a high-tech, synthetic world. Remember that **human vibrational energy thrives in natural conditions** of light, air, and earth. By re-aligning our lifestyles with some "old-fashioned" wisdom, we counteract the suppressive design of modern toxins.

In essence, this is a gentle revolution of awareness. The same structured approach used to lull society into complacency can be used to EMPOWER. We start with simple, memorable steps each day – like taking a tech-free nature walk at sunset or choosing a wooden cotton combed t-shirt over a polyester one – and these habits build into a healthier, high-vibration life. As we detox our homes and habits, many people report clearer thinking, better sleep, more vitality, and even a stronger sense of connection to

spirit. **Psychologically**, you shift from being a passive consumer to an active guardian of your well-being. **Emotionally**, you may feel a new lightness or optimism as the burden lifts. And **spiritually**, you reclaim the sanctuary of your body and home as sacred space, not to be violated by harmful substances or energies. The call to action is clear: **purify your “temple”** – both your body and your immediate environment – so your true self can resonate at its highest frequency. By doing so, you not only heal personally but also contribute to a higher collective consciousness that values life, health, and harmony with nature. This is how we turn the tide on being poisoned by design: with informed, inspired design of our own lives.

References:

1. Russo, P. *et al.* (2018). **Chemicals from textiles to skin: an in vitro permeation study of benzothiazole**. *Environmental Science and Pollution Research*, 25(30), 30365-30370.
2. University of Birmingham. (2024). **Toxic chemicals from microplastics can be absorbed through skin** – *Environment International* study summary.
3. World Health Organization (WHO). (2009). **WHO Guidelines for Indoor Air Quality: Dampness and Mould** – *Executive Summary*, WHO Europe.
4. Harvard Health Publishing. (2024). **Blue light has a dark side** – how artificial light at night affects health.
5. Hardell, L. (2017). **WHO, radiofrequency radiation and health – a hard nut to crack**. *Int. J. Oncology*, 51(2), 405-413.
6. Schuermann, D. & Mevissen, M. (2021). **Manmade Electromagnetic Fields and Oxidative Stress**. *Front. Public Health*, 9: 628532.
7. National Institute of Environmental Health Sciences (NIEHS). (2021). **Flame Retardants and Your Health** (Fact Sheet) ([Flame Retardants and Your Health fact sheet](#)) ([Flame Retardants and Your Health fact sheet](#))
8. U.S. Environmental Protection Agency (EPA). (2023). **Volatile Organic Compounds' Impact on Indoor Air Quality** ([Volatile Organic Compounds' Impact on Indoor Air Quality | US EPA](#))