

HOME

SWEET

HOME



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IS YOUR HOME MAKING YOU SICK?

We all envision something different when we think of “home”—a chic urban apartment, a multi-acre farmhouse, a rocky-mountain cottage—but wherever you hang your hat, you’re likely spending a significant percentage of your time therein. As Paleo aficionados, we’re doing our best to live naturally. Yet the modern home is becoming a toxic, environmental health hazard. Which begs the question: Is the interior space past your heart-shaped welcome mat making you sick?

What Really Makes a Healthy Abode?

A healthy body is only as healthy as the home in which it resides. What naturally resonates with your body? What colors, lights, sounds and scents nourish you? When you daydream about escaping to your personalized utopia, where do you go? Chances are your dreamscapes have you sunbathing in Fiji, snowboarding in the Alps, or hiking the Blue Ridge Mountains. What do all these destinations have in common?

Nature.

American beat poet Gary Snyder (an influential figure in this post-World War II poetry movement) said: “Nature is not a place to visit. It is home.” Unfortunately, our tightly sealed, chemically-infused modern dwellings are intrinsically

disconnected from the natural world, and our health is suffering the consequences.

Architect and building biologist Paula Baker-Laporte—principal at Econest Architecture Inc.—creates holistically designed, handcrafted natural homes. She explains: “The very design that’s embedded in the building can enhance or do the opposite to create ‘dis-ease’ in the space. Ask a room full of people what their favorite space in the house is, and their answer is almost always nature-based or element-based. So, how can a home invite nature in, or create spaces outdoors to extend your space into nature?” Indeed, this is the question that should guide the planning, design and building of our domiciles.

Do You Have 'Sick Building Syndrome'?

The US Environmental Protection Agency identifies indoor air pollution as one of the top-four environmental health risks. Research shows that U.S. citizens spend as much as 90 percent of their time indoors, where indoor levels of pollutants may be two to five times higher than outside—and occasionally 100 times higher.³ Potential indoor health hazards include things like sulfur oxides, nitrous oxide, pollen, dust, mold spores, and EMFs.^{1,6}

- **VOLATILE ORGANIC COMPOUNDS.**
Substances that readily release vapors at room temperature, known as “out-gassing” or “off-gassing.” Common sources include plywood, particleboard, carpets, paints, insulation, finishes, adhesives, synthetic fabrics and more.
- **TOXIC COMBUSTION BYPRODUCTS.**
Fumes emitting from gas, oil, coal, wood and other fuels burned indoors. These vapors include formaldehyde, sulfur oxides, carbon monoxide, nitrous oxide, butane, propane and benzene.
- **PESTICIDES AND BIOCIDES.**
Substances that were first developed as nerve-gas offshoots used during World War II—most pesticides are petroleum-derived synthetic chemicals.
- **BIOLOGICAL POLLUTANTS.**
These include pollen, house dust, bacteria, fungi, mold spores and mycotoxins.
- **ELECTROMAGNETIC FIELDS.**
Emitted as radio-frequency radiation—air-conditioning electric fields and magnetic fields, radioactivity and terrestrial radiation.
- **POOR INDOOR CLIMATE.**
Caused by unbalanced temperature, humidity, air ions and air exchange.

“We’ve all been numbed about so many bad statistics about everything—no one’s interested in another set of bad news of something they hadn’t thought of before. But so many people are interested in improving something that they didn’t know could be improved.”

—Paula Baker-Laporte



Exposure to these indoor toxins can cause Sick Building Syndrome, which the EPA defines as “situations in which building occupants experience acute health and comfort effects that appear to be linked to time spent in a building, but no specific illness or cause can be identified.”² Quite simply, the body cannot rest, rejuvenate and heal when under constant assault in a sealed, electrified box. It’s a perfect storm for developing chronic systemic illness, allergies, autoimmune conditions and even cancer.

For some people, these toxic exposures lead to Multiple Chemical Sensitivity (MCS), causing the affected individual to experience physiological symptoms even when around exceedingly smaller amounts of

common chemicals.⁷ Symptoms include headaches, burning eyes, concentration problems, nausea, muscle pain, dizziness, fever and asthma.⁸ Those with MCS say it’s impossible to maintain “normal” functioning when they’re sickened by, well, almost everything. And at present, they have little recourse other than to remain housebound in their self-imposed, chemically-pure homes, or relocate to remote rural areas.

But Aren't Chemicals Tested for Safety?

Astonishingly, of the 88,000-plus chemicals in common use, most of them have no toxicity data available.¹ A Material Safety Data Sheet (MSDS) provides information about a product’s

chemical substances, handling precautions, and known health effects. The Toxic Substances Control Act of 1976 gives the EPA authority to require reporting, record-keeping and testing for chemicals.⁵ Unfortunately, certain substances are exempted from the TSCA. Further, companies are not required to list ingredients they define as “trade secrets.” As such, the MSDS does not need to list its components’ health effects.¹ Moreover, hazardous ingredients at less than 1 percent, and carcinogens at less than 0.1 percent, do not need to be listed at all. Neither do “inert” ingredients, which paradoxically are often more hazardous than active ingredients.¹

On June 22, 2016, President Obama signed the Frank R. Lautenberg Chemical

Safety for the 21st Century Act, granting the EPA new authority to review, and eventually restrict or ban, harmful chemicals.⁶ Yet with tens of thousands of chemicals to test, and gaps in the law itself, it will be a long time before our products are truly safe.

The Biological Home

Fortunately, there is an international movement concerned with the interaction of the built environment and human health. Baubiologie (or Building Biology)—a German term meaning, “building for life”—emerged over 30 years ago in Germany in response to the declining health of residents in poorly structured, chemically-toxic post-World War II buildings. This artful living science uses “nature as the ultimate guide” to design, plan and build healthy homes and workplaces.

Building Biologists consider all possible sources of health risk. The International Institute for Building Biology and Ecology sets forth precautionary guidelines for creating exposure- and risk-free natural indoor-living environments.¹⁰ These are the professionals you want to call if you feel sick inside your house, or if you wish to develop a healthy home as a precautionary measure.

Oram Miller—owner of Create Healthy Homes, in Los Angeles—explains that Building Biology presents natural, nontoxic, breathable alternatives to the protocols and materials currently in use. “Walls built today are energy-efficient but cannot handle the inevitable intrusion of moisture, resulting in mold, ill health for occupants and structural damage. Instead of ‘build tight, ventilate right,’ we say make your building envelope ‘waterproof but vapor-permeable.’ We work with, not against, the forces of nature.”

Further, Building Biology goes beyond Green. As Miller explains: “We like to augment what is recommended by the Green movement. But, we put the health of the occupant before everything. We have to choose for health.”

We are not The Jetsons

As humans, we are neither biochemically or genetically structured for space-age living. Between our Internet of things, wiring errors, and switch-mode transformers, our homes are pulsating with artificial electromagnetic fields, a scientifically-known biological stressor.¹¹

But there’s also a detrimental psychosocial effect of the digitally-interconnected home. “The smart home creates dumb occupants,” says Baker-Laporte. “If you walk in a room and the light turns on, and you walk out and the light turns off, you become oblivious to your ability to control the environment or be energy-conscious. And the biggest asset we have as humans is consciousness.”

There’s now an endless supply of futuristic gadgets, which, in the name of safety and convenience, are effectively purging the domestic sphere of our need to think. Sure, it’s impressive that we can answer the door

Where Do Biological Pollutants Hide in Your Home?

Studies have shown that 30 percent to 50 percent of all building structures have damp conditions, which may encourage the growth and buildup of biological pollutants (such as mold, fungi, bacteria and viruses). If you think you might have a problem with biological pollutants in your home, it’s best to hire a professional to investigate and remediate. For starters, you might want to check if you have some of these common sources:

1. Dirty air conditioners
2. Dirty humidifiers and/or dehumidifiers
3. Bathroom without vents or windows
4. Kitchen without vents or windows
5. Dirty refrigerator drip pans
6. Laundry room with unvented dryer
7. Unventilated attic
8. Carpet on a damp basement floor
9. Water damage

REFERENCE:

CONSUMER PRODUCT SAFETY COMMISSION, BIOLOGICAL POLLUTANTS IN YOUR HOME. [HTTP://WWW.CPSC.GOV/EN/SAFETY-EDUCATION/SAFETY-GUIDES/HOME/BIOLOGICAL-POLLUTANTS-IN-YOUR-HOME/](http://www.cpsc.gov/en/safety-education/safety-guides/home/biological-pollutants-in-your-home/)

with our smartphone (even when we’re not home)—but toward what end, exactly? How “at home” can we be with ourselves and our loved ones if we’ve literally got our heads in the Cloud?

But we don’t need to be The Flintstones...

In terms of shelter, our Paleolithic ancestors didn’t have many options. They chose caves or sustainably constructed huts to protect themselves from inclement weather and hungry predators. We’ve come a long way in building architecture since 30,000 B.C., however, archaeological research indicates that biologically we are still closer to our Paleolithic ancestors than our “civilized” selves. One such study explains that there is “a fundamental mismatch which exists between our Paleolithic genome and modern urban living. We cannot all live in a rural wilderness, so how can that most artificial of environments, the town, be reconfigured to better fit our biology?”⁴

Again, the answer is nature. This is not to move ourselves back outside into a rawhide hut. But rather, it’s to bring nature back into the modern house.

It’s been said, “Place is security, space is freedom: We are attached to the one and long for the other.”⁹ So if you build in accordance with nature, then the physical place where you dwell becomes the expansive space where you live. And then, your beautiful house becomes your healthy home. 🏡

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