

organic life

A Good Night's Rest

creating a healthy haven

By Melissa B. Scott

ARE YOU GETTING ENOUGH Z'S? DO YOU BLAME YOUR LACK OF SLEEP ON your hectic schedule, kids, or stress? Although many of our sleep problems do come from our actual day-to-day stressors, our sleeping environment—the 20,000 dust mites we cuddle up with, the toxic pollutants spewing from our sheets, the air that lacks in oxygen, and the mold spores we inhale—may actually be a bigger culprit. Yes, the room you sleep in could be contributing to your baggy eyes, depressed immune system, and constant need for a nap.

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Our rooms are filled with so-called comforts that we associate with a quality night's rest: overstuffed down pillows and comforters, subdued colors, 300+thread count sheets, tvs, stereos, fountains, and more. Yet, these comforts may be the exact culprits behind our maladies.

According to Mary Cordaro, a certified Bau-Biologist (a.k.a. building biology, a field that incorporates architecture and design with human and environmental health) and president of H3 Environmental, a Los Angeles based environmental design company and healthy bedroom showroom, our bedroom—more than any other room—has the biggest impact on our health. Our body uses sleep as a time to rejuvenate, replenish, detox, and repair from day to day assaults, toxins, and stresses. Our bedrooms need to accommodate this need by creating an environment that is not only comfortable but healthy, inside and out. The problem with most of our homes boils down to four things: air circulation, moisture problems, electromagnetic fields, and chemical contaminants. But Cordaro points out, “You'll gain the biggest bang for your buck in the bedroom.”

The Air We Breathe

HVAC systems (Heating, Ventilation, and Air Conditioning systems) that are installed in most homes are installed poorly. Forced air gas and electric systems recirculate air containing dust and other toxins throughout your home instead of fresh, clean air. These systems also contribute to a negative pressure situation in the home in which the home itself sucks in contaminants in order to balance out the pressure. These contaminants come from the pollution in carpets, wall cavities, attics, crawl spaces, outdoor air particles, and pollution. Furthermore, most heating units pull in even more junk through leaks in the ducting. Most filters installed in our heating units are totally inadequate, but even the best filter will not work effectively if your home is negatively pressurized. And, you wonder why your allergies are sometimes worse when you are inside!

The Enemy is Moisture

Moisture problems have become a greater concern as we adjust our homes to be “more convenient.” If your bedroom is on an exterior wall or is close to a bathroom it is more likely you'll have a moisture problem. Rooms that have exterior walls can develop moisture problems from poor drainage or the actual act of watering the house (caused by having plants and irrigation too close to the exte-



rior.) By having a bathroom with its high moisture content directly within your sleeping quarters you automatically increase the likelihood of moisture problems in your bedroom as well. Wall to wall carpeting further exacerbates this problem because it holds in moisture, thus promoting dust mites and mold, and accumulates dirt and toxins including pesticides tracked in by our shoes. “In fact carpet is one of the worst problems in American homes,” says Cordaro, “carpet outgasses chemicals, holds moisture, and is nearly impossible to clean.” (One of the first ways to improve the air quality in your house

is to dispose of your wall to wall carpeting.)

Our expensive mattress—made from synthetic materials like polyurethane foam, synthetic battings, glues, toxic fire retardants, and chemically grown cotton—are the second big contributor to moisture problems in our bedroom. The cotton and the synthetics in your mattress and pillows hold moisture instead of releasing it. And, when you lose your nightly pint of moisture vapor (through your breath and your sweat), the bed literally sucks it in. Well, as you can probably guess, dust mites and mold love this environment and proliferate. According to the *Asthma and Allergy Foundation of America*, nearly twenty percent of a pillow's weight is made up of dust mites and their waste.

Electromagnetic Waves

The third problem is still a debate among scientists and scholars. Some, like Mary Cordaro, believe that electromagnetic fields—electrical frequencies that you cannot see—have some effect on the biological system of our body. These effects range from the minimal (just feeling tired) to cancer and leukemia. Bau-Biologists and other environmentalists feel that by eliminating these fields in our rooms we limit our exposure to electromagnetic radiation that may cause or contribute to a host of health problems. Electromagnetic fields can come from the wiring in the walls and floors, appliances (different fields are created when the electronics are turned on or simply plugged in and turned off), and the coils in mattresses and box springs. Typically we don't have much choice during the day as to how many EMFs we receive. Your boss may not understand turning off your computer at noon because you're receiving too many EMFs! But, at night, in the bedroom, where we spend $\frac{1}{3}$ of our lives, we do have a choice. Cordaro stresses that the important thing is to practice prudent avoidance. Unplug your appliances in your bedroom when they are not in use, replace your plug-in clock with a battery operated one, and move all appliances and electronics as far away from the bed as possible.

Chemical Overload

We are breathing and sleeping in toxins. The toxic paint we use to coat our walls, the non-organic bedding, and the other synthetic materials we use to decorate from our furniture choices to our flooring—all contain toxins. Why are these items bad for our health? Linens that have been treated with chemicals like formaldehyde, anti-stain, and anti-wrinkle treatments will continue to release (outgas) volatile organic compounds (VOCs) over a long period of time. Environmentalists and Bau-Biologists stress that the body cannot handle these toxins and shouldn't be sleeping in an environment that contains them. On a side note, the cotton industry is one of the most polluting industries in the world, and we should use our dollars to show our concern for our environment.

So, now that you know the big four problems, what are the solutions? I asked Mary Cordaro to visit my Carpinteria, California home for some advice on how to create a healthier living environment for my partner and I.

Solutions

Luckily we don't have carpet so we eliminated the first factor that can contribute to mold, dust, and other problems. If you do have carpet and wish to remove it, Cordaro suggests contacting a specialist who understands how to properly remove it to avoid contaminating your entire home during removal. "Otherwise clients will come to me and say that they tore out their carpet but feel sicker than before. This doesn't surprise me . . . just think how much

What's in a healthy bed?

From the core of the bed to the fluff, what makes a healthy bed?

The mattress should be metal free and made out of natural, breathable materials such as Pure-Grown wool and 100% natural latex. Pure Grown Wool—from sheep that were raised on organic feed and were treated humanely—is an excellent filler for pillows, comforters, and mattresses because it wicks away moisture instead of absorbing it, and is dustmite resistant. Wool is also naturally fire-retardant so chemical fire-retardants are not necessary.

The topper on the bed should also contain wool batting and be covered in organic cotton or hemp. Mattress and pillow barrier covers are a necessity for those that cannot afford a new, healthy mattress and also add additional insurance by providing a barrier between you and the dustmites.

Make sure you purchase a 100% cotton dust mite barrier.

Pillows and duvets should be made out of organic wool batting and covered in organic materials.

Lastly, organic linens round out the natural bed. According to Cordaro, a typical set of queen sheets that weighs four pounds will have used one pound of pesticides! To keep your sheets fresh, wash them once in a week in hot water to kill any dust mites.



stuff is being released into the air when you haphazardly tear out something that has been underfoot for twenty years!" If you decide to keep your carpet, leave your shoes at the door, and invest in a HEPA vacuum cleaner to ensure that you are keeping it as clean as possible without releasing toxins, dust, and dirt into your air.

Because we live in a damp climate where ambient mold levels are high, and we don't have a continuous source of fresh air throughout the house, Mary suggested purchasing a HEPA air filter that also contains at least several pounds of carbon. She stressed that most homes could use a high-quality air filter to compensate for poorly installed HVAC

To-Do List for those on a Budget

1. Make sure there are no outside sources of moisture, and fix all plumbing and roof leaks immediately.
2. If your room has carpet, either purchase a HEPA vacuum or remove the carpet carefully and install natural flooring.
3. Purchase barrier covers for your duvet, pillows, mattress, and box spring. This eliminates one source of contaminants—dust mites.
4. Purchase a topper for the bed made out of Pure Grown Wool. This will help regulate moisture and will ease allergy symptoms.
5. Replace your duvet and pillows.
6. Replace your mattress.
7. Repaint your walls.

systems. You can also improve your air quality by adding houseplants. (This isn't a replacement for a high-quality air filter, however.) Plants absorb the carbon dioxide we exhale and fill the air with oxygen. Spider plants, ferns, and some forms of ivy, are all excellent air filters but make sure you purchase them at an organic nursery, and thoroughly dry out the soil between waterings to decrease mold levels.

Although our bedroom furniture is mostly made of environmentally harvested wood, it does have a toxic stain and sealer. There are natural finishes available from several paint companies, see below for details.

After carefully inspecting our furniture we held our breath as we waited for Mary to deliver the bad news . . . we sleep on a chemical factory full of dust mites! Not only do we have a conventional mattress but we have two old down comforters, two down pillows, and plenty of non-organic linens. However, redoing our entire bedroom would cost us more than \$7,000, so Mary made a few suggestions for homeowners and renters who are on a shoe-string budget. (See the sidebar for suggestions.)

The electromagnetic fields in our room were a bit high for a comfortable sleeping environment. By unplugging our two night lamps, stereo, and cell-phone charger we reduced the high EMF's by 90%, much better for a good night's rest! We also learned that if an appliance is plugged in but turned off there still can be high EMFs. Luckily the EMFs in our bedroom were primarily from appliances and not outdoor powerlines or wiring inside the walls.

The paint on our walls is old and in good shape, so it is unlikely that toxic chemicals are still being outgassed into the air. However, if we do choose to repaint the rooms we will need to make sure that we don't disturb older, imbedded layers of lead-based paint and will invest in

a high quality non-toxic paint—preferably one made from plant chemistry and natural pigments. Paints and finishes made from natural ingredients help eliminate static, or the electrostatic charge in the room which attracts dust to surfaces like walls. Natural paints and other surfaces also help to create more negative ions in the room, mimicking the healing balance found in nature.

The last item on our to-do list was to remove the candles. We have a dozen or so candles in the house that range from unscented to scented that when lit will pollute the air with soot, also called combustion by-products. The best choice for candles are 100% untreated, unbleached, and undyed beeswax candles because they are chemical-free and help improve the air quality in the room.

While soy candles do not pollute, they do not improve the existing air quality either. If you like scented candles buy a beeswax candle and add a few drops of organic essential oils to the base of the wick. The scent will be natural and will linger while the candle is in use.

That evening although we still had our relatively disgusting bed, we did have the insight on how to make our bedroom better. Our first step was to purchase barrier covers and a topper for the mattress. Someday, a new mattress. Then, after we said good night I reached behind the bed and unplugged the lamps. 🌱

RESOURCES

- AFM Safecoat Paint (800) 239-0321 www.afmsafecoat.com
- Aller Air Cleaner's (888) 852-8247 www.allerair.com
- BioShield paints (800) 621-2591 www.bioshieldpaint.com
- Coyuchi Organic Bedding (featured on page 62) (888) 418-8847 www.coyuchi.com
- H3 Environmental Corporation (818) 766-1787 www.h3environmental.com
- Indika Organic Bedding (featured on page 60) (866) 446-3452 www.indikahome.com
- Lifekind Organic Mattresses & Bedding (800) 284-4983 www.lifekind.com
- Phylonian Beeswax Candles (877) 445-6942 www.philoxia.com
- Samina Organic Mattresses & Pillows www.samina.com
- Tomorrow's World Wool Comforters and Pillows (800) 229-7571 www.tomorrowworld.com
- White Lotus Home (866) 426-3623 www.whitelotus.net

Websites with information on healthy homes, products, bedding, etc.

- www.ecochoices.com
- www.greenhome.com
- www.healthyhome.com