

**“NON-TOXIC LIVING”
MYTHS AND REALITY BEHIND THE SLOGAN...**

***Within 26 seconds after exposure to toxins,
traces of them can be found in every organ of human body.***

Beware!

**By reading this article, you will find out about the nasty substances in the products you use daily
which will almost certainly change your shopping habits forever!**

COSMETIC TOXINS

Toxins are eliminated through the skin but they can also be absorbed through the skin. You will not ever hear skincare manufacturers claiming that their products penetrate through the skin and into the blood circulation, because they would then be classified as drugs and subject to much more stringent testing and regulation. However, there is plenty of evidence that skin does absorb some ingredients from skincare preparations because they are turning up in our blood, urine, organs and tissues. Scientists often find phthalates in urine, parabens in breast tumours, and synthetic fragrances like musk xylene in human fat.

It is ironic that cosmetic companies pour so much research funding into the development of new products that help to disguise the signs of ageing (anti-wrinkle creams, hair-thickening shampoos and conditioners, firming body lotions) yet they use ingredients that some researchers suspect of being carcinogens, neurological toxins, immune suppressants and hormone disruptors, so the net effect can be drastically ageing.

In the USA, the Environmental Working Group tested 120 cosmetics products, including shampoos, moisturizers, foundations and lip balm, and found ingredients certified by the US Government as “known or probable carcinogens” in each and every one.

In 2005, the US Food and Drug Administration declared that consumers should be informed of the fact that many commercial shampoos, deodorants, perfumes, nail polishes, hand creams, hair dyes and bubble baths have not been safely tested, despite the fact that they commonly contain chemicals that disrupt the hormones, are carcinogenic and disrupt the nervous system.

AIR TOXINS

In an area with a lot of traffic the air is simply poisonous.

Traffic emissions contain:

- benzene (linked to leukaemia),
- carbon monoxide (makes you tired, causes memory loss, can cause chest pain and miscarriage),
- diesel particles (linked to circulatory disease and lung cancer),
- petrol (may damage the nervous system and lungs),
- polycyclic aromatic hydrocarbons (linked to reproductive problems and cancer)
- total petroleum hydrocarbons (which may affect the circulatory and immune systems, the skin, lungs and eyes).

You are breathing in even more of these chemicals while sitting in your car than out in the street, because the air pumped in for heating and air conditioning systems is at ground level where the exhaust fumes are pumped out.

Do you think that you would be better off moving to the country instead? Well, the air there can be full of agricultural pesticides and fertilizers.

These contain:

- carbamates (which some experts think disrupt the nervous system and can cause rashes and fatigue at low levels),
- organochlorines (which are thought to build up in the fat cells and over the long term can cause weakness and tremors),
- organophosphates (high levels are fatal and low levels are linked to skin rashes and fatigue)
- pyrethroids (linked to nervous system damage and respiratory system irritation).

HOUSEHOLD TOXINS



DID YOU KNOW ?

- **THAT OF THE 80,000 KNOWN CHEMICALS IN USE, ONLY 12,000 HAVE BEEN ADEQUATELY TESTED FOR THE NEGATIVE EFFECTS ON OUR HEALTH.**
- **US FEDERAL ENVIRONMENTAL PROTECTION AGENCY (E.P.A.) HAS FOUND THAT AIRBORNE CHEMICAL LEVELS IN HOMES WERE AS MUCH AS 70 TIMES HIGHER INSIDE THAN OUTSIDE.**
- **US FEDERAL FOOD & DRUG ADMINISTRATION (F.D.A.) CANNOT REQUIRE COMPANIES TO DO SAFETY TESTING ON THEIR PERSONAL CARE PRODUCTS BEFORE THEY ARE SOLD TO THE PUBLIC.**
- **MEDICAL DOCTORS AND SCIENTISTS HAVE STUDIED, ANALYZED, EVALUATED, AND CONCLUDED THAT THERE IS A DEFINITIVE CONNECTION BETWEEN OUR HEALTH AND THE USE OF EVERYDAY COMMON HOUSEHOLD CLEANING CHEMICALS, INDUSTRIAL- AND AGRO-TOXINS.**

Source: "Neighborhood Network's" 2002 Environmental Resource Directory for Home and Business

In the past 50 years more than 75,000 chemicals have been introduced into the environment. Today 300 synthetic chemicals are found in the bodies of humans. Even newborn babies have synthetic chemicals passed on from their mothers. *[REACH - Registration, Evaluation, and Authorization of Chemicals, an European Union program]*

No toxic information is available for more than 80% of the chemicals in everyday-use products. Only 1% of toxins are listed on labels, because companies classify their formulas as "trade secrets." *[US National Research Council]*

In homes where aerosol sprays and air fresheners were used frequently, mothers experienced 25% more headaches and were 19% more likely to suffer from depression. Additionally, infants under 6 months of age had 30% more ear infections and 22% higher incidence of diarrhea. *[NEW SCIENTIST Magazine, 1999]*

Cancer rates have increased since 1901 from only 1 in 8,000 Americans, to 1 in 3 today! *[American Cancer Society]*

Cancer rates have continued to increase every year since 1970. Brain cancer in children is up 40% in 20 years. Toxic chemicals are largely to blame. *[New York Times, September 29, 1997]*

Women who work at home have a 54% higher death rate from cancer than those who work away from home. The 15-year study concluded it was as a direct result of the much higher exposure rate to toxic chemicals in common household products! *[Toronto Indoor Air Conference 1990, Canada]*

The toxic chemicals in household cleaners are 3 times more likely to cause cancer than air pollution. *[US E.P.A. Environmental Protection Agency report, 1985]*

In 1990, more than 4,000 children under age 4 were admitted to hospital emergency rooms as a result of household cleaner-related injuries. That same year, 75% of the 18,000 pesticide-related hospital emergency room admissions were children.

Over 80% of adults and 90% of children in the United States have residues of one or more harmful pesticides in their bodies.

Petrochemical cleaning products in the home are easily absorbed into the skin. Once absorbed, the toxins travel to the blood stream and are deposited in the fatty tissues where they may exist indefinitely. *["In Harm's Way," a study by "The Clean Water Fund" and "Physicians for Social Responsibility", USA, May 11, 2000]*

More than 7 million accidental poisonings occur each year, with more than 75% involving children under age 6! *[The Columbia University College of Physicians & Surgeons, USA]*

A child is accidentally poisoned every 30 seconds at home. *[U.S. Poison Control Centers]*

Unregulated air pollution in California has caused 1 in 6 children to suffer from asthma. *[California's State Department of Health Services]*

In USA alone, air pollution causes between 50,000 and 100,000 premature deaths per year – and soot accounts for a majority of these. Soot is the most deadly air pollutant, accounting for more deaths than homicides or automobile accidents. According to the California Air Resources Board, diesel soot accounts for 70 percent of the cancer risk from toxic air pollution statewide. *[California Air Resources Board, USA]*

Learning, behavioral and developmental disabilities including Attention Deficit Hyperactivity Disorder (ADHD) and autism prevent our children from reaching their full human potential. 17% of children in the United States have been diagnosed with one or more developmental disabilities. These disabilities are clearly the result of complex interactions among genetic, environmental, and social factors that impact children during vulnerable periods of development. Research demonstrates that pervasive toxic substances, such as mercury, lead, PCBs, dioxins, pesticides, solvents, and others, can contribute to neurobehavioral and cognitive disorders. Human exposure to neuro-toxic substances is widespread. A review of the top twenty chemicals reported released under the 2000 Toxics Release Inventory reveals that nearly half are known or suspected neuro-toxicants. Over 2 billion pounds of these neuro-toxic chemicals were released on-site by facilities into the air, land or water. *[Physicians for Social Responsibility, Boston, USA, May 11, 2000, <http://psr.igc.org/ihw.htm>]*

Of the chemicals found in personal care products:

- 884 are toxic
- 146 cause tumors
- 218 cause reproductive complications
- 314 cause biological mutation
- 376 cause skin and eye irritations

[United States House of Representatives report, 1989]

Over the last 20-30 years, as more toxic chemicals have been introduced in greater amounts, the level of toxins stored in adipose tissues (fat cells) of our bodies has risen. Bio-accumulation studies have shown that some toxins store in our bodies for life. Greater and greater amounts are being stored at younger ages. Diseases that used to occur later in life are now appearing at younger ages. Disease that used to be rare are more frequent, for example, there has been a 28% increase in childhood cancer since the addition of pesticides into household products. *[National Cancer Institute, USA]*

In one decade, there has been a 42% increase in asthma (29% for men; 82% for women – the higher rate for women is believed to be due to women's longer exposure times to household chemicals). *[Center for Disease Control, USA]*

There is an increased risk for leukemia in children where parents have used pesticides in the home or garden before the child's birth. *[Journal of the National Cancer Institute, USA]*

Over 150 chemicals found in the average home have been linked to allergies, birth defects, cancer and psychological abnormalities. *[Consumer Product Safety Commission, USA]*

ARGO-TOXINS

On July 13 2007, a young German researcher working at the European parliament bought eight fruit items from the convenience store located inside the parliamentary building in Brussels. The purchase itself was unremarkable: some oranges, apples, pears, apricots, strawberries and three bunches of grapes. But the story of what happened next has astounded many working at the heart of European government. The young researcher sent the fruit samples to the TMO analytical laboratory in the Netherlands where they were tested for traces of pesticides.

In total, the eight fruit samples contained 28 different pesticides, including 10 carcinogens, eight suspected endocrine disruptors, three neurotoxins, three reproductive toxins, and two chemicals classified by the World Health Organisation as "highly hazardous". The strawberries contained 14 different pesticide contaminants. Worse still, three of the eight fruit items contained pesticides at levels exceeding legal limits - thus rendering their sale illegal. Researchers later calculated that a five-year-old child eating just two of the oranges would ingest carcinogens at a dose 40% above internationally recognised safety levels.

While the results of this analysis are shocking, they are well in line with current estimates of EU food contamination. According to a 2006 survey published by the European Commission, the EU food chain is contaminated with 324 different pesticides - within which some of those most commonly detected are among the most detrimental to human health. In total, 40% of fruit and vegetables sold in Europe contain pesticide residues, while one item in 30 contains pesticides at levels above EU legal limits. Based on these figures, the average European consumes fruit and vegetables containing excessive levels of pesticides on an almost fortnightly basis. Even baby foods are affected - with 2.7% containing levels above the legal maximum.

Until the 1940's farmers dealt with pests by natural methods, keeping soil healthy, rotating crops, utilizing a pest's natural enemies, physically removing weeds. In the 1940's (in the USA) only about 7% of crops were lost to pests. Today farming is based upon chemically sterilizing the soil (the source of all nutriment!), mono cropping, fewer seed varieties, and mass mechanisation. While farm yields (and incomes) have increased, the nutrient value of food have declined (contributing to immune deficiency diseases), billion of kilos of pesticides have fouled the environment and caused disease and death, and the current percentage of crops lost to pests has nearly doubled to 13%.

Pesticides include insecticides, herbicides, fungicides and rodenticides. Many of these such as disinfectants and wood preservatives are not commonly thought of as pesticides. Pesticides enter the body through inhalation, ingestion, or contact with the skin. They can be absorbed faster when inhaled.

Thousands of pesticides have been marketed without the required laboratory testing. The use of any pesticide poses some hazard. Data on home use pesticide is insufficient. In 1987 the American Consumers Union compiled a list of 50 active ingredients of pesticides used around the home and found that 66% had been inadequately tested to determine whether they could cause cancer, 72% inadequately tested for mutations, 62% for birth defects, 64% for adverse effects on reproduction, and 98% for neurobehavioral effects. [*American Consumers Union, USA*]

Studies in the USA have linked the herbicide 2,4-D, an ingredient in more than 1,500 pesticide formulations, to cancer in farmers as well as malignant lymphoma in dogs. Recently scientists have found evidence that certain pesticides such as synthetic pyrethroids may act to disrupt the hormonal system of animals. These pesticides appear to mimic natural sex hormones resulting in malformed sexual organs, birth defects, changes in sex-linked behavior, decreased fertility, and immune system suppression. [*National Cancer Institute studies, USA*]

"Growing evidence demonstrates that pervasion contamination of air, water, soil, and food with a wide range of industrial carcinogens, generally without public knowledge and consent, is important in causation of modern preventable cancer. Even if hazards posed by any industrial carcinogen are small, their cumulative, possible synergistic, effects are likely to be substantial." [*Science magazine, Vol. 240*]

Acute and chronic effects of chemical poisoning:

- Fatigue
- Headaches
- Flu-like symptoms

- Skin rashes
- Muscular and joint pain
- Irritability often with aggression
- Palpitations
- Digestive upset, nausea vomiting and diarrhea
- Insomnia and night sweats
- Onset of allergies and asthma
- Food, chemical and noise intolerance
- Impaired sight and hearing
- Memory and concentration loss, learning impairment
- Swollen glands
- Exacerbation of existing conditions
- Hormonal imbalances
- Behavioral disorders
- Stinging tummy in children

Children are particularly vulnerable to the effects of pesticides. Many of the most frequently used pesticides affect the nervous system, and children have been found to be more susceptible to neurotoxins than adults.

Exposure to carcinogens is of special concern. The National Cancer Institute USA found an increase risk of leukemia in children whose parents used pesticides in the home and garden.

The elderly can also be at greater risk from pesticide exposure because their immune systems and organ functions decline with age.

HOW REALLY “ORGANIC” IS ORGANIC FOOD?

Organic agriculture is being promoted as being healthier than conventional food production. There are many different production systems described as organic, but the central belief is that avoiding the use of artificial chemicals will produce healthier food and have less or no negative impacts on the environment. However, these claims are not backed up by facts.

Organic movement insists that nothing synthetic must be used in food production. But do they really follow this rule? A large number of synthetic chemicals are actually allowed in organic agriculture, but the industry is very quiet about it. The following are some of the synthetic chemicals that are allowed in food certified as organic following the USDA and/or the United Kingdom standards:

- Fertilizers: Magnesium sulfate, iron sulfate, copper sulfate, zinc sulfate, manganese sulfate, sulfuric and phosphoric acids (added to liquid fish fertilizers), basic slag.
- Pesticides: copper sulfate, copper oxychloride, copper hydroxide, potassium permanganate, mineral oils, calcium polysulfide.
- Livestock pesticides, antibiotics and other drugs: with the exception of organophosphates, all synthetic pesticides antibiotics and drugs are allowed.
- Cleaning agents: chlorine dioxide, calcium hypochlorite, sodium hypochlorite, hydrogen peroxide, nitric acid, sulfuric acid, phosphoric acid, formaldehyde.

One of the selling points of organic agriculture is that it does not use pesticides. The fact is that organic agriculture uses a range of pesticides including synthetic chemicals. Some of these chemicals are actually more harmful than the ones that are not allowed.

One of the most popular organic pesticides, neem, is toxic to non-target species including crustaceans and tadpoles. Neem has been shown to cause the brain disease toxic encephalopathy in children. In mice, it causes chromosomal abnormalities in bone marrow cells and damages the DNA of sperm.

Are there any other problems with organic pesticides? We really do not know simply because they are not regulated like the “synthetic” ones. Many organic products have never been tested for safety, but they are used under the guise that they are “natural” and are therefore not “chemicals”.

Those who promote organic agriculture may have good intentions, but their position is based on wishful thinking and emotion, not facts. No chemical, organic or synthetic, is perfectly safe. Under the wrong conditions, every substance is harmful. We need to understand the properties of all the products available to us and make sensible use of these resources whether they are natural or synthetic.

RESUME

Don't panic, however. Concentrate on avoiding the toxins that you can do something about - in the products you buy. Read labels carefully; if there is a long string of complex chemicals, give those products a miss. Choose natural ingredients, such as essential oils, herbs and sea salts, and look for certified organic brands. You can't avoid all the toxins in modern life, but if you try not to ingest them voluntarily, you will be taking a huge step towards looking after your health.

About authors

COMPLETE-PHARMA is FINNISH-THAI factory of food supplements. We are involved in research, development and production of modern nutraceuticals which provide health and medical benefits. We carefully study the latest achievements in related fields and apply up-to-date knowledge to all our formulations.

Each and every ingredient we use is clinically approved for its efficacy and safety. Receiving high-quality standardized ingredients from reliable suppliers in US, Germany, India, Malaysia, Thailand, China and other parts of the world, enables us to produce high-potency products with maximum health effect.

By combining together knowledge of ancient European, Thai, Chinese and Indian medicines with modern knowledge of nutrients, we position COMPLETE-PHARMA among the most unique producers in the world.

Here, in COMPLETE-PHARMA, we believe that word "health" is a part of our life, not just a word of self-promotion. We do our business with honesty and believe in responsibility towards our customers who need our assistance and help. We do not over-state our products and rely on modern scientific approach, remembering the words of Hippocrates "Let your food be your medicine, and your medicine be your food".