

ORGANICS: BEYOND GREEN

Discover the Dangers Lurking in Conventional Foods and Why Organics Are Your Key to Vitality, Longevity and Hormonal Balance



www.HealingGourmet.com

Organics: Beyond Green

By Kelley Herring & the Editors of Healing Gourmet®

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In this book, you'll learn:

- The 12 fruits and vegetables that contribute to 90% of your pesticide exposure
- Why fruits and vegetables produce more good-for-you nutrients when raised without chemicals
- How chemicals in foods disrupt your endocrine system and contribute to major diseases including thyroid dysfunction, diabetes, obesity and cancer
- The worrisome effects we're seeing in animals from exposure to these everyday chemicals... and what it means for our future
- Why less boy babies are being born (Hint: It's in our food!)
- The toxic heavy metal that's in one of America's favorite foods that could be causing your depression or Alzheimer's
- How fish farms promote cancer
- The yummy herb that can help to pull toxic chemicals (like mercury) out of your body
- The disgusting diet and lifestyle of animals raised in "concentrated animal feeding operations" and how it contaminates your plate
- Why grass-fed and pastured meats are the best choice for your health (and where to get them at great prices!)
- The processes required by law for milk and how they are hurting your health
- How you can eat the healthiest foods on the planet...and save money too!

***"Diseases are crises of purification,
of toxic elimination."***

-Hippocrates (500 B.C.)

The Flavor of “Green”



It's no coincidence that our health has steadily declined as mass-produced, low quality foods have taken over our markets, pantries and plates.

Innately we know that organic foods are better for us. And our taste buds can certainly tell the difference.

In fact, taste tests show that fresh foods, produced in accord with nature, pack more flavor and a certain “je ne sais quoi” in every bite.

In foods, that “je ne sais quoi” (or the French phrase used to describe a mysterious sensation or feeling translating to “I don't know what”) is the flavor of crisp, clean, freshness.

But freshness is only part of the clean flavor of “green” foods.

Foods grown in accord with nature have higher levels of disease-fighting nutrients. And at the same time, are free from disease-promoting contaminants. They fill your plate with purity.

In other words, you get all of the upside, with none of the downside.

Back to The Good Ole Days

Simpler times – even just 100 years ago – offered food that nourished our bodies and souls. Meals were enjoyed with family and friends, gathered around humble tables with the sounds of buzzing bees and crickets, not the ringing of cell phones and the drone of electronic devices.

The food back then was tastier. And it was richer in nutrients too. Sadly, many of these nutrients no longer make a seat at our table due to modern farming practices and our over-processed fare.

But farmers aren't the only ones responsible for the decline in our health. Families are too.

Fast foods, fast lives, and an unwillingness to make healthy meals a central part of the day has wrecked the health of hundreds of millions.

In the U.S. – the land of plenty – we live on nutrient-void fast food that fuels a life of disconnection from our family and friends. We are overfed and undernourished.

It's time to rewind to simpler times and simpler foods. You'll be rewarded with more pleasure, potent disease prevention, a happier palate and a fuller pocket to boot.

Preserving Your Hormonal Harmony

Your health depends on your hormones. In fact, your entire body is interlinked by these complex communication molecules. For your body to be healthy, your hormones must be in harmony.

Because of the intricate and interconnected nature of your hormonal (or endocrine) system, an imbalance in any one area can set off a chain reaction – like a line of dominoes falling.

But the good news is that you can create hormonal harmony... with the power of your plate!

In ***Your Guide to Living a Low Glycemic Lifestyle***, you learned that your blood sugar is a big influence on your hormones. High blood sugar sends a message to your body to “store fat” and triggers a cascade of events that promote a myriad of diseases from metabolic syndrome to cancer.

But our hormones aren’t just produced inside of our bodies; they are also introduced into this sophisticated symphony by the foods we eat.

And the result is anything but harmonious.

In our diet, we upset our hormonal harmony in two ways:

1. By eating animal foods (dairy products, meats, eggs, fish) that have been treated with ***synthetic hormones*** and;
2. By ingesting ***endocrine disruptors*** that come from pesticides in conventionally grown produce, the plastics we use to store and heat our food in and chemicals like dioxins and PCBs found in farm-raised fish and conventional animal foods.

In fact, the average American consumes pounds of hormones and hormone-mimics each year.

How is that possible?



Take a look at this so-called “healthy dinner” of farm-raised tilapia, sautéed conventional spinach and conventional potatoes washed down with a glass of conventional milk has three “secret” ingredients:

- **PCBs** from the farm-raised tilapia
- **Organochlorines** from the spinach and potatoes
- **Recombinant bovine growth hormone (rBST)** from the milk

And while these toxins are quickly absorbed, they’re slow to go.

That’s because they accumulate in fatty tissue and are released very slowly into the body, dripping out their “hormonal instructions” over a long period of time. Because women naturally have a higher level body fat, we’re more prone to the perils of pesticides and other endocrine disrupting chemicals.

In this book, you will learn about the harmful endocrine disruptors in your food, the easy ways to avoid them and why eating organic goes way beyond the overused term of “being green”.

Your Choice: Chemical Cuisine or Meals That Heal

Unfortunately, we live in a sea of toxicity. And many of the toxins that enter our bodies come packaged in the foods we eat.

In fact, the average person consumes over a *gallon* of pesticides and herbicides every year by eating conventionally grown fruits and vegetables.

Juicy peaches, shiny apples and crisp spinach. Sounds like a health-food lover’s dream, right?

Think again. Unless you’re buying organic, these foods may be doing you more harm than good.

That’s because peaches, apples and spinach rank among the twelve most heavily contaminated with pesticides, also known as “The Dirty Dozen” (see p. 7).

The U.S. government recently evaluated the gravity of the situation in the “National Report on Human Exposure to Environmental Chemicals.” The researchers who compiled this report found an average of 148 chemicals in our bodies.

You may be thinking: “*What can a little pesticide hurt?*” The answer: a lot. These chemicals and hormone-mimics are bioactive in extremely miniscule amounts (trillionths of a gram) and can be highly toxic to the human body.

In fact, our hormones as well as the contaminants in conventional produce are measured in the scale of nanometers (nM). That's *really, really* small.

Nano researcher, Professor Michael Mackay, helps us put a nanometer into perspective. Here's the concept:



Imagine holding a 3x3 inch Post It[®] note in front of you, an arms' length away from your eye. Now, imagine how small the Post It[®] note would "look", not at arms length, but halfway around the world from the spot where you were standing. That is approximately three nanometers (nM).

Three nanometers is approximately the size of the endocrine disrupting chemicals we'll explore in this book.

You can't wash them off. And while peeling can help, it's certainly not a surefire way to avoid these chemicals. Plus, peeling takes most of the disease-fighting nutrients along with it.

Your only option for escaping the perils of pesticides is to buy organic.

In the next section you'll learn that eating organic doesn't just take away the health harmers, but provides you with more healing power too.



Don't Dabble in The Dirty Dozen: The twelve most pesticide-ridden crops are aptly called the "dirty dozen". By insisting on only buying these foods as organic, you can reduce your pesticide exposure by 90%, according to the Environmental Working Group (EWG). Here they are:

- Nectarines
- Peaches
- Apples
- Celery
- Sweet bell peppers
- Strawberries
- Cherries
- Lettuce
- Grapes
- Pears
- Spinach
- Potatoes



Would You Eat Your Lotion? While *Healing Gourmet* focuses on wellness through dietary choices, it is paramount to note that *anything you put on your body, you put in your body*. That means every day you use chemical products — on your body or in your home—you take in endocrine disruptors and burden your body with these toxins. Learn more about the safe products to choose at: [Skin Deep: Cosmetic Safety Reviews](#).

Be a Member of the “Clean Plate Club”

You may remember the trick parents use to get kids to finish their veggies: “*Don’t you want to be a member of the Clean Plate Club?*”

The “Clean Plate Club” usually meant there was dessert or some other treat for becoming a member. But this catchy phrase now has new meaning.

Clean eating has taken off in the last decade as a way to free our bodies of the contaminants and “junk” ingredients found in processed foods.

At *Healing Gourmet* we take the concept of clean eating a step further. To us, “eating clean” means consuming meals that are:

- Free of hormones
- Free of pesticides
- Free of growth promotants
- Free of genetically modified organisms (GMOs)
- Free of additives and preservatives
- Free of artificial colors and flavors
- Free of artificial sweeteners

By cleaning our plate of these harmful compounds, you allow your body the opportunity to function as nature intended (you’ll learn more about how these silent poisons hamper your health later in the section called *Endocrine Disruptors: A Silent Epidemic*).

But another amazing thing happens when you avoid these contaminants and focus on organic and naturally-raised foods: You get higher levels of disease-fighting, age-defying nutrients!



“Fake food – I mean those patented substances chemically flavored and mechanically bulked out to kill the appetite and deceive the gut – is unnatural, almost immoral, a bane to good eating and good cooking.”

-Julia Child (1912-2004)

Dining with Darwin: Why You Want Your Food to Struggle



They say struggles make us stronger. And this is certainly the case when it comes to nature.

When left to rely on their own defenses, plants must produce higher levels of their natural pesticides and fungicides just in order to survive. These natural compounds are called *phytonutrients* (phyto meaning “plant”).

The result is Darwinian: The weak wither and die, and the strugglers become stronger, producing heartier fruit and passing on stronger genes to the next generation.

But when we give our crops a “crutch” — chemical assistance to defend against predators — they become weak. And so does their nutrient content.

Organic fruits and veggies are proven to be higher in phytonutrients:

A study conducted at the University of California at Davis, showed that organic foods have significantly higher antioxidant levels than conventionally grown produce. Organically and sustainably grown corn and marionberries contained up to 65% more phenolics powerful, health-promoting antioxidants than did the conventionally grown crops. Sustainably grown strawberries contained 19% more.

A USDA study compared the amount of lycopene – a powerful nutrient that protects the heart and guards against cancer in 13 brands of ketchup. The results showed that the organic brands packed 56% more lycopene on average than the conventional brands.

In a review of 97 studies, researchers associated with The Organic Center found that organic, plant-based foods contain higher levels of 11 important nutrients, including significantly greater concentrations of phenolics and antioxidants. What’s more, organically grown plant-based foods turned out to be 25% more nutrient-dense, meaning you get more nutrition per serving or calories consumed.

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Along with buying organic produce, there are a few other ways to pack more power into your fruits and veggies:

1. **Buy Local:** Our food travels on average 2,000 miles. In the transit, many vital nutrients are lost. You'll learn more about buying local later in the section, Eating Clean, Saving Green.
2. **Eat With The Seasons:** When you buy in season, the food is picked at its peak of freshness and must get to market fast. That means it travels less and arrives fresher.
3. **Grow Your Own:** When you do this, you can control the mineral content of the soil. Because of mass-scale farming, our precious soil minerals have been depleted. And so is the food that's grown in it. Check out the Kitchen Garden section of our website offering resources to help you get started with an edible organic garden.



The Power of Phytonutrients! Visit our website to learn more about hundreds of [Phytonutrients](#) – from *ajoene* to *zeaxanthin* – including where they can be found and how they affect specific health conditions.

"The single biggest environmental influence you can control is what you eat. Remember, food is not just calories; it is information. It tells your genes what to do. The highly processed, nutrient-poor foods that are sold to us do exactly the opposite of enriching us. They turn off the right genes, turn on the wrong ones, and send your system into chaos. They are literally a trigger for the loaded gun."

***-Dr. Mark Hyman, M.D.
The UltraMind Solution***

Endocrine Disruption: A Silent Epidemic

The epidemics of obesity, diabetes, cancer, infertility, depression and hypothyroidism are not separate “diseases”, but rather interlinked variations of the same “dis-ease” that stem from one thing: endocrine disruption.

As you learned in ***Your Guide to Living a Low Glycemic Lifestyle***, much of the problem lies in the amount of sugar we consume each year. To put it in perspective, picture 150 one pound bags of sugar sitting on your kitchen table on January 1st. Now imagine eating every single one of these before the year is up. That is how much sugar the average American consumes each year – 150 pounds!

And the high blood sugar, high insulin levels and inflammation that go along with this grotesque addiction are leading us to an early grave.

But another factor is one that we can’t “see” or measure in teaspoons, grams or even with a microscope. They are endocrine *disrupting chemicals* (EDCs).

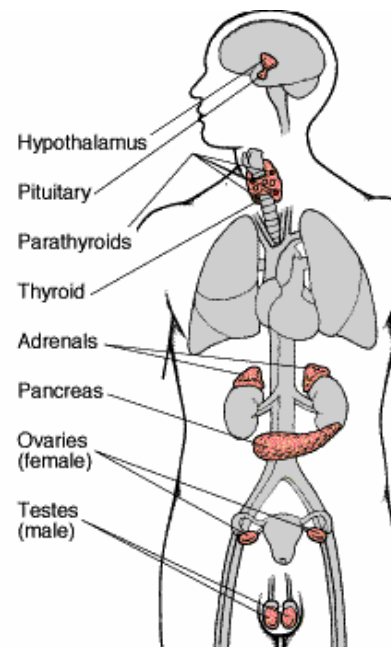
Your endocrine system is a complex network of glands and organ tissues that secrete hormones.

Hormones are simply chemical messengers – they send signals from one part of the body to another giving instruction on what functions to carry out.

And these are vital functions that affect growth, metabolism, reproduction and more.

The endocrine system is finely tuned and highly sensitive. Disruptors upset the delicate balance by blocking the right signals, or by sending the wrong ones.

While adults can recover from endocrine imbalances, the harm to babies and children can be permanent, as their development requires specific doses of hormones at precise times. Hormonal imbalances in children and young adults can lead to permanent immune suppression, neurological damage that can lead to behavior problems (or worse), reproductive disorders and problems with sexual development.



Disruptors Dictionary: What They Are & How To Avoid Them

These next few pages serve as an endocrine disrupting encyclopedia. We will be discussing these individually throughout the book and have included this section as a quick reference.

Endocrine disrupting chemicals (EDCs) function in three stealthy ways:

1. **Mimicking:** EDCs mimic the action of natural hormones like estrogen and testosterone, setting off similar chemical reactions in the body.
2. **Blocking:** EDCs block the receptors in cells that receive hormones, preventing the action of the body's natural hormones.
3. **Altering:** EDCs affect the body's manufacture, transport, metabolism and excretion of hormones.



Here are the main endocrine disruptors that can make their way into your meals:

- **Bisphenol-a (BPA):** Found in plastics with recycling code 3 or 7, as well as can liners and other packaging that leaches into foods and beverages (see ***Smart Cooks Age Better*** for tips on safe pots, pans and cookware)
- **DDE:** This compound is a byproduct of DDT. While DDT was banned in 1972, it is still present in the soil in the areas it was used and can remain there for hundreds of years. Eating foods grown in areas previously treated with DDT is one of the ways DDE makes its way into the body. DDE is fat soluble and is rarely excreted from the body. Because of this, body levels tend to build up throughout life. The exception is the excretion of DDE in breast milk, which delivers a DDE burden to the baby. DDE is a potent endocrine disruptor and xenoestrogen.
- **DDT:** While this organochlorine has been banned since 1972, the 1.8 million tons that were used still persist in nature and continue to pollute the food chain. What's more, DDT is used on crops in other countries...which are then exported back to the U.S. Like DDE, DDT contaminates soil, which then contaminates crops. DDT impacts reproductive development, thyroid function, and the risk of hormone-dependent cancers. Exposure to DDT in the womb can increase a child's risk of childhood obesity.

- **Dioxins:** This group of compounds accumulates in humans and animals due to their affinity for fat. Dioxins enter our bodies almost exclusively from foods, specifically through the consumption of farmed fish and conventional meat and dairy products. Because these compounds are difficult to expel, they readily climb the food chain. Dioxins are highly carcinogenic and well known to cause birth defects. They can also cause severe acne, damage the nervous system, thyroid disorders, damage to the immune system and reproductive system, and play a role in diabetes and metabolic syndrome.
- **Obesogens:** These chemicals disrupt normal metabolism and the use of fats by the body. Obesogens can affect the distribution of fat and also sexual characteristics by disrupting the genes that control them.
- **Organochlorines (OCs):** A wide group of chemicals which include dioxins, PCBs and DDT.
- **Organophosphates (OPs):** These chemicals are the basis of many insecticides, herbicides, and nerve gases. Organophosphates include parathion, malathion, methyl parathion, chlorpyrifos, diazinon, dichlorvos, phosmet, tetrachlorvinphos, and azinphos methyl. They are highly neurotoxic at low levels of exposure and act as endocrine disruptors.
- **Perfluorinated compounds (PFCs):** A family of fluorine-containing chemicals used to make materials stain and stick resistant. PFCs are endocrine disruptors and have also been linked with liver, pancreatic, thyroid, testicular, and mammary gland tumors. These compounds are found in non-stick pans, as well as grease-resistant food packaging and paper products, such as micro-wave popcorn bags and pizza boxes (see **Smart Cooks Age Better** for tips on safe pots, pans and cookware).
- **Phthalates:** These harmful chemicals are most prevalent in personal care products including nail polish, shampoo, fragrances, lotions, insect repellants as well as in plastics (see **Smart Cooks Age Better** for tips on choosing phthalate-free plastic containers).
- **Polychlorinated biphenyls (PCBs):** Prior to their ban in the 1970s, this group of chemicals was used in a myriad of industrial applications ranging from fluids in transformers and capacitors to carbonless copy paper. Like the other persistent organic pollutants, PCBs bio-accumulate in animals and people. Due to companies like General Electric (who dumped 1.3 million pounds of PCBs into the Hudson river) and others, contamination of PCBs in oceans and lakes is widespread. Later in the book (see p. 23), you'll learn about the high levels of PCBs in farmed fish and conventional meats and how to avoid them. PCBs have a wide range of toxic effects including endocrine disruption, alteration of gene transcription, cancer, neurotoxicity, and thyroid disruption.

- **Polybrominated diphenyl ethers (PBDE):** Structurally similar to PCB's, these contaminants impair development of the nervous system and are potent endocrine disruptors particularly on estrogen and thyroid hormones. PBDEs are most commonly found in conventional meat and dairy products and farm-raised fish.
- **Persistent Organic Pollutants (POPs):** Chemicals found in our food supply that are "persistent" because they aren't expelled easily. POPs are sprayed on crops that we eat (or are fed to animals that we eat, further concentrating their dose). POPs permeate soil, flow into rivers and pollute seafood. Because POPs concentrate in fat, the more fat a meat has, the greater the risk of contamination.
- **Recombinant Bovine Growth Hormone (rBGH):** Cows naturally produce this hormone. But it's also produced synthetically and administered to boost milk production. The sale of the Posilac (the rBST made by Monsanto) is illegal in virtually every developed country, with the exception of the United States, where it has been approved by the FDA. This hormone has been linked with the hormone-dependent cancers – especially prostate cancer.
- **Xenoestrogens:** A group of man-made compounds that have been introduced into the environment by industrial, agricultural and chemical companies in 70 years. Xenoestrogens mimic the hormone estrogen and act as endocrine disruptors that alter reproductive processes. In women, these compounds increase the risk of endometriosis and breast cancer, among other disorders. In men, they are implicated in falling sperm counts. Almost all of the endocrine disruptors are xenoestrogens.

"Our bodies live by farming; we come from the earth and return to it, and so we live in agriculture as we live in flesh...it is hardly surprising, then, that there should be some profound resemblances between our treatment of our bodies and the treatment of the earth...the care of the earth is our most ancient and most worthy and, after all, our most pleasing responsibility. To cherish what remains of it, and to foster its renewal, is our only legitimate hope."

-Wendell Berry

Sentinels: Sounding the Alarm



In humans, the effects of chemical assaults are difficult to pinpoint. In fact, some cancers can take up to 30 years to develop.

While test tube studies to evaluate the effects of specific chemicals on cell lines are important, Mother Nature also provides us with clues through “indicator” or “sentinel” species in the wild.

Sentinel species are plants or animals whose presence or absence in an area indicates certain environmental conditions. And by understanding impacts to sentinel species, we can better

understand what is happening to humans.

Because endocrine disrupters interfere with, or mimic the action of hormones, they alter normal growth, behavior, and reproduction.

Let’s take a look at how pesticides are “gender-bending” sentinel species:

- **Male or Female?:** A study done at the University of California, Davis, found that when the eggs of gulls were exposed to DDT and other synthetic chemicals similar to levels found in the wild, the male gulls emerged with feminized reproductive tracts.
- **Estrogen Overload:** In 1992 — 12 years after a compound called dicofol (a relative of DDT) spilled into Florida's Lake Apopka — testosterone levels in the lake's male alligators dropped to just one-quarter to one half their normal level. What's more, the lake's female alligators had higher-than-average estrogen levels.
- **Extra “Parts”:** In 1995, schoolchildren in a nature studies class discovered frogs with five legs and other deformities in a pond near Henderson, Minn. Because frogs are another sentinel species, scientists around the country took notice. Subsequent searches turned up frogs with extra or missing legs and grossly deformed webbing in numerous other states. In Anacortes, Washington, a frog had an eye sprouting from behind its front leg.

"We have to bite the bullet. Whatever we're finding in animals, I think we have to assume that it's very relevant to what is going on in humans."

**-Ana Soto, Associate Professor of Cellular Biology,
Tufts University, School of Medicine**

Disruptors: A Slow Demise

Are you being slowly robbed of your native state of vibrant health?

Chances are, if you're not eating exclusively organic produce, wild fish, grass-fed meats and dairy, the answer is yes.

In fact, most of us go through life with low energy levels, fatigue, subtle aches and pains, mood swings and depression, a "brain fog" and a myriad of other symptoms and just accept it as "part of life".

It is not part of life. It is not part of getting older. It is your body telling you that you're doing something wrong.

They say the proof is in the pudding. In this case, the poison is on your plate.

But these dietary contaminants do much more than just contribute to weight problems and obesity, mood swings, lethargy and foggy thinking... they can also dramatically increase your risk of disease.

In the next section (part of which is technical), we'll explore the many studies on the common chemical contaminants that plague our plates and their effects on the thyroid, pregnancy and childhood, sexual development, cancers, diabetes and obesity.

After that you'll learn about the specific contaminants found in common foods and the simple choices you can make to keep them out of your body.

Thyroid Health

The thyroid is often viewed as the "canary in the coalmine". It is a highly sensitive organ and gives us subtle clues about our overall hormonal health.

- The EPA published a report that of the 240 pesticides screened for their ability to cause cancer. At least 24 (10%) of these chemicals produced thyroid tumors in animals.
- A recent study published in the *American Journal of Epidemiology* evaluated the effects of PCBs, hexachlorobenzene (a fungicide), DDT and DDE on thyroid function during pregnancy. Researchers found that both PCBs and hexachlorobenzene (HCB) were associated with lower levels of thyroid hormones.



- A study in *Occupational and Environmental Medicine* evaluated the effects of organochlorine exposure in thyroid function of preschoolers. The researchers found that higher levels of DDT, PCBs and a pesticide called beta-HCH in blood were associated with lower levels of T3– an important thyroid hormone.

Pregnancy & Childhood Development

Endocrine disruptors do some of the most harm during the nine months between conception and birth. In this crucial period, the fetal brain is transformed from instructions in genes to a complex, highly differentiated mass of organized cells capable of learning and interacting with the outside world. Those first nine months lay the groundwork for everything that happens later in life. Here are the startling facts of the toxicity that conventional foods pose to our children:

- Every day, nine out of ten American children between the six months and five years of age are exposed to combinations of 13 different neurotoxic insecticides in the foods they eat.
- Every day, more than one million children under the age of six (1 out of 20) eat an unsafe dose of organophosphate (OP) insecticides. One hundred thousand of these children exceed the EPA “safe” dose by a factor of 10 or more.
- For infants six to twelve months of age, commercial baby food is the dominant source of unsafe levels of OPs. The OPs in baby food apple juice, pears, applesauce, and peaches expose about 77,000 infants each day to unsafe levels of insecticides.
- The foods that expose the most children age six months through five years to unsafe levels of OPs (because they are more heavily consumed) are apples, peaches, applesauce, popcorn, grapes, corn chips, and apple juice. Just over half of the children that eat an unsafe level of OPs each day, 575,000 children, receive this unsafe dose from apple products alone.
- Consumer Reports published an astounding analysis of baby foods in an article titled: “*Your HEALTH: Hormone mimics: They're in our food: Should we worry?*”. They found a baby who eats one jar – just 2.5 ounces – of an average meat-based baby food on a given day would consume around 100 times the EPA’s daily limit of dioxins. No one brand was found to be higher in dioxins than the other.
- Dutch scientists report that boys exposed prenatally to higher levels of PCBs and dioxin are more likely to show demasculinized play behaviors. Girls and boys exposed to modestly elevated dioxin levels demonstrate more feminized play behaviors. The scientists suggest that that these alterations in play result from endocrine disruption of the development of sex-specific behaviors.

- In the 2007 Annual Meeting of the American Association for the Advancement of Science (AAAS), Dr. Frederick vom Saal found that endocrine-disrupting chemicals, including bisphenol-a (BPA), cause mice to be born at very low birth weights and then gain abnormally large amounts of weight in a short period of time, more than doubling their body weight in just seven days. Dr. vom Saal notes:

"The babies are born with a low body weight and a metabolic system that's been programmed for starvation. This is called a 'thrifty phenotype,' a system designed to maximize the use of all food taken into the body. The problem comes when the baby isn't born into a world of starvation, but into a world of fast food restaurants and fatty foods"

- According to Dr. Theo Colborn, TEDX President and originator of a new database called Critical Windows of Development:

"The unprecedented global increases in endocrine-related disorders such as autism, other learning and developmental disabilities, reproductive problems, diabetes, obesity, thyroid problems, breast, prostate, and testicular cancer and more, signal the need for a crash program in 'inner-space' research. The roles of contaminants in the womb must be addressed before it is too late."

Reproductive Problems & Feminization

The vast amounts of endocrine disruptors in our food supply have estrogen-mimicking properties. Because of this, there is an increasing trend of feminization of the male population.

- The CDC reported an increase in *hypospadias* – a birth defect in males in which the urinary opening is mislocated – on the underside of the penis or even on the scrotum. This defect doubled between 1968 and 1993 and now affects 1 out of 100 newborn babies nationwide.
- A large study published in the *Journal of Clinical Endocrinology and Metabolism* reports a population-wide decline in Massachusetts's men's testosterone levels during the last 20 years that is not related to normal aging or to health and lifestyle factors known to influence testosterone levels. They found that testosterone concentrations dropped about 1.2% per year, or about 17% overall, from 1987 to 2004.

Prostate Cancer

Prostate cancer is a hormone-dependent cancer, and therefore is influenced by hormones and hormone-mimics.

- A report by the National Institutes of Health's National Toxicology Program found that bisphenol A (BPA), may alter brain development and behavior and increase the risk of prostate cancer in children, infants and fetuses. Some 93% of Americans have detectable levels of bisphenol A in their urine, according to data from the Centers for Disease Control and Prevention.
- A recent study published in *Molecular Cancer Therapeutics* found that extremely low doses of bisphenol A increase a process in prostate cancer cells that renders them less responsive to a standard treatment that forces prostate cancer into remission. These are levels that other scientists have measured in adult men leading normal lives (1.4 to 6.5 nM).

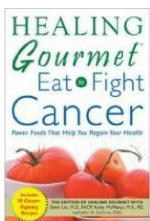
Breast Cancer

Because the molecular structure of certain pesticides closely resembles that of estrogen, these food contaminants may attach to estrogen receptor sites in the body and promote cancer. *Diet and hormone-dependent cancers are inextricably linked.* Only 5 to 10% percent of breast cancer cases are linked with a family history of disease or with known inherited high-risk genes.

- An epidemiological study published in *Environmental Health Perspectives* found that women exposed to relatively high levels of DDT prior to mid-adolescence are 5 times more likely to develop breast cancer later in life than women with lower exposures.
- A study published in *Occupational and Environmental Medicine* evaluated blood levels of two endocrine disrupting pesticides, DDT and HCB in 159 women with breast cancer and 250 healthy women. The women with breast cancer had mean levels of total DDT and HCB that were significantly higher than what was observed in healthy women.



Fight Cancer with a Fork! You've learned quite a bit about the link between diet and cancer throughout this book series. But don't forget to visit the [Cancer & Diet](#) center at our website to learn more about the delicious ways you can guard your cells and protect against cancer.



Further Reading

Healing Gourmet—*Eat to Fight Cancer*: Featuring Dr. Simin Liu, MD, Harvard's Brigham & Women's Hospital Dietitians & Chef John Carlino, C.E.C.

Diabetes

Diabetes is a disease of the endocrine system. As such, it is strongly influenced by endocrine disrupting chemicals.

- A recent study of more than 2,000 people, published in *Diabetes Care* found a strong dose dependent relationship between type II diabetes and the levels of six persistent organic pollutants (POPs) in the body, including PCBs, Dioxins, and three pesticides. They selected these contaminants because they were detectable in over 80% of participants. Compared to people in the lowest exposure category, people in the highest were almost 38 times more likely to have diabetes.
- A study published in *Environmental Health Perspectives* found that low-level, chronic exposure to bisphenol A (BPA) induces insulin resistance in adult mice. The doses used in the study were within the range of current human exposure and 5,000 times below the dose identified by the US EPA as the lowest level causing effects. Researchers found that exposure to BPA increased the risk of type II diabetes and high blood pressure.

Obesity

300 million people in the world are obese. Since the introduction of obesogen pesticides, the rate of obesity in Britain has quadrupled. In the U.S. it's even worse. Numbers posted by the National Center for Health Statistics show that more than 34% of Americans are obese, compared to 32.7% who are considered "overweight". The population of Americans who are obese (not including those that are simply "overweight") equals more than 72 million people.

- A study published in *Molecular Endocrinology* evaluated the effect of organotins (group of pesticides) on fat cells and weight gain in animals. Researchers found that several organotins disrupted fat cell differentiation, leading to weight gain.
- Researchers at Barcelona's Municipal Institute of Medical Research found 403 children born on the island of Menorca to have high levels of HCB and other organochlorine pesticides in their blood. The children with the highest levels were twice as likely to be obese when they reached the age of six and a half.



Sumptuously Slim! While obesogens factor into the fat equation, the primary cause of being overweight or obese is eating the wrong foods...and too much of them. Learn how to stabilize your blood sugar and reduce insulin (your fat-storage hormone) in ***Your Guide to Living a Low-Glycemic Lifestyle***. And don't forget to visit the Healing Gourmet website. We've cooked up thousands of recipes that are all low-glycemic and free of obesogens to help you slim down...sumptuously!

Seafood: Dangers in the Deep



Eating seafood is one of the best things you can do for your health. It's rich in metabolism-boosting protein and high in important nutrients like omega-3 fats, selenium and B vitamins.

But if you're not a savvy seafood selector, what ends up on your plate can do much more harm than good. In the next section, we'll take a look at the safety concerns that come from the sea.

Toxic Tuna: A Meal of Heavy Metals

Americans consume over 4 pounds of tuna, per person each year.

Despite the fact it's rich in nutrients, most commercial tuna is packed with neurotoxic (brain-damaging) mercury. So much so, that the safe limit has been set to 7 ounces per week. For women who are pregnant or nursing, the safe amount is none.

Mercury is the second most toxic substance known to man after plutonium. It can cause damage even in minutely small amounts. The so-called "safe" levels of exposure are totally unproven to afford protection from mercury,

Mercury is a systemic poison. It doesn't just affect one part of the body, it affects virtually every system. The laundry list of health problems mercury can cause is astounding and includes: autism, Alzheimer's, "ADHD", low-IQ, depression, dementia, digestive problems and more. And because it can be so damaging to the immune system, mercury toxicity can show up as any number of other diseases.

The dose doesn't make the poison! So while the government and many health professionals and agencies note that up to 7 ounces per week is "safe", we won't take a chance your health. There are no recipes containing tuna on our website. *Sorry Charlie.*

If you do choose to eat tuna, the company we trust and recommend is [Vital Choice](#). Vital Choice selects younger, smaller tuna (under 12 lbs). These fish are naturally lower in mercury because the metal hasn't had as long to bioaccumulate in the fish. Vital Choice Albacore contains one-third less mercury (0.08 ppm) than average "light" Tuna (0.12 ppm) and Vital Choice Albacore contains three-quarters less mercury (0.08 ppm) than average Albacore (0.34 ppm).

If you just can't resist your tuna salad, but you still want to avoid the mercury in tuna, consider switching to sardines. These little silver sliders are a health bonanza – brimming with omega-3 fatty acids and brain boosting DMAE. And because they are so small and low on the food chain, they are a very pure source of protein and healthy fat. If you're looking to replicate the taste and texture of tuna salad, use boneless skinless sardines in water and mix as you would canned tuna.

Other mercury-laden fish to avoid include swordfish, tilefish, shark, marlin, orange roughly, bluefish, grouper, mackerel (Spanish, Gulf), and sea bass (Chilean). Visit our website and search "mercury" for the levels found in other common fish.



Fresh Herbs Combat Heavy Metals: Do you need to detox from mercury? If you're like most people, the answer is yes. In fact, Dr. Mark Hyman, M.D., goes into this important issue in great detail in his new book *The UltraMind Solution* (a must read!). Mercury testing kits are inexpensive and easy to use and they're listed in your free bonus: **20 Lifesaving Tests Your Doctor Hasn't Performed (And Should!)**. To learn how to detoxify from mercury, visit our section of Nutritional Cleanses and see "Mercury and Heavy Metal Cleanse". Also, check out our [Cilantro-Chlorella Detox Elixir](#) – a fresh recipe with mercury binding action.

"How many apples fell on Newton's head before he took the hint? Nature is always hinting at us. It hints over and over again. And suddenly we take the hint."

-Robert Frost (1874-1963)

Forgo Farmed Fish!

Americans have tripled their consumption of salmon in the last 15 years. And more than 80% of that came from fish farms.

So what's wrong with farmed fish? Four things:

1. **They're Packed with Endocrine-Disruptors:** Farmed salmon are high in endocrine-disrupting **PCB's** due to the contaminant-rich fish meal they consume. The process that separates the fish into meal and oil concentrates the pollutants these fish have picked up in the ocean. While all salmon contain a certain level of PCBs, farmed salmon have up to 10 times higher levels than wild salmon.
2. **They're High in Inflammatory Fats:** In *Fats That Heal, Fats That Harm*, you learned that omega-3 fats reduce inflammation, and omega-6 fats promote it. Because fish meal also often contains corn meal, soy and canola oil, the flesh of farmed salmon contains up to four times the amount of inflammatory omega-6s of wild salmon.
3. **They Have Artificial Coloring Added:** In the wild, salmon dine on krill. This tiny shrimp-like creature is packed with *astaxanthin* (pronounced asta-Zanthin) – one of the most powerful antioxidants ever discovered. It is also the nutrient responsible for wild salmon's beautiful red-orange color. But without the krill in their diet, farmed salmon are naturally an unappetizing gray. So salmon farmers "color-finish" their fish using a dye that is derived from petrochemicals, by growing red yeast on corn byproducts, or by utilizing E. coli to synthesize astaxanthin.
4. **They're Administered Antibiotics:** Tens of thousands of farmed salmon are squeezed into pens that are 30 to 300 meters across. Due to the cramped quarters, lice and disease spread rapidly in fish farms. In fact, farmed salmon are administered more antibiotics by weight than any other form of livestock.



If you think you're body can simply "clean up" the chemicals left behind from the farmed fish, think again. Even a finely-tuned metabolic machine can't rid the residues.



The Facts on Farmed: The Environmental Working Group found that 7 out of 10 pieces of farmed salmon purchased at grocery stores in Washington, DC were contaminated with PCBs at levels that raised serious concern. On average, farmed salmon were found to have 16 times the PCBs of wild salmon, 4 times the levels in beef and 3.4 times the amount found in other seafood.

That's because PCBs have a very long half-life, the rate at which half of the compound degrades. The half-life of PCBs is 8-15 years. That means the PCBs you get in a meal of farmed-fish you eat today will stay in your body for 16 to 30 years.

But fish farming – and the toxins and endocrine disruption that go along with it – aren't relegated solely to salmon. Trout and tilapia are two varieties that are also propagated in pens, fed fish meal, and administered antibiotics.

What's more, farm-raised tilapia (one of the most highly consumed fish in America) has very low levels of healthy omega-3's and very high levels of inflammatory omega-6's (which you learned about in ***Fats that Heal, Fats that Harm***). Researchers say that the omega-6 content of tilapia is even greater than conventionally-raised 80% lean beef, doughnuts and bacon.

You'll notice that tilapia is another ingredient you won't "catch" at *Healing Gourmet*.

The bottom line is this – you can't afford to not eat wild, sustainable salmon. It is one of the few fish left that is remarkably unpolluted, it is sustainably harvested, and it's one of the healthiest proteins you can put on your plate.

To minimize your exposure to toxins:

1. **Be Label Savvy:** In the grocery, check the label. It is now required that all fish bear a country-of-origin label (or COOL) that will tell you where it was harvested and if it is wild or farmed.
2. **Ask Your Fishmonger:** Because Pacific salmon is only harvested from May to October, fresh salmon in the seafood case is usually farmed.
3. **Probe Your Waiter:** Ask your waiter if the salmon is Atlantic or Pacific. Because all Atlantic salmon is farmed, this will give you a clue. Unfortunately, restaurant seafood is almost always farmed. Yet another reason to cook clean meals in the comfort of your own home.
4. **Trim the Fat:** Because toxins reside in the fat, trim the skin and let the fat drip away from the fish when cooking.

The additional cost of wild salmon ranges between \$0.50 (Target, Archer Farms brand) to approximately \$2.00 (Vital Choice) per serving. You'll learn more about eating clean and saving green later in the book.



The Reel Deal: Visit us online to learn about the sustainable smorgasbord of safe seafood, including hundreds of delicious seafood recipes that are packed with healing nutrients. And check out "Best Brands" for the companies we recommend.

Pick Pastures...NOT Pens



Rewind for a moment to the rolling hills and green pastures where cows grazed in the sunshine, pigs rooted for tubers in the shade and chickens plucked worms from the rich earth.

When it comes to our health, those really were the “good old days”.

Now fast forward to 2011. More than 90% of the meat we consume comes from meat factories – technically called concentrated animal feeding operations (CAFOs).

In these CAFOs, cows are crammed into tight quarters, chickens caged and pigs penned up, standing, wallowing in bacteria and their own filth, biting and pecking at one another until the day they’re inhumanely slaughtered.

That is the brutal truth and the grim end for the animals. And it is the beginning of health problems for humans.

By changing the diet and the environment of the animals we raise for food, we change their composition. And in doing so we change our own.

Livestock were meant to graze on grass, flowers, sprouts, seeds, worms and bugs. Not the grains, animal byproducts (including chicken waste) and stale candy (yes, it’s true) they are fed in CAFOs.

In this section, you’ll learn about the innumerable benefits of choosing animal foods raised as Mother Nature intended. Not only will you have a cleaner plate, but perhaps a clearer conscious, as well.

“The unnaturally rich diet of corn that undermine a steer’s health fattens his flesh in a way that undermines the health of the humans who will eat it.”

***-Michael Pollan,
The Omnivore’s Dilemma***

Grass-Fed Beef

Grass-fed beef is about as similar to conventionally-raised beef as apples are to oranges.

Here are the key benefits of grass-fed:

1. **Lower in fat and calories:** Because the cows eat grass, not grain, they don't "beef up" as much. Hence, a lower fat, lower calorie meat.
2. **More omega-3 and less omega-6:** As you learned in *Fats that Heal, Fats that Harm*, omega-6 fats are ubiquitous in the American diet and promote inflammation and disease. Because omega-6 comes from corn, grain-fed cows have an omega 6:3 ratio that is higher than 20:1. Grass-fed beef, conversely, has a much better balance, boasting a ratio of 0.16:1
3. **More vitamin A and E:** All that green grass makes for meat that's over 400% higher in vitamins A and E.
4. **Packed with fat-blasting, cancer-fighting CLA:** Grass-fed beef is 300-400% higher in conjugated linolenic acid (CLA) – a healthy fat that promotes weight loss and has powerful anti-cancer properties.
5. **Less risk of disease and fewer antibiotics:** Cows were not designed to eat grain and their digestive system is not equipped for it. When they do eat grain, it makes them sick. And because of the cramped quarters (often as many as 30,000 cows on a feedlot!) disease spreads fast. Conventional farmers administer antibiotics prophylactically (as a preventive measure) to reduce disease. Grass-fed cows are naturally healthier, and farmers use antibiotics sparingly and only when necessary.
6. **No endocrine disrupting chemicals:** The pesticide-ridden grain and hormones that conventional cows eat, or which are administered to them, wind up on your plate, affecting your delicate hormonal balance.

When it comes to grass-fed beef, you can expect to pay from 25% to 100% more per pound. The higher quality meat and many health benefits are more than worth it.



Best Taste, Best Price! Looking for the highest-quality grass-fed beef, pastured pork, poultry and dairy products... without breaking the bank? Go straight to the source U.S. Wellness Meats appropriately named and managed with the same dignity and integrity as the folks who did it "way back when". You'll be amazed with the great prices (a 3-lb grass-fed bottom roast for \$21, 1 lb of grass-fed ground bison for \$8 and 1 lb. of 75% lean grass-fed beef for under \$6!). [Visit them here!](#)

Pastured-Raised Pork & Poultry

The benefits of pastured pork, poultry and eggs are similar to those of grass-fed beef and include:

1. **More nutrients:** Pastured pork and poultry have higher levels of vitamin E, healthy omega-3 fatty acids, and many other nutrients than conventionally raised. Eggs from pastured hens contain as much as 10 times more omega-3 than eggs from factory hens.
2. **Less contamination:** Pastured pork and poultry is less likely to be contaminated with *E.coli*, *Salmonella* and other pathogens. What's more, the antibiotics that are constantly fed to conventionally-raised animals contribute to antibiotic-resistant bacteria, further increasing the risk of disease.
3. **Less fat and calories:** Less grain translates to less body fat on the animals. The same is true for humans, as you learned in ***Your Guide to Living a Low Glycemic Lifestyle.***



Cook Your Way to Better Health! At *Healing Gourmet*, we only recommend grass-fed beef and buffalo and pastured poultry and pork. And we've created hundreds of delicious recipes using these wholesome ingredients you can access free of charge on our website. Here are some that you'll find:

Grass-Fed Beef & Buffalo

- Buffalo Bolognese
- Buffalo Stuffed Tex-Mex Squash Curry-Glazed
- Grass-Fed Tenderloin Grass-Fed Beef Brisket with Horseradish
- Spaghetti Squash with Grass-Fed Meatballs and Raw Pecorino Cheese

Pastured Pork

- Cilantro Lime Pork Tacos
- Almond-Crusted Pork Tenderloin
- Chipotle Pork Roast
- Slow-Roasted Cider Pork Loin with Cabbage
- Rosemary-Garlic Roasted Pork Loin

Pastured Poultry

- Chicken Capri
- Chicken Provençale
- Goat Cheese & Walnut Stuffed Chicken
- Mediterranean Chicken Roulades
- Tarragon Turkey Burgers

Raw Milk, Real Milk

When it comes to dairy, going raw is your best bet for health.

That's because raw milk contains more than 60 health-promoting enzymes, un-denatured, highly assimilable protein, healthy fats (like CLA) and beneficial bacteria that pasteurized milk doesn't.

The process of pasteurization has been mandated since the 1920's. It was put into place to remove the risk of food borne illness associated with the bacteria in milk.



But the truth is, dairy (pasteurized or not), causes less than 1% of food-borne illness. The highest risk comes from fruits and veggies, which account for 38%. Poultry and beef come in at 20% and 16%, respectively.

Here are some important facts about pasteurized milk:

- **Pasteurization creates AGEs:** The process of heating milk proteins and sugars creates molecules called advanced glycation end-products (AGEs). Like their name indicates, these compounds promote aging and disease. Learn more about these and how to avoid them in ***Smart Cooks Age Better***.
- **Pasteurization kills lactoferrin:** Lactoferrin is a glycoprotein found in raw milk that has some amazing biological activities. It binds to iron ("ferrin" meaning iron) and helps to reduce the free radical damage that iron causes to the body. Free-floating iron in the body promotes what amounts to "rusting". But lactoferrin is an iron-scavenger. Lactoferrin also acts as an anti-fungal, antibacterial, anti-viral, anti-inflammatory and anti-cancer agent.
- **Pasteurization kills healthy bacteria:** When you take antibiotics to kill the bugs that are making you sick, you also kill the healthy bacteria in your gut. The same happens with pasteurizing. Because it's not selective, pasteurization destroys all of the bacteria – including the health-promoting ones your body needs. Raw, fermented milk (like kefir) is a veritable goldmine of healing strains of bacteria (called probiotics) that boost immunity, improve digestion and more. Learn more about the importance of bacteria in ***Your Digestive Ecosystem***.
- **Pasteurization diminishes nutrients:** The vitamin content of pasteurized milk is diminished and vitamins C, B6 and B12 are destroyed in the process.
- **Pasteurization kills enzymes:** As you learned in *Your Body's Ecosystem*, enzymes are essential for health. Killing the enzymes in milk makes it less digestible, causing a range of gastrointestinal problems.

- **Pasteurization destroys CLA:** As you learned earlier, CLA is a cancer fighting, body fat-melting nutrient found predominantly in the milk and meat of grass-fed animals. Pasteurizing destroys CLA.
- **Pasteurization promotes allergies:** The lactose in pasteurized milk is converted to beta-lactose – a form that can cause allergies.
- **Pasteurization ruins the taste.** If you've had the opportunity to enjoy raw milk, you know. The fresh, clean, pure taste of raw milk can't be compared to that which is pasteurized.

Keep in mind, all foods bear risk. And based on the research, drinking pasteurized milk may pose many more perils than raw. Over the past two decades, more than 200,000 food poisoning incidents have been linked to milk that has been pasteurized. It has been suggested that killing all the bacteria in the milk (including those that are friendly) allows the bad bacteria to grow more quickly if the milk does become contaminated.



Udderly Delicious! Dr. Ron Paul recently pushed to lift the raw milk ban. But until that happens, you'll need to seek it out. To learn more about the benefits of raw milk and where to get it visit: Weston A. Price (www.westonaprice.org) and RealMilk (www.realmilk.com).

Food Freedom!



Have you heard of HR 875, the Food Safety Modernization Act of 2009? Under this proposed act, your local farm-fresh foods could be a thing of the past. The proposed law could allow government authorities to fine small farms \$1 million a day while arresting and imprisoning their owners for refusing to spray toxic chemicals on their organic produce.

Thomas Jefferson has officially rolled over in his grave.

Don't allow this to happen. Take a stand for your right to enjoy clean foods. Sign the Health Revolution Petition created by Mike Adams [Sign the Health Revolution Petition today!](#)

"If people let government decide what foods they eat and what medicines they take, their bodies will soon be in as sorry a state as are the souls of those who live under tyranny."

-Thomas Jefferson

Eating Clean, Saving Green



While the economy may be in trouble, your health doesn't have to be.

In fact, you may be surprised at how cost-effective buying "clean" foods – those without added hormones, pesticides and other chemicals – really is.

Of course, growing your own or buying from a CSA locally will be even less expensive (as well as more nutritious and eco-friendly) than what we illustrate here. You can learn more about joining a CSA and even starting your own kitchen garden at our website.

On the next few pages, you'll find a list of healing foods you can find at local markets nationwide and online for delivery right to your door.

This list is meant to act as a "getting started" guide. It's also meant to give you a fresh perspective on your food expenditures.



Food For Thought

- You would think nothing of paying \$15 for an entrée of PCB-pumped, farm-raised salmon at a restaurant. Why not enjoy a ruby-red piece of wild, contaminant-free salmon right at home for just \$1.99?
- For \$2.99 you can pick up a fast-food hamburger, laden with healthharming hormones and packed with inflammation-promoting omega-6 fats. Why not make a juicy burger from farm-fresh, grass-fed beef for just \$1.40?
- It's 3 pm and you're in need of a pick-me-up. Pass on the cup o' pesticides from Starbucks (that will set you back \$2.50) and brew a fresh cup of organic java made with clean, pure water for only \$0.21!
- A "decent" glass of Zinfandel on the wine list at a local wine bar will set you back \$11. Because grapes rank #9 on the Dirty Dozen (and wine is just concentrated grapes) your drink is drowning in disruptors! Opt instead for a silky glass of organic Sobon for just \$2.75 at home, or bring the bottle to the restaurant and gladly pay the passing-on-pesticides cork charge.

And don't forget to visit our website and see our **Food Encyclopedia** of 700+ individual foods (i.e-Scallops) to learn about the best brands to choose and the health benefits of each.

Food	Where to Buy	Cost	Amount	Serving Size	Cost Per Serving
WILD SUSTAINABLE & SAFE SEAFOOD					
<i>Seafood harvested in the wild in a manner that protects the oceans. Low contaminants, low-mercury. Learn about Marine Stewardship Council Certified below</i>					
Archer Farms Wild Alaskan Salmon – MSC Certified	Target	\$7.99	16 oz.	4 oz.	\$1.99
Mahi – MSC Certified	Target	\$4.99	16 oz.	4 oz.	\$1.25
Archer Farms Wild Patagonian Sea Scallops MSC Certified	Target	\$7.99	16 oz.	4 oz.	\$1.99
Archer Farms Wild Key West Shrimp MSC Certified	Target	\$8.99	16 oz.	4 oz.	\$2.25

GRASS FED BEEF, PASTURED POULTRY & PORK					
<i>Pasture-raised, never administered hormones; antibiotics administered only when needed. These are the healthiest meats to choose thanks to a truly natural diet, clean living environment and beneficial fat ratio.</i>					
75% Lean Grass-Fed Ground Beef	U.S. Wellness Meats	5.62	1 lb.	4 oz.	\$1.40
Pasture-Raised Pork Chops	U.S. Wellness Meats	\$9.35	1 lb.	4 oz.	\$2.33
Pasture-Raised Ground Turkey	U.S. Wellness Meats	\$6.75	1 lb.	4 oz.	\$1.69
Grass-Fed Bottom Round Roast	U.S. Wellness Meats	\$21.22	3 lbs.	4 oz.	\$1.77

RAW GRASS-FED DAIRY					
<i>Dairy products from cows eating grass. Never administered hormones, antibiotics administered only when needed. Raw dairy products are not pasteurized.</i>					
Organic Valley Raw Sharp Cheddar Cheese	Whole Foods	\$6.29	8 oz.	1 oz.	\$0.79
Mt. Sterling Raw Goat Cheese	Whole Foods, Mt. Sterling online store	\$4.77	8.oz	1 oz.	\$0.60
Grass-Fed Butter	U.S. Wellness Meats	\$9.30	1 lb	1 Tbsp	\$0.29



Fish for Our Future:

The Marine Stewardship Council's fishery certification program and seafood eco-label recognize and reward sustainable fishing. This global organization works with fisheries, seafood companies, scientists, conservation groups and the public to promote the best environmental choice in seafood. Help save our seas and ensure there will be fish for our future by choosing MSC certified seafoods. Learn more at www.msc.org

Food	Where to Buy	Cost	Amount	Serving Size	Cost Per Serving
ANTIBIOTIC, HORMONE & PRESERVATIVE FREE MEATS					
<i>Animals fed a grain-based diet. While there may be some access to the outdoors, most of these animals are raised in a CAFO setting. Never administered hormones; antibiotics administered only when needed. In terms of your health, these animal products are decidedly a better option than conventional, but not as beneficial as grass-fed.</i>					
Maverick Ranch Ground Buffalo	Publix	\$5.99	1 lb.	4 oz.	\$1.49
Niman Ranch Uncured Bacon	Target	\$4.99	12 oz/10 slices	1 slice	\$0.50
Greenwise Chicken Breasts	Publix	\$5.99	1 lb.	4 oz.	\$1.50
Organic Prairie Roast Beef	Whole Foods	\$6.39	6 oz.	2 oz.	\$2.13
Organic Prairie Ground Turkey	Whole Foods	\$6.29	1 lb.	4 oz.	\$1.57
Organic Prairie Roast Turkey Breast	Whole Foods	\$5.69	6 oz.	2 oz.	\$1.90

ORGANIC PRODUCE					
<i>Fruits and vegetables grown without the use of chemical pesticides, herbicides, fungicides or fertilizers.</i>					
Ranier Organic Apples	Target, Publix	\$4.99	3 lbs. (~ 14 apples)	1 apple	\$0.36
Greenwise Organic Spinach Salad	Publix	\$3.99	16 oz.	2 oz.	\$0.50
Earthbound Farm Organic Arugula	Publix	\$3.29	5 oz.	2 oz.	\$1.32
Earthbound Farm Organic Spring Mix	Publix	\$4.29	5 oz.	2 oz.	\$1.71
Woodstock Farms Organic Blueberries	Whole Foods	\$6.19	10 oz. (2 cups)	½ cup	\$1.55
Cascadian Farm Organic Cherries	Whole Foods	\$5.59	10 oz. (2 cups)	½ cup	\$1.39

"A good meal soothes the soul as it regenerates the body. From the abundance of it flows a benign benevolence."

**-Frederick W. Hackwood,
Good Cheer**

Food	Where to Buy	Cost	Amount	Serving Size	Cost Per Serving
ORGANIC WINES					
<i>Wines made from grapes that are organically grown and free of chemical pesticides, herbicides, fungicides or fertilizers. Don't forget to visit our Organic Wine Cellar online for complete details on the wines we love.</i>					
Vin de Pays	The Organic Wine Company (online store)	\$9.99	1 bottle/4 glasses	1 glass	\$2.50
Sobon Zinfandel Hill	Sobon Winery, Total Wine	\$10.99	1 bottle/4 glasses	1 glass	\$2.75
Releaf Organic Cabernet Sauvignon	Total Wine	\$8.99	1 bottle/4 glasses	1 glass	\$2.25
Santa Julia Organic	Total Wine	\$8.99	1 bottle/4 glasses	1 glass	\$2.25
Bonterra	Publix, Whole Foods	\$13.99	1 bottle/4 glasses	1 glass	\$3.50
Natura	Publix	\$10.99	1 bottle/4 glasses	1 glass	\$2.75

ORGANIC COFFEE					
<i>Coffee grown without the chemical pesticides, herbicides, fungicides or fertilizers. Learn more about why you should choose organic, shade-grown coffee* at our website.</i>					
Sam's Choice USDA Organic Arabica Coffee	Wal-Mart	\$4.99	12 oz.	0.5 oz.	\$0.21
Seattle's Best Fair Trade Breakfast Blend Coffee	Publix, Target	\$5.99	12 oz.	0.5 oz.	\$0.25
Archer Farms Nicaraguan Fair Trade Organic Coffee	Target	\$6.99	12 oz.	0.5 oz.	\$0.29
Café Altura Organic ShadeGrown Coffee*	Whole Foods	\$7.99	12 oz.	0.5 oz.	\$0.33

"The staple foods may not contain the same nutritive substances as in former times. Chemical fertilizers, by increasing the abundance of crops without replacing all the exhausted elements of the soil, have indirectly contributed to change the nutritive value of cereal grains and of vegetables. They have, thus, contributed to the weakening of our body and our soul."

**—Alexis Carrel,
Man the Unknown**

4 Fabulous Organic Meals for About \$4 Per Serving

So what does a “clean plate” look like? Here are 4 simple and delicious meals that take less than 30 minutes of active kitchen time and cost about \$4 per serving.

To get the recipes, complete nutrition information and recommended brands, just click on the links below.



[Pacific Northwestern Delight](#)

In the Pacific Northwest, wild salmon swim freely, blueberries grow abundantly and hardy vines grown in rich soil produce some of the best Pinot Noir in the world. Pair this light meal with an organic Frey Pinot Noir.

- Pan-Roasted Wild Salmon with Olives
- Spinach Salad with Roasted Beets & Goat Cheese
 - DESSERT: Blueberry Soufflés



[Pristine from Patagonia](#)

With influences from Spain and the Alps, Patagonia’s ecological diversity is rivaled by its cuisine. Try this sumptuous meal made with sustainable scallops...from Target!

- Patagonian Sea Scallops
- Santa Cruz Wild Herb Salad with Herb-Shallot Vinaigrette
 - DESSERT: Raspberry Bavarois



[A Meal from Mykynos](#)

Hearty flavors of oregano and pine nuts compliment the tender texture of pastured poultry.

- Greek Chicken with Olives, Pine Nuts & Feta Cheese
- Wilted Chard
 - DESSERT” Greek Yogurt Parfait



[Farmhouse Feast](#)

This “comfort” meal is sure to please. But unlike most comfort foods, it won’t cause a blood sugar spike and hamper your hormonal harmony.

- Rosemary-Encrusted Pork Loin
- Sweet Potato Smashers
- Mixed Green Salad with Tomatoes and Cucumbers with Creamy Dill Dressing

References

1. Alavanja MC, Hoppin JA, Kamel F. Health effects of chronic pesticide exposure: cancer and neurotoxicity. *Annu Rev Public Health*. 2004;25:155-97.
2. Cynthia L Curl, Richard A Fenske, and Kai Elgethun. Organophosphorus pesticide exposure of urban and suburban preschool children with organic and conventional diets. *Environ Health Perspect*. 2003 March; 111(3): 377-382.
3. Akland, GG; Pellizzari, ED; Hu, Y; Roberds, M; Rohrer, CA; Leckie, JO; Berry, MR. Factors influencing total dietary exposures of young children. *J Expo Anal Environ Epidemiol*. 2000 10(6 Pt 2):710-722.Nov-Dec
4. Fenske, Richard A; Kedan, Golan; Lu, Chensheng; Fisker-Andersen, Jennifer A; Curl, Cynthia L. Assessment of organophosphorous pesticide exposures in the diets of preschool children in Washington State. *J Expo Anal Environ Epidemiol*. 2002 12(1):21-28.Jan-Feb
5. Pamela M. Hurley, Richard N. Hill, and Rick J. Whiting. Mode of Carcinogenic Action of Pesticides Inducing Thyroid Follicular Cell Tumors in Rodents. *Environmental Health Perspectives Volume 106, Number 8, August 1998*
6. Wetherill, YB, CE Petre, KR Monk, A Puga, and KE Knudsen. 2002. The Xenoestrogen Bisphenol A Induces Inappropriate Androgen Receptor Activation and Mitogenesis in Prostatic Adenocarcinoma Cells. *Molecular Cancer Therapeutics 1: 515-524*
7. Cohn, BA, MS Wolff, PM Cirillo and RI Sholtz. 2007. DDT and breast cancer in young women: New data on the significance of age at exposure. *Environmental Health Perspectives* doi:10.1289/ehp.10260
8. Travison, TG, AB Araujo, AB O'Donnell, V Kupelian, JB McKinlay. 2007. A population-level decline in serum testosterone levels in American men. *Journal of Clinical Endocrinology and Metabolism 92:196-202.*
9. Lee, D-H, I-K Lee, K Song, M Steffes, W Toscano, BA Baker, and DR Jacobs. 2006. A Strong Dose-Response Relation Between Serum Concentrations of Persistent Organic Pollutants and Diabetes. Results from the National Health and Examination Survey 1999-2002. *Diabetes Care 29:1638-1644.*
10. Cohn, BA, MS Wolff, PM Cirillo and RI Sholtz. 2007. DDT and breast cancer in young women: New data on the significance of age at exposure. *Environmental Health Perspectives* doi:10.1289/ehp.10260
11. W. Alonso-Magdalena, P, S Morimoto, C Ripoll, E Fuentes and A Nadal. 2006. The Estrogenic Effect of Bisphenol-A Disrupts the Pancreatic β -Cell Function in vivo and Induces Insulin Resistance. *Environmental Health Perspectives 114:106-112.*
12. Brody, J.G., R.A. Rudel. 2008. Environmental Pollutants and Breast Cancer: The Evidence from Animal and Human Studies. *Breast Diseases: A Year Book Quarterly, 19(1): 17-19.* 13. Anderson HA, Imm P, Knobeloch L, Turyk M, Mathew J, Buelow C, Persky V. 2008. Polybrominated diphenyl ethers (PBDE) in serum: Findings from a US cohort of consumers of sportcaught fish. *Chemosphere 73:187-194.*
14. Betts KS. 2002. Rapidly rising PBDE levels in North America. *Environmental Science and Technology 36(3):50A-52A.*
15. Bigsby R, Chapin RE, Daston GP, Davis BJ, Gorski J, Gray LE, Howedeshell KL, Zoeller T, vom Saal FS. 1999. Evaluating the Effects of Endocrine Disruptors on Endocrine Function during Development. *Environmental Health Perspectives 107(4):613-618.*
16. Brown DP. 1987. Mortality of workers exposed to polychlorinated-biphenyls an update. *Archives of Environmental Health 42(6):333-339.*
17. Costa LG, Giordano G. 2007. Developmental neurotoxicity of polybrominated diphenyl ether (PBDE) flame retardants. *NeuroToxicology 28(6):1047-1067.*
18. Daly GL, Wania F. 2005. Organic Contaminants in Mountains. *Environmental Science and Technology 39(2):385-398.*
19. Eriksson P, Lundkvist U, Fredriksson A. 1991. Neonatal exposure to 3,3',4,4'-tetrachlorobiphenyl Changes in spontaneous behavior and cholinergic muscarinic receptors in the adult-mouse. *Toxicology 69(1):27-34.*
20. Eriksson PH, Viberg E, Jakobsson U, Fredriksson A. 2002. A Brominated Flame Retardant, 2,2',4,4',5-Pentabromodiphenyl Ether: Uptake, Retention, and Induction of Neurobehavioral Alterations in Mice during a Critical Phase of Neonatal Brain Development. *Toxicological Sciences 67: 98-103.*

21. Field JA, Sierra-Alvarez R. 2008. Microbial transformation and degradation of polychlorinated biphenyls. *Environmental Pollution* 155(1):1-12.
22. Fürst P. 2006. Dioxins, polychlorinated biphenyls and other organohalogen compounds in human milk; Levels, correlations, trends and exposure through breastfeeding. *Molecular Nutrition & Food Research* 50(10):922-933.
23. Guo YLL, Lambert GH, Hsu CC. 1995. Growth abnormalities in the population exposed in-utero and early postnatally to polychlorinated-biphenyls and dibenzofurans. *Environmental Health Perspectives* 103(6):117-122.
24. Hallegue D, Rhouma KB, Tebourbi O, Sakly M. 2003. Impairment of Testicular Endocrine Functions after Dieldrin Exposure in Adult Rats. *Polish Journal of Environmental Studies* 12(5):557-561.
25. Hites RA. 2004. Polybrominated Diphenyl Ethers in the Environment and in People: A MetaAnalysis of Concentrations. *Environmental Science & Technology* 38(4): 945-956.
26. Hites RA, Foran JA, Carpenter DO, Hamilton MC, Knuth BA, Schwager SJ. 2004. Global Assessment of Organic Contaminants in Farmed Salmon. *Science* 303(5655):226-229.
27. Jensen S, Johnels AG, Olsson M, Otterlind G. 1969. DDT and PCB in Marine Animals from Swedish Waters. *Nature* 224:247-250.
28. Kodavanti PRS. 2006. Neurotoxicity of Persistent Organic Pollutants: Possible Mode(s) of Action and Further Considerations. *Dose-Response* 3(3):273-305.
29. Knobeloch L, Turyk M, Imm P, Schrank C, Anderson H. 2008. Temporal changes in PCB and DDE levels among a cohort of frequent and infrequent consumers of Great Lakes sportsfish. *Environmental Research* 109(1):66-72.
30. Lema SC, Dickey JT, Schultz IR, Swanson P. 2008. Dietary exposure to 2,2',4,4'-teatrabromodiphenyl ether (PBDE-47) alters thyroid status and thyroid hormone-regulated gene transcription in the pituitary and brain. *Environmental Health Perspectives* 116(12):1694-1699.
31. Lilienthal H, Hack A, Roth-Härer A, Grande SW, Talsness CE. 2006. Effects of developmental exposure to 2,2',4,4', 5-pentabromodiphenyl ether (PBDE-99) on sex steroids, sexual development, and sexually dimorphic behavior in rats. *Environmental Health Perspectives*. 114(2): 194-201.
32. Loomis D, Browning SR, Schenck AP, Gregory E, Savitz DA. 1997. Cancer mortality among electric utility workers exposed to polychlorinated biphenyls. *Occupational and Environmental Medicine* 54:720-728.
33. Lorber M. 2008. Exposure of Americans to polybrominated diphenyl ethers. *Journal of Exposure Science and Environmental Epidemiology* 18:2-19.
34. Lundholm CE. 1997. DDE-induced eggshell thinning in birds: Effects of p,p'-DDE on the calcium and prostaglandin metabolism of the eggshell gland. *Comparative Biochemistry and Physiology Part C: Pharmacology, Toxicology and Endocrinology* 118(2):113-128.
35. Morland KB, Landrigan PJ, Sjödin A, Gobeille AK, Jones RS, McGahee EE, Needham LL, Patterson Jr DG. 2005. Body Burdens of Polybrominated Diphenyl Ethers among Urban Anglers. *Environmental Health Perspectives* 113(12):1689-1692.
36. Mullerova D, Kopecky J, Matejkova D, Muller L, Rosmus J, Racek J, Sefrna F, Opatrna S, Kuda O, Matejovic M. 2008. Negative association between plasma levels of adiponectin and polychlorinated biphenyl 153 in obese women under non-energy-restrictive regime. *International Journal of Obesity* 32(12):1875-1878
37. Norén K, Meironyté D. 2000. Certain organochlorine and organobromine contaminants in Swedish human breast milk in perspective of past 20-30 years. *Chemosphere* 40(9-11):1111-1123.
38. Recabarren SE, Rojas-Garcia PP, Recabarren MP, Alfaro VH, Smith R, Padmanabhan V, SirPetermann T. 2008. Prenatal Testosterone Excess Reduces Sperm Count and Motility. *Endocrinology* 149(12):6444-6448.
39. Rudel RA, Seryak LM, Brody JG. 2008. PCB-containing wood floor finish is a likely source of elevated PCBs in residents' blood, household air and dust: a case study of exposure. *Environmental Health* 7(Special section):1-8.
40. Schecter A, Päpke O, Tung K, Staskal D, Birnbaum L. 2004. Polybrominated Diphenyl Ethers Contamination of United States Food. *Environmental Science and Technology* 38(20):5306-5311.

41. Sinks T, Steele G, Smith AB, Watkins K, Shults RA. 1992. Mortality among workers exposed to polychlorinated-biphenyls. *American Journal of Epidemiology* 136(4):389-398.
42. Stoner HB. 1953. Effect of 2,2-bis (parachlorophenyl)-1,1-dichloroethane (DDD) on the adrenal cortex of the rat. *Nature* 172(4388):1044-5.
43. Szabo DT, Richardson VM, Ross DG, Diliberto JJ, Kodavanti PRS, Birnbaum LS. 2009. Effects of perinatal PBDE exposure on hepatic phase I, phase II, phase III, and Deiodinase 1 gene expression involved in thyroid hormone metabolism in male rat pups. *Toxicological Sciences* 107(1):27-39.
44. Szlinder-Richert J, Barska I, Mazerski, Usydus Z. 2008. Organochlorine pesticides in fish from the southern Baltic Sea: Levels, bioaccumulation features and temporal trends during the 1995–2006 period. *Marine Pollution Bulletin* 56(5):927-940.
45. Talsness CE, Shakibaei M, Kuriyama SN, Grande SW, Sterner-Kock A, Schnitker P, de Souza C, Grote K, Chahoud I. 2005. Ultrastructural changes observed in rat ovaries following in utero and lactational exposure to low doses of a polybrominated flame retardant. *Toxicology Letters*. 157:189–202.
46. Tang NJ, Liu J, Coenraads PJ, Dong L, Zhao LG, Ma SW, Chen X, Zhang CM, Ma XM, Wei WG, Zhang P, Bai ZP. Expression of AhR, CYP1A1, c-fos and TGF-alpha in skin lesions from dioxinexposed humans with cloracne. *Toxicology Letters* 177(3):182-187.
47. Tauber OE, Hughes AB. 1950. Effect of DDT ingestion on total cholesterol content of ovaries of white rat. *Proceedings of the Society for Experimental Biology and Medicine*. 75(2):420-22
48. Tiemann U. 2008. In vivo and in vitro effects of the organochlorine pesticides DDT, TCPM, methoxychlor, and lindane on the female reproductive tract of mammals: A review. *Reproductive Toxicology* 25(3):316-326.
49. Uemura H, Arisawa K, Hiyoshi M, Satoh H, Surniyoshi Y, Morinaga K, Kodama K, Suzuki T, Nagai M, Suzuki T. 2008. Associations of environmental exposure to dioxins with prevalent diabetes among general inhabitants in Japan. *Environmental Research* 108(1):63-68.
50. Verhulst SL, Nelen V, Den Hond E, Koppen G, Beunckens C, Vael C, Schoeters G, Desager K. 2009. Intrauterine exposure to environmental pollutants and body mass index during the first 3 years of life. *Environmental Health Perspectives* 117(1):122-126.
51. Viberg H, Johansson N, Fredriksson A, Eriksson J, Marsh G, Eriksson P. 2006. Neonatal exposure to higher brominated diphenyl ethers, heptabromo-(PBDE 183), octabromo-(PBDE 203) or nonabromodiphenyl ether (PBDE 206), impairs spontaneous behaviour, and learning and memory functions of adult mice. *Toxicological Sciences*. 92 (2006): 211–218.
52. Weschler CJ. 2009. Changes in indoor pollutants since the 1950s. *Atmospheric Environment* 43 (1):153-169.
53. Krinsky S (December 2001). "An epistemological inquiry into the endocrine disruptor thesis". *Ann. N. Y. Acad. Sci.* 948: 130–42. PMID 11795392.
54. Colborn T, vom Saal FS, Soto AM (October 1993). "Developmental effects of endocrine-disrupting chemicals in wildlife and humans". *Environ. Health Perspect.* 101 (5): 378–84. PMID 8080506.
55. Golden RJ, Noller KL, Titus-Ernstoff L, et al (March 1998). "Environmental endocrine modulators and human health: an assessment of the biological evidence". *Crit. Rev. Toxicol.* 28 (2): 109–227. PMID 9557209.
56. Rogan WJ, Ragan NB (2003). "Evidence of effects of environmental chemicals on the endocrine system in children". *Pediatrics* 112 (1 Pt 2): 247–52. PMID 12837917.
57. Colborn, Theo; Carroll, Lynn E. (2007), "Pesticides, Sexual Development, Reproduction, and Fertility: Current Perspective and Future Direction", *Human and Ecological Risk Assessment* 13:1078–1110
58. Scientific Consensus Statement on Environmental Agents Associated with Neurodevelopmental Disorders, Collaborative on Health and the Environment's Learning and Developmental Disabilities Initiative, November 7, 2007.
59. Swan SH, Main KM, Liu F, Stewart SL, Kruse RL, Calafat AM, Mao CS, Redmon JB, Ternand CL, Sullivan S, Teague JL (August 2005). "Decrease in anogenital distance among male infants with prenatal phthalate exposure". *Environ. Health Perspect.* 113 (8): 1056–61.
60. Postellon, Daniel (2008). "Baby Care Products". *Pediatrics* 121 (6 June): 1292. doi:10.1542/peds.2008-0401. PMID 18519505.

61. Romano-Riquer SP, Hernández-Avila M, Gladen BC, Cupul-Uicab LA, Longnecker MP (May 2007). "Reliability and determinants of anogenital distance and penis dimensions in male newborns from Chiapas, Mexico". *Paediatr Perinat Epidemiol* 21 (3): 219–28.
62. Cooper RL, Kavlock RJ (1997). "Endocrine disruptors and reproductive development: a weight-of-evidence overview". *J. Endocrinol.* 152 (2): 159–66. doi:10.1677/joe.0.1520159. PMID 9071972.
63. Safe SH (2000). "Endocrine disruptors and human health--is there a problem? An update". *Environ. Health Perspect.* 108 (6): 487–93. doi:10.2307/3454608. PMID 10856020.
64. In Utero and Lactational Exposures to Low Doses of Polybrominated Diphenyl Ether-47 Alter the Reproductive System and Thyroid Gland of Female Rat Offspring *Environ. Health Perspect.* 116:308–314 (2008).
65. Arnold SF, Klotz DM, Collins BM, Vonier PM, Guillette LJ, McLachlan JA (1996). "Synergistic activation of estrogen receptor with combinations of environmental chemicals". *Science* 272 (5267): 1489–92. doi:10.1126/science.272.5267.1489.
66. Ramamoorthy K, Wang F, Chen IC, Norris JD, McDonnell DP, Leonard LS, Gaido KW, Bocchinfuso WP, Korach KS, Safe S (April 1997). "Estrogenic activity of a dieldrin/toxaphene mixture in the mouse uterus, MCF-7 human breast cancer cells, and yeast-based estrogen receptor assays: no apparent synergism". *Endocrinology* 138 (4): 1520–7.
67. McLachlan JA (July 1997). "Synergistic effect of environmental estrogens: report withdrawn". *Science* 277 (5325): 462–3. PMID 9254413.
68. "Findings of scientific misconduct". NIH Guide Grants Contracts: NOT-OD-02-003. October 2001. PMID 12449946. <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-02-003.html>.
69. Hayes, T et al. Pesticide Mixtures, Endocrine Disruption, and Amphibian Declines: Are We Underestimating the Impact *Environ Health Perspect.* 2006 Apr;114 Suppl 1:40-50.
70. Environmental Working Group: The Pollution in Newborns
71. National Report On Human Exposure to Environmental Chemicals., U.S. Centers for Disease Control and Prevention.
72. Erickson, Britt (June 2, 2008). "Bisphenol A under scrutiny". *Chemical and Engineering News* 86 (22): 36–39. <http://pubs.acs.org/cen/>.
73. Eriksson 2006. Polybrominated diphenyl ethers, a group of brominated flame retardants, can interact with polychlorinated biphenyls in enhancing developmental neurobehavioral defects. *Toxicol Sci* 94(2): 302-9.
74. Fisher, Jane S (2004), "Environmental anti-androgens and male reproductive health: focus on phthalates and testicular dysgenesis syndrome", *Reproduction* 127 (3): 305–315, doi:10.1530/rep.1.00025, PMID 15016950
75. Swan, S.H. et al. 2005. An overview of this paper is given in the same volume: Julia R. Barrett, Phthalates and Baby Boys: Potential Disruption of Human Genital Development, *Environ. Health Perspect.* 2005 Aug; 113(8): A542.
76. Harding AK, Daston GP, Boyd GR, Lucier GW, Safe SH, Stewart J, Tillitt DE, Van Der Kraak G (August 2006). "Endocrine disrupting chemicals research program of the U.S. Environmental Protection Agency: summary of a peer-review report". *Environ. Health Perspect.* 114 (8): 1276–82. PMID 16882539. PMC: 1552001.
77. Colborn, T., vom Saal, F. S., and Soto, A. M. (1993). Developmental effects of endocrinedisrupting chemicals in wildlife and humans. *Environ. Health Perspect.* 101, 378–384.
78. EDSTAC (1998). Endocrine Disruptor Screening and Testing Advisory Committee Final Report, August 1998.
79. Eroschenko, V. P., and Wilson, W. O. (1975). Cellular changes in the gonads, livers and adrenal glands of Japanese quail as affected by the insecticide Kepone. *Toxicol. Appl. Pharmacol.* 31, 491–504.
80. Gaido, K.W., Leonard, L. S., Lovell, S., Gould, J. C., Babai, D., Portier, C. J., and McDonnell, D. P. 1997. Evaluation of chemicals with endocrine modulating activity in a yeast-based steroid hormone receptor gene transcription assay. *Toxicol. Appl. Pharmacol.* 143, 205–212.
81. Kelce, W. R., Stone, C. R., Laws, S. C., Gray, L. E., Kempainen, J. A., and Wilson, E.M. 1995. Persistent DDT metabolite p,p'-DDE is a potent androgen receptor antagonist. *Nature* 375, 581–585.
82. O'Connor, J. C., Frame, S. R., Davis, L. G., and Cook, J. C. 1999. Detection of the environmental antiandrogen p,p'-DDE in CD and Long-Evans rats using a Tier I screening battery and a Hershberger assay. *Toxicol. Sci.* 51, 44–53.

83. Beychok, Milton R. (January 1987). "A data base for dioxin and furan emissions from refuse incinerators". *Atmospheric Environment* 21 (1): 29–36. doi:10.1016/0004-6981(87)90267-8. ISSN 0004-6981.
84. Weber R, Tysklind M, and Gaus C (2008). "Dioxin — Contemporary and future challenges of historical legacies (Editorial, dedicated to Otto Hutzinger)". *Env Sci Pollut Res* 15 (2): 96–100 (p.97). doi:10.1065/espr2008.01.473.
85. Schecter A, Cramer P, Boggess K, et al (2001). "Intake of dioxins and related compounds from food in the U.S. population". *J. Toxicol. Environ. Health Part A* 63 (1): 1–18. doi:10.1080/152873901750128326. PMID 11346131.
86. Latch DE, Packer JL, Stender BL, VanOverbeke J, Arnold WA, McNeill K (2005). "Aqueous photochemistry of triclosan: formation of 2,4-dichlorophenol, 2,8-dichlorodibenzo-p-dioxin, and oligomerization products". *Environ. Toxicol. Chem.* 24 (3): 517–25. doi:10.1897/04-243R.1. PMID 15779749.
87. Geyer HJ, Schramm KW, Feicht EA, et al (2002). "Half-lives of tetra-, penta-, hexa-, hepta-, and octachlorodibenzo-p-dioxin in rats, monkeys, and humans—a critical review". *Chemosphere* 48 (6): 631–44. doi:10.1016/S0045-6535(02)00030-9. PMID 12143938.
88. Van den Berg M, Birnbaum LS, Denison M, et al (2006). "The 2005 World Health Organization reevaluation of human and Mammalian toxic equivalency factors for dioxins and dioxin-like compounds". *Toxicol. Sci.* 93 (2): 223–41. doi:10.1093/toxsci/kfl055. PMID 16829543.
89. Geusau A, Schmaldienst S, Derfler K, Pöpke O, Abraham K (2002). "Severe 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) intoxication: kinetics and trials to enhance elimination in two patients". *Arch. Toxicol.* 76 (5-6): 316–25. doi:10.1007/s00204-002-0345-7. PMID 12107649.
90. Bock KW, Köhle C (2006). "Ah receptor: dioxin-mediated toxic responses as hints to deregulated physiologic functions". *Biochem. Pharmacol.* 72 (4): 393–404. doi:10.1016/j.bcp.2006.01.017. PMID 16545780.
91. Geusau A, Abraham K, Geissler K, Sator MO, Stingl G, Tschachler E (2001). "Severe 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) intoxication: clinical and laboratory effects". *Environ. Health Perspect.* 109 (8): 865–9. doi:10.2307/3454832. PMID 11564625.
92. Zambon P, Ricci P, Bovo E, Casula A, Gattolin M, Fiore AR, Chiosi F, and Guzzinati S (2007). "Sarcoma risk and dioxin emissions from incinerators and industrial plants: a population-based case-control study (Italy)". *Environ. Health* 6 (19): 1–19. doi:10.1186/1476-069X-6-19. PMID 1948886.
93. Alaluusua S, Calderara P, Gerthoux PM, et al (2004). "Developmental dental aberrations after the dioxin accident in Seveso". *Environ. Health Perspect.* 112 (13): 1313–8. PMID 15345345.
94. Peterson RE, Theobald HM, Kimmel GL (1993). "Developmental and reproductive toxicity of dioxins and related compounds: cross-species comparisons". *Crit. Rev. Toxicol.* 23 (3): 283–335. doi:10.3109/10408449309105013. PMID 8260069.
95. Pelclová D, Urban P, Preiss J, et al (2006). "Adverse health effects in humans exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)". *Reviews on environmental health* 21 (2): 119–38. PMID 16898675.
96. Pavuk M, Schecter AJ, Akhtar FZ, Michalek JE (2003). "Serum 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) levels and thyroid function in Air Force veterans of the Vietnam War". *Annals of epidemiology* 13 (5): 335–43. doi:10.1016/S1047-2797(02)00422-2. PMID 12821272.
97. Baccarelli A, Mocarelli P, Patterson DG, et al (2002). "Immunologic effects of dioxin: new results from Seveso and comparison with other studies". *Environ. Health Perspect.* 110 (12): 1169–73. PMID 12460794.
98. Eskenazi B, Mocarelli P, Warner M, et al (2002). "Serum dioxin concentrations and endometriosis: a cohort study in Seveso, Italy". *Environ. Health Perspect.* 110 (7): 629–34. PMID 12117638.
99. Arisawa K, Takeda H, Mikasa H (2005). "Background exposure to PCDDs/PCDFs/PCBs and its potential health effects: a review of epidemiologic studies". *J. Med. Invest.* 52 (1-2): 10–21. doi:10.2152/jmi.52.10. PMID 15751269.
100. "Dioxin pollution leads to more baby girls -study". <http://www.reuters.com/article/healthNews/idUSN1836384520071018?feedType=RSS&feedName=healthNews>
101. Birnbaum LS, Tuomisto J (2000). "Non-carcinogenic effects of TCDD in animals". *Food additives and contaminants* 17 (4): 275–88. PMID 10912242.

102. Peters JM, Narotsky MG, Elizondo G, Fernandez-Salguero PM, Gonzalez FJ, Abbott BD (1999). "Amelioration of TCDD-induced teratogenesis in aryl hydrocarbon receptor (AhR)-null mice". *Toxicol. Sci.* 47 (1): 86–92. doi:10.1093/toxsci/47.1.86. PMID 10048156.
103. Kransler KM, McGarrigle BP, Olson JR (2007). "Comparative developmental toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in the hamster, rat and guinea pig". *Toxicology* 229 (3): 214–25. doi:10.1016/j.tox.2006.10.019. PMID 17126467.
104. Bruggeman V, Swennen Q, De Ketelaere B, Onagbesan O, Tona K, Decuyere E (2003). "Embryonic exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin in chickens: effects of dose and embryonic stage on hatchability and growth". *Comp. Biochem. Physiol. C Toxicol. Pharmacol.* 136 (1): 17–28. doi:10.1016/S1532-0456(03)00168-6. PMID 14522596.
105. Carney SA, Prasch AL, Heideman W, Peterson RE (2006). "Understanding dioxin developmental toxicity using the zebrafish model". *Birth Defects Res. Part A Clin. Mol. Teratol.* 76 (1): 7–18. doi:10.1002/bdra.20216. PMID 16333842.
106. Mann PC (1997). "Selected lesions of dioxin in laboratory rodents". *Toxicologic pathology* 25 (1): 72–9. PMID 9061855.
107. Grinwis GC, Vethaak AD, Wester PW, Vos JG (2000). "Toxicology of environmental chemicals in the flounder (*Platichthys flesus*) with emphasis on the immune system: field, semi-field (mesocosm) and laboratory studies". *Toxicol. Lett.* 112-113: 289–301. doi:10.1016/S0378-4274(99)00239-8. PMID 10720744.
108. El-Sabeawy F, Enan E, Lasley B (2001). "Biochemical and toxic effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin in immature male and female chickens". *Comp. Biochem. Physiol. C Toxicol. Pharmacol.* 129 (4): 317–27. doi:10.1016/S1532-0456(01)00199-5. PMID 11489429.
109. Holladay SD (1999). "Prenatal immunotoxicant exposure and postnatal autoimmune disease". *Environ. Health Perspect.* 107 Suppl 5: 687–91. PMID 10502532.
110. Spitsbergen JM, Schat KA, Kleeman JM, Peterson RE (1986). "Interactions of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) with immune responses of rainbow trout". *Vet. Immunol. Immunopathol.* 12 (1-4): 263–80. PMID 3765346.
111. Schecter A, Dai LC, Thuy LT, et al (1995). "Agent Orange and the Vietnamese: the persistence of elevated dioxin levels in human tissues". *American journal of public health* 85 (4): 516–22. PMID 7702115.
112. Collins JJ, Straus ME, Levinskas GJ, Conner PR (1993). "The mortality experience of workers exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin in a trichlorophenol process accident". *Epidemiology (Cambridge, Mass.)* 4 (1): 7–13. PMID 8420584.
113. Christoph EH, Umlauf GCK, Bidoglio G (September 2004). "PCDD/Fs and Dioxin-like PCBs in Soils after the Flooding of River Elbe and Mulde in 2002". *DIOXIN 2004 24th Intern. Symposium on Halogenated Environmental Organic Pollutants and POPs, 6-10 September 2004.*
114. Geusau A, Tschachler E, Meixner M, et al (1999). "Olestra increases faecal excretion of 2,3,7,8-tetrachlorodibenzo-p-dioxin". *Lancet* 354 (9186): 1266–7. doi:10.1016/S0140-6736(99)04271-3. PMID 10520643.
115. Chevrier J, Eskenazi B, Holland N, Bradman A, Barr DB. Effects of exposure to polychlorinated biphenyls and organochlorine pesticides on thyroid function during pregnancy. *Am J Epidemiol.* 2008 Aug 1;168(3):298-310. Epub 2008 Jun 10.
116. Korrick SA, Sagiv SK. Polychlorinated biphenyls, organochlorine pesticides and neurodevelopment. *Curr Opin Pediatr.* 2008 Apr;20(2):198-204.
117. Charlier C, Albert A, Herman P, Hamoir E, Gaspard U, Meurisse M, Plomteux G. Breast cancer and serum organochlorine residues. *Occup Environ Med.* 2003 May;60(5):348-51.