EASY STEPS
To a Safer Pregnancy
A guide to protecting your growing baby from toxic chemicals

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Congrats! Chances are if you're reading this, you're pregnant—or someone very close to you is. There really is no bigger news! But before the wild miracle of holding your new babe in your arms, and the rush of hormones, emotions, and exhaustion that comes with it, you'll need to get through nine months of pregnancy, give or take. Depending on your body and your mental state, this might be a delight. Or it might be complete misery. Sometimes it can be both—at the same time. Get used to it.

While helping your baby grow arms, legs, ears, eyes, organs, and a lot more, you'll also spend some time nesting—that biological/irrepressible urge to create the safest, coziest first home possible for your new baby. It's a great instinct, but we're here to offer a different perspective: Your baby's first home isn't her nursery or even your house. It's your body. And you're not just your baby's first environment, you're also the source of everything she needs to grow and develop. If you think about it this way, taking care of yourself when you're pregnant is your first official job as a parent. Scary, sure. But it can also be empowering.

In today's increasingly toxic world, taking care of yourself and your growing baby can be a challenge. We encounter so many untested, unsafe chemicals and other pollutants as we go about our daily lives. These substances perform various roles, some vital, some not, and many of them are capable of interfering with bodily functions. Some can create cell mutations that trigger cancer. Some may damage organs and other tissues. Some are even able to disrupt the human endocrine system, which influences pretty much every cell, function, and organ in our bodies. Scientists are increasingly concerned about this endocrine—or hormone—disruption (see What is Endocrine Disruption, page 6). These impacts can be especially harmful to growing babies; their bodies and protective mechanisms are literally in their infancy. Exposure to the wrong pollutant at the wrong time has the potential to trigger developmental changes that sometimes lead to lasting permanent harm. Some can even have effects on future generations.

This is why, in the fall of 2013, the American College of Obstetricians and Gynecologists and the American Society for Reproductive Medicine issued a historic opinion declaring, “Robust scientific evidence has emerged over the past 15 years demonstrating that prenatal exposure to toxic environmental agents is implicated in increases in adverse reproductive health outcomes.” The organizations found that pregnant women in the U.S. are exposed to at least 43 different chemicals, many of which can cross the placenta. They concluded by calling on obstetricians to learn about this issue and actively advise their patients on how to avoid environmental toxins.

At Healthy Child Healthy World, this hits home. Our organization was founded by Jim and Nancy Chuda in 1992 following the death of their daughter, Colette, from Wilms’ tumor, a rare childhood kidney cancer. The Chudas were baffled by Colette's illness, which had no genetic connection and seemed to come out of the clear blue. Their answer came in 1995, when they received a new study on Wilms’ tumor published in the American Journal of Epidemiology. It found that maternal exposure to pesticides while pregnant was most likely the cause of the disease in tumors that appeared 48 months after birth.
Colette Chuda was four years old at the time of her diagnosis, and Jim and Nancy turned their terrible loss into a lifelong mission to help other parents protect their children from similar harm. And that's the good news here: Avoiding environmental toxins is possible; it's just about getting the right advice. Which is exactly what we have compiled in this e-book. In the pages that follow, we'll show you how to take charge of your pregnancy by minimizing exposure to harm if and where you know it exists. Having a healthy pregnancy is a relatively simple proposition. At its core, it's really just about getting good stuff into your body and keeping bad stuff out. This doesn't mean you have to move into an eco-friendly bubble, but you do need to take proactive measures to safeguard your health. This includes removing common sources of toxic chemicals from your home, avoiding future exposures, and tweaking your diet to give you more of what you need and less of what you don't. (Hint: organic matters.) And since these are all things you'll want to do for your baby, as well, you'll be glad to have the changes already in place when she arrives. Which, as endless as pregnancy can sometimes feel, is really just around the corner. So let's get started.

“The developing fetus is the most sensitive of us all.”
-Shanna Swan, Professor of Preventive Medicine and Obstetrics, Gynecology and Reproductive Science and a 2014 Healthy Child Healthy World Mom on a Mission Nominee
The endocrine system is a complex of glands and hormones that regulates pretty much everything in the body—from sexual development to growth to behavior. Produced naturally in tiny amounts, hormones deliver messages throughout the body that tell our cells what to do and when to do it. Each cell has areas on its surface that allow specific hormones with specific instructions to attach themselves. Like a lock and key, only certain hormone “keys” will fit an individual cell’s “locks.” Once attached, the hormones trigger reactions in the cell that make it behave a certain way.

“Endocrine Disrupting Compounds (EDCs) are mainly synthetic chemicals that have been developed because of their useful properties in many common products including plastics, pesticides and herbicides, personal care products, household cleaning products and flame retardants. Secondary, and often unanticipated, properties of these chemicals include their dispersal into our soil, dust, air and water resources, and their subsequent uptake into wildlife and human bodies where they exert effects that disrupt the delicate balance of the endocrine (hormonal) system. EDCs can mimic, antagonize, or otherwise disrupt particular hormonal pathways, altering the balance of cellular responses. When these exposures occur during early (especially fetal) development, consequences can be severe, increasing the probability of later negative health outcomes including cancers, neurodevelopmental and neurodegenerative diseases, metabolic disorders, asthma and immune disorders.”

--Janet Gray, Professor of Psychology and Science, Technology & Society, Vassar College and Science Advisor and Board Member, Breast Cancer Fund

Scientists have discovered that some common chemicals found in products we all use daily can mimic hormones in the body. They call this process endocrine disruption. Endocrine—or hormone—disrupting chemicals have molecular shapes that also fit into these hormonal “locks.” These prevent the legitimate hormones from attaching and/or deliver the wrong message. The result is cells that divide when they shouldn’t, don’t grow when they should, fail to perform vital functions, or perform their functions at incorrect times. Common endocrine disrupting chemicals we’re likely to encounter in daily life include bisphenol-A (BPA), phthalates, polybrominated diphenyl ethers, and perfluorinated compounds. Exposure to toxins like these during pregnancy can lead to lasting and permanent harm. That makes it critical to avoid them if at all possible when pregnant. The key is knowing where they exist. Read on!
“Pregnancy is a time of rapid development like no other. At this time, the developing embryo is depending on genetic and hormonal instructions to take it from a single fertilized cell to a complex organism also known as a baby! This complex process includes differentiation (cells taking on different roles—one becomes a skin cell, another becomes a brain cell) and migration (moving around so that each cell is in the right place and you don’t end up with an arm sticking out of your head for example). At no other time in a human’s life are so many drastic changes happening so quickly! This process is under delicate control by a number of hormonal and genetic signals, and environmental toxins unfortunately can alter or disrupt these signals. For this reason, I believe that pregnancy is the most critical window for toxin avoidance.”

— JANE TAYYEV-ASHER, MD, DIRECTOR OF PEDIATRIC NEUROLOGY AT CEDARS-SINAI MEDICAL CENTER, ASSISTANT PROFESSOR AT UCLA IN THE DEPARTMENTS OF PEDIATRICS AND PSYCHIATRY AND BIOBEHAVIORAL SCIENCES, AND HEALTHY CHILD HEALTHY WORLD ADVISOR
HOW TO US THIS E-BOOK

Pregnancy can be a daunting experience, even if it isn't your first time. As if the physical and emotional aspects weren't enough—and these are huge!—suddenly there are things like car seats to research, cribs to assemble, pediatricians to interview, maternity leave details to navigate, and so many plans to make. During all of this excitement and tremendous change, you need to be taking special care of your health. There is a fair amount your OB/GYN or midwife is tracking, but chances are environmental health concerns—beyond, say, not smoking cigarettes or eating mercury in seafood—aren't at the top of your doctor's list. That leaves it largely up to you.

We don't want you to be alone, surfing website after website to find out if it is safe to eat non-organic cravings, what, if anything, is OK to use to dye gray hair, or if painting a nursery when pregnant can harm your growing baby. So we've designed this e-book to make it easier for you to have and enjoy a safer pregnancy, not be stressed out by trying to figure out how to have one. (Remember! Stress is toxic, too!) Use this e-book to help avoid exposure to harmful chemicals and common pollutants, find out where problems can arise, how to avoid them, and what your alternatives are. From nursery furniture to menu choices, the following pages will explain what you need to know to give your baby the very best start in life.

With short, focused chapters that get straight to the point, it's simple to read straight through. Or you can consult the sections in any order you consider a priority. However you choose to read this e-book, consider it a basic road map to a healthier pregnancy. Like most road maps, it doesn't show everything. This is not—and cannot be—exhaustive. If you're interested in learning more about the key healthy pregnancy essentials outlined on these pages, please explore the resources we've gathered on page 50.

WHAT ARE YOU HAVING?

Since we don't know your baby's sex and you may not either, we're using both male and female pronouns throughout this e-book. Feel free to make your own substitutions!
LET’S GET STARTED!

Any time is the right time to start making healthy changes. Today is the first day of the rest of your pregnancy—a great time to start. Here are a few things to keep in mind. Oh, and don’t forget to take pictures!

1. Have patience. You can’t do it all in one day. A healthy pregnancy involves many things and is a process that unfolds over time. It’s not a one-time event—and neither is parenting.

2. Don’t know where to start? Tackle things that will give a quick and healthy bang for your effort. These include eating a more non-toxic diet and removing obvious sources of potential hazards, like conventional cleaning products and pesticides, from your home. Then move on to the other suggestions in the following pages.

3. In the absence of non-toxic alternatives, sometimes doing or using nothing is your best and healthiest option—from diaper creams to baby monitors to carpets. Use this rule of thumb to steer your choices whenever you face a decision you don’t feel informed enough to make. And remember that natural is almost always safer than synthetic or processed.
HOME DETOX

OVERVIEW

Home. It’s a refuge from the world outside, and it’s especially comforting to hole up at home, with your feet up, when pregnant. But—call it modern irony—some of the very things that make our homes so cozy happen to contain chemical toxins that can make them less than safe.

Though we usually can’t see or smell them, these substances are released into our living spaces and sometimes absorbed by our bodies. This happens as the items containing them age or simply as they are used—think of things as common as paint, cookware, and couches. No one really knows exactly what prenatal consequences may follow. Of the 87,000 chemicals (give or take) registered in the U.S., only 10 percent have been tested for potential health consequences, and more than 80 percent of all so-called “high-production volume” chemicals lack toxicity data for their effects on developing organs and bodily systems.

Yet research conducted on umbilical cord blood discovered an average of 200 manmade chemicals in the babies tested, which indicates that fetal exposure to environmental pollutants can be significant. Many of these pollutants mimic hormones in the body—important because of just how powerful hormones are. Conditions in the womb, for example, are controlled by changes in hormonal concentrations of as little as a tenth of a trillionth of a gram—the equivalent of a single second in 317,000 years—according to the Endocrine Disruption Exchange.

Fortunately, protecting our babies from these chemicals is often just a matter of avoiding the things that contain them. In fact, by taking a few of the simple steps outlined in the following pages, we can remove many of our homes’ biggest potential hazards. That’s good news for mom and baby.

Your Checklist

- Practice precaution
- Clean your indoor air
- Banish lead and radon
- Kill the pesticides
In recent years, public health advocates have rallied around an idea known as the Precautionary Principle. This philosophy says that whenever there is any suspicion that an activity or product may cause harm to human health or the environment, it should be set aside until its safety can be proven.

The Precautionary Principle is about looking very carefully before we leap. It’s a great philosophy to bring to your pregnancy and eventually your parenting, too. If there’s any question that an activity or product may cause harm to you or your baby, set it aside until you can be absolutely sure it won’t. You won’t miss it.
HOME DETOX

EASY STEPS

1. DUST OFTEN

Household dust is more than a nuisance. It’s also the final resting place for many of the toxins introduced into our homes. One study identified 35 pollutants in tested samples, including alkylphenols linked to altered sexual development, organotin compounds suspected of affecting brain development, perfluorinated chemicals, pesticides, phthalates, and flame retardants. If this upsets you now, just wait until you have a crawling baby pawing at your dust bunnies, then putting her hands in her mouth! To safely remove household dust, vacuum regularly with a HEPA vacuum, damp mop hard floors, wipe furniture and other surfaces with a microfiber cloth or damp rag, and carefully maintain the filters on HVAC and other climate control equipment. If you’re concerned about lead dust, your damp wiping should involve a non-toxic detergent solution.

2. CLEAR THE AIR

Air pollution doesn’t just happen outdoors. It also occurs indoors. Our homes trap combustion emissions, fumes from cleaners, personal care items, home furnishings, building materials, and other products, as well as pollutants carried in from outside. Indoor air pollution has been called one of the top five environmental risks to public health, and studies indicate that indoor air is often two to five times more polluted than the air outside.

Some of the biggest contributors to poor indoor air are volatile organic compounds (VOCs), synthetic chemicals that form vapors at room temperature. Maternal exposure to VOCs is suspected of affecting the immune status of newborns and impairing behavioral development.

Maintaining indoor air quality is relatively simple. Follow these steps for fresher indoor air:

• Open windows regularly—even in winter—to “rinse” bad air out.
• Don’t use cleaners or products with a strong chemical smell, like rubber cement or paint.
• Use your stove fan if you cook with gas.
• Keep HVAC filters clean.
• Test for radon.
• Let freshly dry-cleaned items air out in the garage for a few days (or don’t send your clothes to a conventional dry cleaner in the first place).
• Use a chlorine-free dishwasher detergent.
• Avoid new furniture made from plywood and/or other pressed woods or particleboard. They can release formaldehyde vapors.
• Don’t use personal care products containing synthetic fragrance. The same goes for laundry detergent, dryer sheets, and even scented candles.
• Don’t use your fireplace or use it sparingly.
• Keep humidity levels between 30 to 50 percent to help VOC fumes dissipate.
3. GET THE LEAD OUT

Lead is a well-known household contaminant, one definitively found to cause a wide variety of prenatal neurological harm. It can appear in many places. Simple swab-based test kits available at most hardware stores will identify its presence, and items containing lead should be removed or encapsulated. Here are some of the common places lead hides:

- Paint applied prior to 1979. (Lead paint was banned in 1978 and continues to be a big problem.) Know when your home is built.
- Dust.
- Drinking water obtained through older pipes that may contain lead.
- Imported traditional medicines.
- Low-quality jewelry including children’s costume jewelry.
- Fishing tackle.
- Imported glazed ceramics.
- Imported candies or foods containing chili or tamarind.
- Mini-blinds.

When it comes to lead paint, friction surfaces (windows, doors) are especially of concern since they can create lead dust when they rub. Removal or encapsulation of lead-tainted objects is not a job for a pregnant mom. It’s one thing to throw out a piece of costume jewelry, quite another to remediate flaking window jambs. Hire workers certified in government regulations to methodically address the problem. Make sure to look at their lead-safe certifications and carefully discuss the issue before any work begins. A thorough post-construction clean up as well as lead clearance testing should follow any home improvement project that disturbs lead paint.
“When we took an old shell of a building and made it a green home, it took enormous effort and research to make choices to avoid environmental toxins, but it was so worth it! We chose radiant heating instead of blown air, went with a soy based plaster, low VOC paints and sealants for the floors, and untreated furniture. When I was considering getting pregnant, I experienced the same feeling. I wanted to create the best home for my growing baby—first in my body then in the world. Again it took a lot of effort and research but worth every second. I went even more organic with my food. I also became more aware of my beauty products and went all organic and toxic-free for everything from toothpaste to perfume to shampoo. HCHW was an incredible resource. I think the most important part of the journey is not getting overwhelmed and staying positive. We are all doing our best and every little change counts.”
— ALYSIA REINER, ACTRESS, AND HEALTHY CHILD HEALTHY WORLD AMBASSADOR
4. FILTER YOUR WATER.

Your OB/GYN or midwife has likely told you to drink a lot of water during these 9 months. But what’s in that water? Municipal water supplies are usually treated to remove impurities, but they also commonly have materials intentionally added to them, like chlorine and fluoride, both of which have been implicated in birth defects and other prenatal problems, from holes in the heart to neurological dysfunction. Since you drink water day in and day out, you will have chronic low-level exposure. Ask your water supplier whether chlorine or fluoride is present in your tap water. If so, filter your drinking water—and, if practical, your bathing water: chlorine can be volatized into an inhalable form by hot water. If you drink well water, it’s likely chlorine- and fluoride-free, but it may contain other contaminants like agricultural pesticides. Have it tested and filter accordingly. (See Filter Your Water page 37.)

5. AVOID VINYL

Polyvinyl chloride (PVC) products—from flooring to shower curtains—are made flexible by a family of chemical plasticizers called phthalates. Research indicates that prenatal phthalate exposure can interfere with testosterone production and reproductive development, and adversely affect mental, motor, and behavioral development during the toddler years. Phthalates have also been implicated in low birth weights and even significantly increased odds of preterm delivery. Unfortunately, phthalates are not chemically bound to the products that contain them. As a result, they can easily “shed” and/or evaporate into the air and into house dust.

Steps should be taken to decrease exposure to phthalates during pregnancy. To keep phthalates away, don’t use any vinyl products or plastic items with the “PVC,” “V,” or “3” recycling symbols. Be aware that vinyl is unfortunately one life’s most common materials. It’s found in shower curtains, flooring, wallpaper, carpet mats, imitation leather, inflatable products, venetian blinds, electronic cables, shoes, backpacks, luggage, plasticized fabrics (bib, printed t-shirts, aprons, tablecloths, etc.), soft plastic toys and teethers, and garden hoses. And that’s just a partial list!

The good news is that PVC-free versions of almost every vinyl product are available. For example, there are plenty of PVC-free shower curtains. If you have vinyl flooring and you’re not in the market to replace, damp mop frequently. Use non-PVC shades or blinds to keep sunlight from floors and other vinyl surfaces; direct sun causes vinyl to heat up and release its phthalates faster.
“Chemical pollution is chemicals in the wrong place. They may come from air pollution, consumer products or environmental pollution. Many of these chemicals can pass from the pregnant woman to her child, and they also make their way to the brain. Our brains are so complex that their development is uniquely sensitive to adverse effects from pollutants. The results are generally subtle — often just a matter of a few IQ points or some attention deficit. However, we need to protect every single brain cell and IQ point, as optimal brain function is so crucial to all of us. It is different from all other organs. Certain things, let's say paint fumes at home or strong cleaning agents can be avoided. Don't use chemicals in your garden, especially when a woman is pregnant or kids are playing in the grass. Choose organic food, especially during pregnancy and for baby food. When I look at the pesticide levels in conventional vegetables and fruit, I see there are residues. I think the limits used by the FDA are too high. We are now learning that exposures we said were safe in the past are no longer safe. Instead of hoping everyone will be fine, we should take action.”

- DR. PHILIPPE GRANDJEAN, PROFESSOR OF ENVIRONMENTAL MEDICINE IN DENMARK AND AT HARVARD SCHOOL OF PUBLIC HEALTH AND AUTHOR OF ONLY ONE CHANCE.

6. DON’T GET STUCK ON PERFLUOROCHEMICALS

Perfluorinated chemicals (PFCs) are materials used to create non-stick cookware, greaseproof food packaging, stain repellants, and other products. Like phthalates, these long-lived endocrine disruptors often escape from items that contain them. Research into the fetal health effects of PFCs is, like your growing baby, in its infancy, but early indications suggest they’re problematic. They’ve been linked to low birth weight, small head size, and low maternal thyroid hormone levels that can lead to below-average motor skills, learning difficulties, reduced IQ, ADHD, and problems with infant socialization.

To prevent contact with PFCs, swap your non-stick cookware for naturally non-stick cast iron. Avoid fast food, takeout pizza, and things like microwave popcorn, which are typically packaged in PFC-coated materials. Don’t apply stain-or water-repelling treatments to furniture, carpets, or clothing, or buy pre-treated items. Use plain dental floss instead of coated types, which often contain PFCs. Don’t use coated paper plates.
7. DON'T USE ANTIBACTERIAL PRODUCTS

Antibacterial products from soaps to socks are all the rage, but scientists believe that their rampant use is contributing to the rise of antibiotic-resistant “super germs.” It can be scary, not to mention annoying, to get sick when pregnant, but it’s best to avoid products containing antibacterial agents. According to a theory called the hygiene hypothesis, living in a hyper-sanitized world created by antibacterials may also weaken our immune systems. The chemicals used in these products also create harm of their own. Most concerns revolve around triclosan, a common antibacterial ingredient found in the urine of 75% of Americans. It’s believed to be an endocrine disruptor that inhibits estrogen sulfotransferase, a key placental enzyme needed for a healthy pregnancy. Other studies link it to fetal nervous system damage, low birth weight, and thyroid dysfunction. In late 2013, the FDA proposed a rule requiring manufacturers of antibacterial hand soap and body wash to prove their products are more effective than soap and water in preventing illness and spreading infection, as well as requiring them to prove their products are safe for long-term use. In the meantime, pregnant moms can scrutinize the labels of personal care items, cleaners, and other products. Skip those containing triclosan or claiming that they are antibacterial or odor fighting. Thankfully regular hand washing has been shown to be just as effective at removing germs as antibacterial soaps. Lather up.

8. KILL THE PESTICIDES

It comes as no surprise to learn that pesticides—toxic chemicals deliberately designed to kill living things—are also capable of inflicting in utero harm. Prenatal exposure to these dangerous toxins can affect cranial growth and head circumference, impair neurological development, and cause urogenital defects, limb birth defects, and circulatory, respiratory, and musculoskeletal malformations, to name just a few outcomes. So steer clear of pesticides of all kinds when you’re pregnant. Embrace your lawn and garden as it is. If you have an infestation inside the house, use the least toxic methods available to address it. Most pests can be avoided with prevention—so keep your kitchen clean, even if you feel too tired and hormonal most nights to clean up. Be aware that pesticides are found in more than just insect sprays. They also hide in insect traps and baits, pet products like flea and tick collars, shampoos, and treatments, lice shampoos, insect-repellent clothing, and non-organic produce.

9. DON'T HANDLE THERMAL PAPER

Thermal paper used for cash register and other receipts as well as in fax machines and similar devices often contain the endocrine-disrupting chemical bisphenol-A (BPA), which is easily absorbed through the skin. According to various studies, fetal exposure to BPA can disrupt development, impair growth, cause behavioral and emotional problems in toddlers, and trigger asthma and breast cancer later in life, among other effects. BPA has also been linked to a greater risk of miscarriage. It’s nearly impossible to avoid BPA entirely, since it’s ubiquitous. But you can minimize your exposure. If you don’t need a receipt, don’t take it. Ask cashiers to place necessary receipts in your bag. Don't store receipts in your wallet. Wash your hands well after handling both receipts and money—which constantly rubs up against receipts in wallets everywhere—and especially before eating. Resist the urge to use hand sanitizer after handling receipts—studies show it actually boosts BPA absorption.

Think chemicals aren’t getting from your products into your body? Think again. Triclosan, a common antibacterial agent, is found in the urine of 75 percent of Americans.
We spend approximately a third of our lives in bed, on our mattresses. When pregnant, that ratio often increases. Unfortunately these horizontal sanctuaries are not always as healthy as they could be. To meet flammability safety standards, many mattresses contain flame retardant chemicals of concern. And the foams inside new mattresses may also emit VOCs (see #2 on page 14). It can be difficult for consumers to find out what chemicals or materials a specific mattress contains or is made of due to manufacturer secrecy. If you have the budget to replace your mattress with one made from natural materials that don’t require toxic chemical flame retardants to meet flammability standards, now is a good moment to do it. Wool, cotton, organic cotton, and natural latex are good alternatives to polyurethane foam. Wool and or/cotton futons are an affordable option. Consider these issues when shopping for a crib mattress, too. If you choose to encapsulate an old mattress in an effort to keep the chemical dust in, rather than replace it, make sure not to use a PVC plastic cover. Using vinyl (see page 18) would be adding insult to injury.

Carpet foam is typically treated with flame retardants that can escape into your home’s environment. One study found that almost 90% of foams tested contained one or more flame retardants considered toxic. Though the U.S. phased out the use of several problematic types in 2004, others remain, especially in older homes, and banned varieties may still appear in imported foams. Flame retardants called polybrominated diphenyl ethers (PBDEs) are suspected of altering the thyroid hormones of pregnant women, which researchers suspect may lead to smaller fetuses and reductions in intelligence and motor skills. They’ve also been linked to neurodevelopment delays.

Carpet foams are prone to decay, and the dust they create is typically laden with flame retardants. If you can, have these foams removed—this is not a DIY home project for a pregnant mom! Make sure the person doing the work uses caution not to stir up excessive dust or to leave particles behind. Have the space cleaned, with similar caution, when the work is done. Similarly, remove any pads you may have under area rugs. If you have wall-to-wall carpeting—or even if you don’t—invest in a HEPA vacuum, which prevents dust from being blown back into household air. Vacuum regularly and avoid prolonged direct contact with padded carpeting.
OVERVIEW

When you ache, are swollen, look different than you ever have in your life, and can’t go out for cocktails at your favorite bar, the urge to pamper yourself spa-style tends to emerge. And who can blame you for wanting to slather creams all over your expanding belly? Stretching skin is itchy! But before you go wild with the beauty products, make sure you read all labels. Carefully. Personal care products and cosmetics have an ugly side. Much like cleaning products (see page 28), they’re woefully under regulated and contain some remarkably unhealthy stuff. The FDA mostly doesn’t require personal care and cosmetic companies to conduct safety tests on their products nor does the agency itself evaluate or regulate formulas or ingredients. Only a handful of coloring agents and “active” ingredients classified as drugs are subject to prior review. Aside from these, manufacturers are free to use virtually any chemical or material. And there is plenty to mix and match: some 10,500 different compounds are used in America’s personal care products. Over 500 of these products contain ingredients that have been banned elsewhere, and around 100 use materials judged unsafe even by the International Fragrance Association.

Chemicals of concern commonly found in personal care items include substances like parabens, a class of preservatives linked to autism-like symptoms, male reproductive dysfunction, and other effects; endocrine disrupting phthalates; butylated compounds like BHT and BHA, which have been found to affect reproductive system development and cause kidney damage; formaldehyde, which has been linked to a greater risk of miscarriage; the neurotoxin toluene, which is suspected of impairing fetal development; mercury; carcinogenic coal tars, and even lead, which has been found in lipstick.

The dangers posed by these and countless other questionable ingredients are magnified by the nature of personal care products themselves, which are applied to and absorbed by the skin. This direct route to the bloodstream also creates a short cut to the womb. That makes avoiding toxic cosmetics and personal care products paramount for expectant mothers. Here’s how to keep you and your baby safe:

Your Checklist

☐ Embrace your natural beauty
☐ Read labels
☐ Go fragrance-free
☐ Beware buzzwords
1. EMBRACE YOUR NATURAL GLOW

As a pregnant mom, you already possess a beauty no products can match. It’s true! Even when you feel green and gray. Make up just isn’t necessary. If you can, dare to go entirely bare! If you want to at least powder your nose, try using fewer products than you have been using. And swap what you want to continue to use for a new, more natural product free of ingredients that may hurt you and your growing baby. Yes, this means you have permission to go shopping for new, safer foundation, blush, and more. Oh, the hardship.

2. KEEP IT ALL NATURAL

It’s not just your make up that needs a makeover. Shine the same spotlight on your personal care products. What do you really need to use and what is extraneous? Edit down the number of products you use, and choose natural versions of the essentials—from toothpaste to deodorant to belly creams. If switching to all new natural products isn’t in your budget, try an organic food grade oil like safflower or coconut. Keep in mind, though, that the word “natural” is largely unregulated, so look for products with third party certification and a solid roster of organic ingredients. There are dozens of certification labels and organizations. Some are more dependable than others, and explaining them all would take an entire e-book itself! Thankfully Consumer Reports offers an online guide to third party certifications that can help you identify which labels are trustworthy.
“Unfortunately, the components of most synthetic fragrance (which can be made up of more than 100 different chemicals) are kept secret from consumers, meaning you just don’t know what you are being exposed to. Common fragrance chemicals include phthalates and synthetic musks both of which can impact hormone levels which may pose developmental harm. Avoiding fragrance where possible is another way to be safe rather than sorry during pregnancy.”

-ALEXANDRA SCRANTON, DIRECTOR OF SCIENCE AND RESEARCH, WOMEN’S VOICES FOR THE EARTH

3. READ LABELS CAREFULLY
Most ingredients will be listed, but be aware that regulatory gaps allow some to go unmentioned. For example, nanomaterials, ultra microscopic particles of undetermined toxicity, can remain hidden in formulas as trade secrets. Scents, which can contain multiple chemical hazards, need only be listed as “fragrance.” Loopholes like these make it difficult to trust any label entirely. Relying on products with third party certification and organic ingredients is good common sense when pregnant. Trust your instincts. If a product’s label seems questionable, its claims over the top or otherwise dubious, or its ingredients suspicious, pick another. There are plenty of options.

4. GO FRAGRANCE-FREE
No one knows exactly what is in the synthetic fragrances found in everything from cream to make up to actual perfume. Fragrance formulas are protected by the government as trade secrets. All manufacturers need to list on their labels is the word *fragrance*. This one word can indicate a combination of hundreds of different chemicals, none of which need to be listed. What we do know is that phthalates, which are endocrine disruptors linked to reproductive, motor and behavioral development effects, are a common class of fragrance ingredients. It’s a good idea to minimize exposure to phthalates when pregnant—in things like vinyl (see page 18) as well as personal care. Thankfully there are plenty of fragrance-free products to choose from. If you really want some scent, use natural or organic essential oils, or a product scented with them.

BEWARE BUZZWORDS

Even if a product claims to be natural, label reading is a must. It’s extremely confusing for a consumer, but words like “natural” and even “hypoallergenic,” which commonly appear on personal care product labels, actually have no legal definition. They can mean anything companies want them to mean. Even “organic” can’t be entirely trusted—it’s legally defined only in the case of personal care ingredients that are also food items (think honey or olive oil). For non-food items and ingredients like essential oils or plant-derived compounds, its use is not regulated. A product labeled “organic” could technically contain toxic petrochemicals. So ignore these and other labeling buzzwords when you shop, unless they’re backed up by third party certification. They’re usually more marketing hype than anything else.
5. JUST SAY NO TO SPA DAYS, PEDICURES, HAIR DYES, AND OTHER TREATMENTS

We get that spa treatments and pregnancy pains go together. But most body and hair treatments rely on toxic products. Conventional nail polishes, for example, contain hazards like dibutyl phthalate, toluene, formaldehyde, xylene, methyl ethyl ketone and/or acetone, chemicals which are collectively capable of causing all kinds of health effects from organ and nervous system damage to hormone disruption and cancer. Don’t even get us started on spray tans.

Hair dyes have been linked to non-Hodgkin's lymphoma, leukemia, and bladder cancer. Avoiding mani/pedis, certain face peels, and hair dye lowers pregnancy risks. There is no way around that. If you’d like to paint your nails anyway—or for a special occasion—there are some less toxic polishes on the market that don’t have some of the worst of these chemicals. And if you’d like to dye your hair no matter what, talk to your doctor about the best time to do your ‘do. Some suggest waiting until the 2nd or 3rd trimester, other suggest highlights instead of a full dye job as a way to lessen the toxic load. Just keep in mind that you’ll still be sitting in a salon exposed to fumes from other dyes, hairspray, nail polish and more. Try to find a well-ventilated salon that uses more natural products. Still wanting a treatment? Get a massage. Just ask your masseuse to use something simple like (organic) jojoba oil on your muscles.

PRACTICE SAFE SUNSCREENING

Sun protection is an essential part of staying healthy. Yet many of us achieve that protection in ways that are less than safe. Most sunscreens use three to six of these active ingredients: oxybenzone, avobenzone, octisalate, octocrylene, homosalate and/or octinoxate. Oxybenzone is the most common, and studies suggest it may increase the risk of endometriosis and low birth weight. Other sunscreen ingredients are suspected of disrupting hormones and/or causing reproductive and developmental disorders. Far safer suncreening strategies include avoiding the sun during peak midday hours, sticking to the shade, and wearing hats and clothing to keep solar rays away. When it comes time to slather on a sunscreen, choose a tube containing a mineral like titanium dioxide and/or zinc oxide.
CLEANING UP

OVERVIEW

Few consumer products contain more toxic chemicals than conventional household cleaners. That may seem counterintuitive—these are, after all, products meant to help us keep clean—but thanks to very loose regulations, many manufacturers can and do use risky chemicals in complex, undisclosed formulas. These can also be sold without prior safety testing.

The lack of ingredient labels is a problem, especially when pregnant. Thousands of different chemicals are used in modern cleaning products. They include organ toxicants like butyl cellosolve and morpholine, reproductive and developmental dangers like glycol ethers and dichloroisocyanurate, hormone disruptors like phthalates and paradichlorobenzene, neurotoxins like xylene and methylene chloride, and carcinogens like formaldehyde and naphthalene, as well as immune system suppressants, respiratory hazards, and other risks best avoided. When you use conventional cleaners, these toxins get spread throughout your home. Some fill indoor air with dangerous fumes. Others are released as aerosols, microscopic droplets that can remain suspended in the air for hours or even days. Many leave residues behind on the “cleaned” surfaces.

The potential consequences of exposing developing babies to these chemical stews remain largely unknown—every product formula is a unique mix of multiple chemicals, and testing them all to identify prenatal risks would take untold years and dollars. What little we do know isn’t comforting. Several studies, for example, have linked maternal exposure to cleaning products during pregnancy to a greater incidence of childhood asthma, respiratory tract infections, and wheezing. In animal studies, glycol ethers have caused reproductive and developmental problems. A recent study by the New York State Department of Health found that that children born to women working as custodians have a greater risk of certain birth defects. Other research has connected prenatal cleaning product exposures to lower IQ, reduced language skills, and vision problems.

Thankfully it’s easy to prevent conventional cleaning products from turning your home into an uncontrolled science experiment with your youngest and most vulnerable family member as the guinea pig. Here’s how.

Your Checklist

- Heed warning labels
- Try natural products or DIY
- Don’t over clean
- Go fragrance-free
EASY STEPS

1. READ LABELS CAREFULLY
Skip any products that don’t offer a complete list of all their ingredients by specific chemical name or that have long lists of unpronounceable ingredients. Avoid products that carry warning words like “caution,” “danger,” “flammable,” or “poison.”

2. CHOOSE NATURAL FORMULA PRODUCTS
Products made from sustainable, biodegradable, plant-derived ingredients are generally far safer than those made from petrochemicals. Choose products from companies that voluntarily list their ingredients. Just make sure to avoid the impostors by investigating product claims. Not all so-called green certifications are third party; some manufacturers self certify. Buyer beware!

3. MAKE YOUR OWN CLEANERS
This is less complicated than it sounds. Simple natural ingredients can be combined to make cleaners that are as effective as commercial formulas and a whole lot healthier. For basic recipes, check out the suggestions on page 31 in DIY (Like Grandma Did) and head to Healthy Child Healthy World’s website.

4. DON’T BOTHER BEING OBSESSIVE ABOUT CLEANING
Most homes are already as clean as they need to be and don’t need the serious scrubbing conventional cleaning products provide. Remember that many scientists believe there’s a body-boosting advantage in home environments that haven’t been hyper-sanitized. Exposure to ordinary microbes keeps our immune systems sharp. Unless someone at home has been ill, most homes mainly need wipe downs with damp rags to minimize dust and ventilation to purify indoor air. The dirtiest thing in any home is your own two hands.

5. BUY FRAGRANCE-FREE PRODUCTS (OR THOSE SCENTED WITH ESSENTIAL OILS)
Fragrance formulas, like cleaning product formulas, are currently government protected as trade secrets. A synthetic fragrance can contain thousands of different chemical ingredients. No one knows what the exact formulas contain—and no manufacturer is required to disclose the ingredients—but we do know that these scents typically contain neurotoxic volatile organic compounds and endocrine-disrupting phthalates. Both of these should be avoided when pregnant. Either opt for fragrance-free products, or, if you really want something scented, make sure you choose one containing a natural essential oil. Keep in mind that some companies use fragrance masking agents to make their products unscented. Generally speaking these chemicals are not found in cleaners made by natural product companies.
DIY (LIKE GRANDMA DID)

Once upon a time, people cleaned their homes with homemade cleaners created from simple ingredients found in every pantry. These powerful recipes used natural materials like baking soda, vinegar, lemon juice, vegetable soap, essential oils, and beeswax in various combinations that made quick work of even the toughest cleaning challenges. With a measuring cup and spoons, a spray bottle, a minute or two, and maybe some hydrogen peroxide, you can easily create your own safe and healthy homemade cleaning products. Mix vinegar and water for glass, plant based dish soap and water for floors, and baking soda and dish soap for a tub scrub. You'll be glad you did.
EAT PURE

OVERVIEW

You are what you eat. And when you’re pregnant, your growing baby is what you eat, too. While everyone from your midwife to your mother-in-law will tell you this means you should fill your plate with healthy food, there’s another side to this dietary edict—there are things you should work very hard not to eat when pregnant. It’s critical to get the essential nutrients your baby needs to grow, but it’s equally important to steer clear of common chemicals found in food that may harm this development. Though most expectant moms are aware of why they should avoid mercury and PCBs in seafood, unfortunately, toxic chemicals in food are hardly limited to big fish.

Over the course of the last half-century, our food supply has become saturated with chemicals and other unsafe substances. Currently, the FDA allows more than 10,000 different additives in food. Some are intentionally added. Others are inadvertently introduced from the manufacturing process or the packaging. Still other pollutants find their way onto our plates as the result of an increasingly polluted planet. The impact many of these additives can have on a healthy pregnancy remains largely unknown; two thirds of these permitted substances have never been studied for safety.

Some of these chemicals are familiar to us even if their effects on fetal development are not. We’re used to ingredients like food dyes, artificial flavors, synthetic sweeteners, and chemical preservatives. We may be aware of dairy hormones and livestock antibiotics. But it’s usually a shock to realize that alongside garden variety additives like these are often highly toxic interlopers like bisphenol-A, perfluorochemicals, and dioxins.

It’s all highly unappetizing. But safer, healthier meals for you and your baby are just a few pieces of advice away. It’s never a bad idea to adopt a homemade organic whole foods diet, pregnant or not. Chances are it’s better than what you’re used to eating. Still, it’s always a good idea to discuss your diet with your doctor. Pregnancy places unique nutritional demands on your body, so be sure that any changes you make won’t prevent you from meeting them.

Your Checklist

- Focus on whole, organic foods
- Play it safe with cookware & plastics
- Cook at home—often
- Avoid canned foods
1. FOCUS ON WHOLE FOODS

Whole foods are just that—whole. Think unprocessed grains, fruits, vegetables, proteins, and dairy products, and fresh herbs and spices. Stocking your cabinets and fridge with whole foods is a simple and highly effective way to steer clear of many of the unstudied chemicals found in our food supply, many of which appear in processed and packaged foods. Whole foods are more nutritious, too. There’s a big difference between dinner made from scratch using just a handful of whole foods and microwaving a ready-to-eat frozen entrée with an ingredient list that reads like a lab experiment. Of course when you’re tired and growing a baby, the latter can be easier. So set yourself up for success by shopping right and prioritizing whole foods. If you don’t already shop at a farmers’ market, give it a try.

2. CHOOSE ORGANIC FOODS WHENEVER POSSIBLE

Organic food is the best choice for a healthy pregnancy. It’s produced without the use of pesticides, synthetic fertilizers, sewage sludge, irradiation treatments, growth hormones, antibiotics, or non-organic feed. In addition, organic foods cannot be genetically modified, a process that often introduces new, never before seen proteins into our food supply with as yet unknown consequences. Eating organic means eating less pesticide residue; Department of Agriculture tests show that conventional fruits and vegetables are up to four times more likely to contain pesticide residues than organic produce and as much as 11 times more likely to be contaminated by multiple pesticides. If you’re not eating organic food yet, keep in mind that the benefits of switching are immediate. Researchers at Emory University found that children who switched to an organic diet reduced the pesticide remnants found in their urine to virtually undetectable levels after just five days. If you can’t eat entirely organic, make an effort to choose organic for meat, dairy, and the fruits and vegetables known to retain the highest levels of pesticide residue.
In recent years studies have confirmed links between exposure to organophosphate pesticides during pregnancy and low birth weight, early gestation, and an increased risk of ADHD. Now, more than ever, it’s important to choose organic fruits and vegetables. One particular nutrient that is important when pregnant is folate (folic acid), so eat up on foods high in folate like dark green leafy vegetables, citrus fruits, dried beans and peas. And be sure to buy organic especially for your leafy green vegetables as they consistently land themselves on the Dirty Dozen list.”

— SARA SNOW, GREEN LIFESTYLE EXPERT, AUTHOR, MOM, AND HEALTHY CHILD HEALTHY WORLD PARENT AMBASSADOR
ORGANICS ON A BUDGET

Eating organic while pregnant doesn’t come cheap—organic foods often cost more than their conventional counterparts. You can maximize your food budget by balancing the two, choosing organic varieties of foods that typically have high pesticide residue levels and conventional varieties of foods that usually don’t. Based on analyses of government test data, here are the Environmental Working Group’s Dirty Dozen and Clean 15 lists of the most and least contaminated types of produce. They update these yearly.

DIRTY DOZEN:
Apples, Celery, Cherry Tomatoes, Cucumbers, Grapes, Hot Peppers, Imported Nectarines, Peaches, Potatoes, Spinach, Strawberries, Sweet Bell Peppers

CLEAN FIFTEEN
Asparagus, Avocados, Cabbage, Cantaloupe, Sweet Corn, Eggplant, Grapefruit, Kiwi, Mangos, Mushrooms, Onions, Papayas, Pineapple, Frozen Peas, Sweet Potatoes
3. DO YOUR OWN COOKING
You’re tired and the last thing you want to do is cook. We get it. But consider this: When you dine out, order in, or consume processed packaged foods, you can never be entirely sure what you’re eating. Preparing your own meals at home using fresh, whole ingredients, on the other hand, gives you maximum control over what ends up on your plate. It’s the best way to ensure an optimally safe and healthy diet for both you and your baby. Besides, cooking tired is a necessary parenting skill. Consider this training. Imagine all the years of baby food prep, school lunches, and more that you have ahead of you. Cook now and cook often.

4. KEEP THE FOCUS ON NON-FATTY FRUITS AND VEGETABLES
Fruits and veggies have obvious and well-known nutritional benefits, especially when pregnant. But here’s another reason to love these non-fatty foods: they’re largely free of a dangerous class of toxins known as persistent organic pollutants, or POPs. POPs include many pesticides, flame retardants, PCBs, dioxins, industrial chemicals, compounds made with chlorine, and other pollutants that behave in similar ways in the environment. They resist biodegradation and persist for years, move efficiently through the food chain, and can travel great distances from their source. They’re also fat-soluble, which means they tend to accumulate in the fatty tissues of people and animals. As a result, measurable quantities of POPs are often present in fatty foods, especially coming from animals highest on the food chain—meat, dairy, and seafood. When we eat POP-contaminated foods, these poisons accumulate inside us and cross the placental barrier. Fetal exposure to some POPs has been linked to developmental changes, lower post-birth psychomotor scores, memory and learning problems, and long-term effects on intellectual functioning. Others have been linked to miscarriage, immune system maldevelopment, and low birth weight. As you eat lower on the food chain to reduce your intake of POPs, though, keep in mind that there are still benefits to keeping some good fat on your plate while pregnant. Just strike a balance.

FILTER YOUR WATER
Pregnant and breastfeeding women are often thirsty. Water is the best beverage; unlike most sodas and many juices, it’s not filled with sugar or anything artificial. Yet there are many reasons to be wary of tap water. Municipal supplies may be treated with chlorine and fluoride. Rural sources can contain pesticides or radon. Lead present in older plumbing can make its way to the tap. Bottled water is rarely better, and in many cases it’s just municipal water put in plastic bottles and sold for a song. This makes home water filters an important tool in keeping your tap water safe and your growing family healthy.

There are many different types of water filters. Some serve an entire home. Others filter just a single tap. Then there are pitchers. The technologies they contain vary, too. Carbon filters, for example, typically remove chlorine, tastes, odors, lead, and organic chemicals, while reverse osmosis filters handle inorganic chemicals, fluoride, and some metals. Choosing the one that’s right for you starts with a water test to identify what you’re looking to filter out. Some municipalities will even test your water for free. (If you have well water, the tests will likely be on you.) Once you know what the issues are with your own H2O—and especially if the results are complicated—it’s a good idea to work with a water filter professional to find the best solution.
5. PLAY IT SAFE WITH PLASTICS

Plastic is undeniably handy, but it may contain toxic compounds that can migrate into food, especially when your meal and/or the plastic is hot. It's wise to exercise caution when using plastics while pregnant. Here's how.

- Never microwave food in plastic of any kind, including so-called “microwave-safe” containers and self-serve food packaging. Use glassware instead. Or, even better, reheat food on the stove.
- Don't serve or store foods in plastic containers, especially hot or acidic foods or those containing fats or oils.
- If you do choose to store food in plastic containers, use only #2 HDPE, #4 LDPE, and #5 PP for the purpose. These types are currently considered safest for food storage by the scientific community.
- Skip products packaged in #1 PETE plastic, like disposable water, juice, and soda bottles. Studies show that under certain conditions PETE can leach unhealthy amounts of antimony, a toxic metalloid that causes health effects similar to arsenic. And keep in mind #1 bottles are never meant for reuse.
- Avoid #7 polycarbonate plastic containers and bottles. This plastic type can release bisphenol-A (BPA), a common endocrine-disrupting agent, into the foods and liquids stored inside.
- Don’t wash plastic containers in the dishwasher and/or with dishwasher detergents containing chlorine. This can accelerate the leaching of toxic plastic compounds. They should be hand washed with warm water.
- Avoid deli wrap and similar plastic wraps. These can contain phthalates, endocrine disrupting chemicals linked to reproductive, mental, motor, and behavioral developmental effects.
- Recycle or throw out your old plastic containers, especially those that are heavily worn or scratched. Plastics tend to leach increasing amounts of the chemicals they contain as they age and become worn.
- Use glass bottles for infant feedings.

CLEAN YOUR PRODUCE

Fruits and vegetables should be washed in warm water to remove pesticide residues and post-harvest treatments like fungicide applications and waxes. Thick-skinned foods like tomatoes and cucumbers can be gently scrubbed in a mild solution of water and natural soap. Skip products made specifically to wash produce, especially if it isn’t clear what’s in them. You’ll just be swapping one residue for another. Even foods whose skins will be discarded, like bananas and squash, should be washed to avoid transferring any contamination they harbor from the skin to the edible portion inside while peeling. But hear this loud and clear: Just because you wash your produce doesn’t mean you can now give up on organic. Washing conventional fruits and vegetables won’t remove all pesticide residues, and some are inside the plants.
6. AVOID CANNED FOODS

The interiors of most food cans are coated with a protective lining containing bisphenol-A (BPA), an endocrine disruptor. This can easily migrate into any food stored in the can, especially if the food is acidic. Prenatal BPA exposure has been linked to post-birth hyperactivity, behavioral changes, chromosome alterations, and even birth defects. Some manufacturers are now using BPA-free cans and advertise this on their labels. There is an overall lack of information on what is being used to replace the BPA in these cans, though, and no regulation or third party certification when it comes to these claims. So skip canned foods while pregnant and while breastfeeding. Opt instead for fresh, frozen, or dried foods.

“We know that a healthy diet is a key component of a healthy pregnancy. Now, researchers are beginning to learn that a woman’s diet may help protect her and her developing baby from the harmful effects of air pollution. For example, a recent study in Spain found greater exposure to air pollutants during pregnancy was associated with lower scores of infant mental development, but only among women who reported eating a diet with low intake of fruits and vegetables. No effects from the air pollutants were observed in women who reported higher intakes of fruits and vegetables, which are well-established sources of important nutrients like antioxidants. Current research is examining a variety of nutrients such as antioxidants, folate, and omega-3 fatty acids to determine if and how they may counteract the effects of air pollutant exposure during pregnancy. Although this is a new field of research, it suggests that there are numerous benefits to eating a healthy, well-balanced diet during pregnancy. Women should consult with their healthcare providers to discuss what and how much they should be eating during this important time.”

JEANETTE STINGONE, PHD, THE ELIZABETH ASCIA SCHOLAR IN CHILDREN’S ENVIRONMENTAL HEALTH OF THE MOUNT SINAI CHILDREN’S ENVIRONMENTAL HEALTH CENTER
7. **COOK IN STAINLESS STEEL AND CAST IRON, NOT NON-STICK PANS.**

Until recently most non-stick cookware was made with a chemical that has been linked to cancer, infertility, and complications during pregnancy. This chemical—perfluorooctanoic acid or PFOA—is so persistent it has been found in low levels in the blood of 98 percent of the general U.S. population. It’s an endocrine disruptor and has been linked to low birth weight and impaired fetal growth. People are exposed to it mainly through easily scratched pans. Non-stick surfaces can also break down at high temperatures and the resulting fumes can cause flu like symptoms in humans and death in birds. In 2005, DuPont settled with the EPA for $16.5 million for allegedly withholding PFOA health risk information. The EPA called on them and six other chemical companies to voluntarily eliminate PFOA and similar substances from plant emissions and products by 2015. While there are new chemicals now being used to produce non-stick cookware, the safety of these PFOA replacements is largely unknown. Safer cooking options include tried and true durable materials like cast iron, enamel coated cast iron, and stainless steel.

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**THE SEAFOOD CONUNDRUM**

Fish is widely considered a superfood loaded with vital prenatal nutrients, particularly omega-3 fatty acids, which boost brain and eye development. But many species can be laden with the potent neurotoxin mercury as well as PCBs, leaving some mothers afraid to eat any seafood. The FDA and EPA advise pregnant women not to eat more than 12 ounces of fish per week. That’s about two meals’ worth. To make these servings safer, choose fish with low contaminants, like whiting, tilapia, sardines, anchovies, flounder, Atlantic haddock, and wild salmon (note that farmed varieties can contain toxic PCBs). The Internet is swimming with frequently updated lists of low mercury and low PCB seafood. If you’d like to play it completely safe and avoid fish altogether, talk to your doctor about obtaining fish’s nutritional benefits via omega-3 supplements or vegetarian alternatives.
EAT PURE

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NESTING

OVERVIEW

From pickle cravings to stretch mark prevention treatments, there are a lot of myths associated with pregnancy. The nesting instinct isn’t one of them. Research finds that pregnant women do indeed focus on readying a safe space for their new child. Anyone who has been pregnant can confirm this anecdotally. This usually means setting up a nursery or a bedroom, though some people take it many steps further. While this seems like a pretty straightforward proposition, the ways pregnant moms choose to renovate, paint, and furnish these spaces can have a big impact on a growing baby.

From cribs to toys, there’s so much to say about creating a healthy nursery that we wrote an entire e-book on the topic in 2013, Easy Steps for a Healthy & Safe Nursery. We’ll cover a few of the basics here, but we urge you to download the longer version—for free—for a complete look at all of the essential concerns. Just click here.

Here are a few initial points to start planning a nursery. Just keep in mind that demolition releases an unknown chemical cocktail of dust and debris into the home—it can contain lead, asbestos, and more. Expectant moms should not be doing any home renovations themselves and should, for the most part, be out of the home for the duration if any are planned. This includes even simple tweaks like painting and caulking. Larger renovation projects should be done by trained professionals. If you have lead paint, ask to see lead safe certification. Post construction clean up and ventilation throughout the project is critical.

Your Checklist

- Choose no-VOC paint & materials
- Hire someone—not you!—to do the work
- Go for solid wood furniture
- Ventilate for clean air
1. **CHOOSE NO OR AT LEAST LOW-VOC PAINT**

Traditional paints include volatile organic compounds (VOCs) to keep ingredients dissolved evenly and to help the finished product dry. These VOCs can affect your baby’s health. Since paints can continue to emit VOCs for months after they’ve been applied, it’s best to choose low- or no-VOC varieties or alternatives like milk paints. It’s also advisable to have someone other than mom applying the paint, especially if scraping of old paint—which may or may not be lead-based—is involved prior to application of new paint. Hiring a trained professional is the safest way to go, especially if you don’t know if there are layers of lead paint in your home.

2. **OPT FOR SOLID WOOD FURNITURE**

Many furniture products are constructed with pressed wood, plywood, particleboard, and/or chipboard. These materials are made from lumber scraps glued together under pressure to create boards. These products typically emit formaldehyde, an indoor air pollutant found in their glues that has been linked to greater risks of infant respiratory tract infections, asthma, and other illnesses. They can be identified at their unfinished edges, which will reveal layers or what looks like wood shavings or sawdust. Selecting solid wood furnishings with water-based finishes eliminates the issue. If you’re interested in hard wood antiques, beware any with chipped or crackling old paint. It could be lead paint. Bare is best.

3. **INVEST IN A SAFE CRIB MATTRESS**

Since your baby will be spending 14 to 16 hours a day sleeping—if you’re lucky—a healthy mattress should be a priority. Look for one made from untreated natural fibers that isn’t wrapped in polyvinyl chloride, a source of phthalate exposure, and one that hasn’t been treated with flame retardants. The best choices are an organic and/or a Greenguard Certified mattress. Outside your budget? Ask your friends and family to chip in and make it a collective baby shower gift. It’s the most important one they could give and your baby will be on it for several years.
“It’s important for us to do everything we can to keep toxics out of the nursery, but it’s no mean feat. We can’t just shop our way out of this problem. So buy safer products when you can, and speak up so everyone can access and afford the safer solutions!

-BOBBI CHASE WILDING, MS, DEPUTY DIRECTOR, CLEAN AND HEALTHY NEW YORK, INC.

4. GO WITH A WOOD FLOOR

When you think of a baby learning to crawl and walk, carpeting’s softness is tempting. Resist the allure; the flame retardants, stain repellents, and other treatments that carpets and carpet foam padding receive create a toxic environment in the very place your baby will spend most of her waking nursery hours. They also trap dust and dust mites—an asthma trigger. Wood flooring with a water-based finish is a better, easy to clean option. Cover with machine washable rag rugs made from untreated natural fibers. If you still want carpet, or wood floors are not an option, look for natural fiber products that meet sustainable carpet standards and won’t add to indoor air pollution.
PLANT FRESH AIR

NASA researchers studying air quality in space habitats have found that many common houseplants are highly efficient air purifiers able to absorb common indoor pollutants like benzene and formaldehyde. Houseplant filled rooms also contain 50 to 60 percent fewer mold spores and bacteria. It doesn’t take many plants to make a difference in a nursery’s air quality. Just a handful of Janet Craig and sweet chico plants, for example, have been found to reduce volatile organic compound levels by about 80 percent. Other plants that excel at cleaning indoor air include Boston fern, areca palm, lady palm, bamboo palm, rubber plant, English ivy, Dwarf date palm, ficus alii, and peace lily. The more houseplants you have, the healthier your home’s air will be. Just be sure to move the plants out of reach when your baby starts crawling or toddling, or you’ll wind up with dirt all over the floor!

5. KEEP THE ELECTRONICS IN ANOTHER ROOM

The subject of electromagnetic fields (EMFs) and human health is controversial. Some say the small zones of enhanced electromagnetism that surround electronic devices are harmless. Others disagree. While the science is far from conclusive, there is evidence suggesting that infants exposed to EMFs may face a greater risk of leukemia, heart rate changes, and other health effects. Until more is known, we recommend a precautionary stance that keeps all electronic devices away from your newborn. You’ll of course want a baby monitor in your nursery, but make that the only device and place it as far away from the crib as possible.

6. LET FRESH AIR IN

According to the EPA, the air inside the average home is 2 to 5 times more polluted than the air outside thanks to fumes emitted by furnishing and other items including household cleaners, combustion devices like stoves and furnaces, and bacteria and molds. The best solution is the simplest. It’s also free: Just open up the windows and let fresh air into the nursery as frequently as you can, even in the winter. And makes sure pollution levels are low in the first place by keeping all synthetic chemical products like cleaners, pesticides, and personal care items out of the room.

7. AVOID TOXIC TOYS

The typical baby has a natural instinct to explore the world via her mouth, and that makes toys a common source of toxic exposures. Possible hazards include phthalates found in soft vinyl toys, lead in paints and plastics, and organotin compounds used in harder types of vinyl. One easy way to keep playtime safe is to avoid plastics. If you can’t abandon them entirely, choose types 2, 4, or 5. Better options include unpainted wood toys or some cloth and plush toys. Remember that sometimes the best teethers and toys are everyday household items. A frozen washcloth is an easy teether and babies love playing with food storage containers, wooden spoons, and pots and pans.
TAKE ACTION FOR CHEMICAL SAFETY

As you make your way through this e-book, you may find yourself asking how the world became filled with so many unchecked chemical dangers—especially ones that are particularly unsafe for children. One key reason is a lack of effective regulations to control the use of toxic materials.

Currently, chemical safety on the federal level is largely controlled by the Toxic Substances Control Act (TSCA). This antiquated, nearly 40-year-old law has successfully regulated just five of the 85,000 chemicals in use today. Under the TSCA, manufacturers can introduce almost any chemical without safety testing. Instead, it's up to the EPA to prove a chemical is harmful once it's in use. That means we are all the guinea pigs, and it's our babies who bear the brunt of this exposure. They're more vulnerable than adults are.

There are so many people who have worked tirelessly to remedy this situation over the years, but the TSCA remains. But our elected officials keep trying. As of early 2014, Congress is considering passing the Chemical Safety Improvement Act (CSIA) to update TSCA. Unfortunately, the CSIA as currently written won't solve our regulatory problems. It's complicated, political, and nuanced, but basically—as before—instead of requiring manufacturers to prove a chemical is safe before it can be used, the CSIA won't allow chemicals to be regulated until the EPA can demonstrate harm. This scenario allows what is already happening to continue—harmful chemicals are left unchecked. The law would also preempt state and local efforts to implement tougher rules and higher standards than the CSIA establishes.

Whether this confuses you or fires you up, we can all help strengthen the CSIA to assure that it's part of the solution and not part of the problem. How? Just call or write your congressional delegation and urge them to ask for a stronger CSIA in 2014. If you want to get more specific, let them know you're interested in requiring manufacturer safety testing and preserving rights to implement tougher local laws. For easy ways to get in touch with your representative, click here.

Meanwhile, staying healthy also helps us resist the unsafe chemicals and hazards we do encounter despite our best efforts. Call it a prescription for a healthy pregnancy.

THE PROACTIVE PREGNANCY

Avoiding environmental toxins clearly isn't the only thing you can do to promote a safe and healthy 9 months. Being proactively healthy also helps. There is plenty of science to back up the wisdom of this approach. University of Montreal researchers, for example, discovered that pregnant women who exercised with moderate intensity three times a week for at least 20 minutes gave birth to babies whose brains were more mature than the brains of babies whose mothers were sedentary. Another study found that first-time mothers who ate fruit three times a day before becoming pregnant and who maintained or achieved a normal maternal weight, reduced their blood pressure, and avoided drug use while pregnant increased their odds of having a complication-free pregnancy. So pack on the fruit and get moving.
ADDITIONAL RESOURCES

GENERAL
• The American College of Obstetricians and Gynecologists - acog.org
• Environmental Working Group - ewg.org
• The Endocrine Disruption Exchange - endocrinedisruption.org
• Mount Sinai Children's Environmental Health Center - mountsinai.org
• Association of Reproductive Health Professionals - arhp.org

INDOOR AIR QUALITY
• EPA - epa.gov/iaq/

LEAD
• Lead Safe America Foundation - leadsafeamerica.org

FLAME RETARDANTS
• Green Science Policy Institute - greensciencepolicy.org/topics/flame-retardants

PESTICIDES
• Pesticide Action Network - panna.org

TRICLOSAN
• FDA - fda.gov/ForConsumers/ConsumerUpdates/ucm378393.htm

BPA
• Breast Cancer Fund - breastcancerfund.org/clear-science/radiation-chemicals-and-breast-cancer/bisphenol-a.html

PVC/VINYL
• Center for Health, Environment & Justice - chej.org/campaigns/pvc
RADON
- March of Dimes - marchofdimes.com/baby/radon.aspx

SAFER COSMETICS
- EWG’s Skin Deep Cosmetics Database - ewg.org/skindeep

PHTHALATES
- Safer Chemicals, Healthy Families - saferchemicals.org/toxic-chemicals/phthalates.html

FRAGRANCE
- Women’s Voices for the Earth - womensvoices.org/issues/fragrance

ORGANICS
- USDA’s National Organic Program http://www.ams.usda.gov/AMSv1.0/nop

PERFLUOROCHEMICALS (PFCS)
- CDC & EPA - cdc.gov/biomonitoring/pdf/PFCs_FactSheet.pdf; epa.gov/oppt/pfoa/pubs/pfoainfo.html

SEAFOOD
- NRDC - nrdc.org/oceans/seafoodguide/page4.asp

VOCs
- EPA - epa.gov/iaq/voc.html

EMFS
- Environmental Health Trust - ehtrust.org

TOYS
- HealthyStuff.org - healthystuff.org

THIRD PARTY CERTIFICATION
- Greener Choices - greenerchoices.org/eco-labels
This e-book is just one part of our Easy Steps To a Safer Pregnancy Toolkit, made possible, in part, by these conscious companies who provide safer products for moms and growing babies.

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To see the full list of resources used to compile this guide, visit the Easy Steps Resource Guide on Healthychild.org
A trusted resource for parents for more than 20 years, Healthy Child Healthy World is a California non-profit public benefit corporation with a mission to empower parents to take action and protect their children from harmful chemicals. By working with manufacturers and supporting policy initiatives, Healthy Child Healthy World provides access to critical information that encourages smarter lifestyle choices that reduce chemical exposure in homes and communities. Healthy Child Healthy World’s vision is a world where every child has the opportunity to grow up in a healthy and safe environment.

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