





A nutritious diet, an environmentally friendly home, and the use of natural and organic products in all facets of life are the most important choices the consumer can make for their health and that of their family.

Study after study has revealed that organic and natural foods contain considerably more nutrients than anything produced using chemicals. Additionally, studies have proven that foods, body products and cleaning products that contain carcinogens and toxic substances are responsible for diseases such as cancer.

However, *PureZing* also realizes that there is mounting confusion for consumers as they attempt to rid their body, homes and cupboards of unsafe, chemical-laden products.

That's why we've assembled this handy guide to the most common toxins on the supermarket shelves. Print it out and take it with you next time you go shopping!



#### DID YOU KNOW?:

- · 75,000 chemicals are licensed for use in the U.S.
- · Everyone in the U.S. permanently carries more than 300 chemical pollutants, pesticides and toxic metals in their organs and tissues: 300 synthetic chemicals acquired from foods, drugs and personal care products the combined effect of these chemicals is entirely unknown.
- On average, a person uses 10 body products every morning: shampoo, soap, toothpaste, moisturizers, deodorant, perfume, cleanser, lotion, conditioner, hair gel or spray etc. On average, every morning before leaving for work, a person applies and uses 250-300 chemicals. This does not take into account chemicals that are ingested.
- The FDA does NOT regulate the cosmetic industry.
  The FDA granted self-regulation to the Cosmetics,
  Toiletries and Fragrance Association (CTFA) in
  1938. Other than certain color additives and a
  handful of prohibited ingredients, manufacturers
  of body products may use whatever chemicals they
  want. No safety tests must be run, and if they are,
  each manufacturer keeps the results secret.
- The National Institute of Occupational Safety & Health Administration (OSHEA) has identified 884 toxic or potentially cancer causing ingredients found in commonly used personal care products.

## DYES COMMONLY USED IN FOODS & BODY PRODUCTS & THEIR EFFECTS:

#### Red 3

History of causing thyroid tumors in animals.

#### D&C Red 33

Cancer in humans, genetic damage to animals.

#### Red 40

Carcinogenic and mutagenic in animals.

#### Asorubine, Carmoisine

Red color, coal tar derivative. Possible allergic reactions in asthmatics. Used for confectionary products. Banned in several countries, but not U.S.

#### Blue 1

Also known as Brilliant Blue and FCF. Suggestions of a small cancer risk. Used in dairy products, sweets and drinks, this is banned in several countries ... but not the U.S.

#### Blue 2

This color is also known as Indigotine, Indigo and Carmine. Study shows brain tumors in mice. May cause nausea, skin rashes, allergic reactions. Banned in Norway, but not the U.S.

#### Citrus Red 2

Used on some Florida oranges, studies show this additive causes cancer.

#### Green 3

Possibly carcinogenic.

#### Green S

Used in canned peas, mint jelly and cake mixes. Banned in Norway and Sweden, but not the U.S.

#### FD&C Yellow 5

Also known as Tartrazine. Cancer, allergen, breathing difficulties and asthma attacks. Found in packaged soup, sweets, jams and cereals. Banned in several countries, but not U.S.

#### FD&C Yellow 6

Also known as Sunset Yellow, FCF, Orange Yellow S. Suspected of causing tumors in adrenal glands and kidneys. May cause allergies, hyperactivity, and chromosomal damage. Banned in Norway but not the U.S.

#### Annatto

Also known as Arnatto, Bixin and Norbixin. Skin, gastrointestinal, airway and central nervous system reactions reported.

## DANGEROUS INGREDIENTS IN BODY & FOOD PRODUCTS

This list only contains the more widely known chemicals and additives in body and food products. There are thousands more in use. Many of the chemicals listed below are suspected or known carcinogens, toxins, hormone disruptors, poisons and contaminates.

## Acesulfame K

Sugar substitute found in pudding, chewing gum, non-dairy creamers, instant coffee mixes, tea mixes and gelatin desserts. May increase cancer in humans.

#### Acetone

Also known as Dimethylketone, 2-Propanone, Beta-Ketopropane. Inhalation of moderate to high amounts, even for a short time results in entry of acetone into bloodstream where it is carried to all other organs. Nose, throat, lung and eye irritant, headaches, confusion, increased pulse rate, effects on blood, nausea, vomiting and unconsciousness, coma. Shortens the menstrual cycle in women. Effects of long-term exposure include kidney, liver and nerve damage, increased birth defects, metabolic changes and coma. Found in nail polish remover.

### Acetaldehyde

Found in many nail care products. Known to cause cancers in humans and experimental animals.

#### Alcohol

Implicated in oral cancer. Found in mouthwash, astringent, toothpaste, cleansers.

## Alkyl-phenol Ethoxylades

May reduce sperm count. Found in shampoo and bubble bath.

## Alpha Hydroxy Acid

Destroys skin cells and leaves skin more susceptible to damage from the environment and skin cancer. Actually ends up aging skin. Found in anti-aging facial creams and lotions.

#### Aluminum

Central nervous system damage and linked to Alzheimers. Found in antiperspirant deodorants.

## Ammonium Glycolate

A photosensitizer with potential to increase risk of sunburn and skin cancer by intensifying UV exposures in deep skin layers. This sensitizer can instigate immune system response that includes itching, burning, scaling, hives, and blistering of skin. It is also a penetration enhancer which alters the skins' structure, allowing other chemicals to penetrate deeper into the skin, thus increasing the amounts of other chemicals that reach the bloodstream. Found in body products.

#### Ammonium Persulfate

Found in hair color and bleaching kit sensitizer - can instigate immune system response that can include itching, burning, scaling, hives, and blistering of skin, lung sensitizer - can instigate immune system response that can include asthma attacks or other problems with the lungs and airways.

#### Aspartame

Genetically Modified, synthetic sugar substitute. People report dizziness, headaches and even seizures. Scientists believe it can alter behavior due to altered brain function. Long term effects of this genetically modified organism on human health has not been studied or tested. Found as a sweetener in foods and some body products, such as shaving gel. See our Genetically Modified / GMO Foods section for more information

### Bentonite (Clay)

May suffocate skin: does not allow CO2 out or O2 in. Traps toxins. Found in soaps, facial masks and cosmetics.

#### Benzene

Inhalation of high levels can cause headaches, rapid heart rate, tremors, confusion, unconsciousness and death. Hodgkin's and Lymphomas result from inhalation. Used in detergents, drugs, pesticides and adhesives.

#### Benzoic Acid

Inhalation affects nervous system and is moderately toxic by ingestion. Severe eye and skin irritant. Used as a food preservative and in pharmaceuticals and cosmetics

## Benzoic / Benzyl / Benzene

Contains carcinogens, endocrine disruptor, may cause birth defects. Found in shower gels, shampoos, bubble bath.

#### BHA - BHT

Banned in other countries, these two preservatives are considered carcinogenic but remain in U.S. manufactured foods that contain oil as they retard rancidity. Found in foods and body products.

#### Bronopol

May break down into formaldehyde, may form carcinogenic nitrosamines. Found in body products.

## Butylparaben

Potential breast cancer risk and endocrine disruptor raising concern for impaired fertility or development, increased risk for certain cancers, itching burning and blistering of skin. Found in body products.

## Carboxymethylcellulose

Causes cancer in animals. Used in cosmetics, inhalation could cause chemical pneumonitis.

## Coal Tar Dyes – (includes D&C Blue 1, Green 3, Yellow 5, Yellow 6, Red 33, etc.)

Even though their carcinogenicity has recently been proven, the 1938 Act includes a specific exemption for them. Severe allergic reactions, asthma attacks, headaches, nausea, fatigue, lack of concentration, nervousness, increased risk of Hodgkin's disease, non-Hodgkin's lymphoma and multiple myeloma. Found in bubble bath, hair dye, dandruff shampoo, toothpaste and foods. For more information, see the Dyes Commonly Used in Food and Body Product Section

## Cocamidopropyl Betaine

May contain harmful impurities or form toxic breakdown products, itching, burning and blistering of skin. Synthesized from coconuts, this chemical is found in body products and may be labeled natural or organic.

#### Coumarin

Formerly the active ingredient in rat poison. A carcinogenic ingredient used in the manufacturing of deodorants, shampoos, skin fresheners and perfumes.

#### D&C Yellow 11

Found in: Lip gloss, polish remover, nail polish, bath oil/salts/soak, body spray, mositurizer, lipstick, styling gel/lotion, bar soap, after sun products, cologne, nail treatment. Color safe for external use only, found in ingested products, Color not approved for use around eyes, in eye products.

#### DEA: Diethanolamine

A chemical used as a wetting or thickening agent in shampoos, soaps, hairsprays and sunscreens, blocks absorption of the nutrient choline, which is essential to brain development in a fetus.

## Ethylacrylate

Found in some mascaras's suspected as a cause of cancer in humans, based on studies of human populations or laboratory animals.

## Hydroabietyl Alcohol

Found in styling gel/lotions. Unsafe for use in cosmetics according to the fragrance industry's International Fragrance Association.

## TEA: Tea, Triethanolamine

## MEA: Cocamide DEA, Lauramide DEA, Linoleamide DEA, Oleamide DEA

NDEA (N-nitrosodiethanolamine) forms when DEA reacts with nitrosating agents or the actual addition of nitrite as a preservative. As there is no way to determine if NDEA has been formed, it is imperative to avoid all products containing DEA as it is a known carcinogen. Often used in cosmetics to adjust the pH, and used with many fatty acids to convert acid to salt (stearate), which then becomes the base for a cleanser.

TEA causes allergic reactions including eye problems, dryness of hair and skin, and could be toxic if absorbed into the body over a long period of time. These chemicals are already restricted in Europe due to known carcinogenic effects (although still in use in the U.S.)

Repeated skin applications of DEA-based detergents resulted in a major increase in the incidence of liver and kidney cancer. Found in shampoos, skin cream, bubble bath, shaving gel, conditioner, lotions.

## Diacetyl

An additive that tastes like butter causes a serious lung condition called bronchiolitis obliterans, or "popcorn workers' lung. Found in foods, especially microwave popcorn.

## Dibutyl phthalate (DBP)

A chemical used to keep nail polish from chipping, has been connected to cancer in lab animals as well as long-term fertility issues in newborn boys. Banned in Europe, but still in use in the U.S. Found in nail polish.

#### Dimethicone

A silicone emollient, which coats the skin not allowing toxins out. May promote tumors and accumulate in the liver and lymph nodes. Found in lotions and creams.

#### **Dioforms**

Damage and weaken tooth enamel allowing more staining and discoloration to take place. Found in tooth whitening products.

#### **Disodium EDTA**

Harmful if swallowed or inhaled, causes irritation to skin, eyes and respiratory tract. Found in cosmetics.

#### Elastin

Suffocates skin by not allowing moisture in or out. Found in facial creams and body lotions.

#### Fluoride

May contain lead, mercury, cadmium and arsenic. Accumulates in body and contributes to bone disease. Carcinogenic. Found in toothpastes.

## Formaldehyde

Suspected carcinogen and neurotoxin, it may be fatal if swallowed, absorbed through skin, inhaled or swallowed. Can cause spasms, edema, chemical pneumonitis and is extremely destructive to tissue of the mucous membrane, this chemical is found in many nail care products. Known to cause cancers in humans and experimental animals. Found in baby shampoo, bubble bath, deodorants, perfume, cologne, hair dye, mouthwash, toothpaste, hair spray, nail polish.

## Fragrances (Synthetic)

Some perfumes / fragrances contain hundreds of chemicals. Some, such as methylene chloride are carcinogenic. Some cause brain damage or are neurotoxins. Avoid unless you can be sure they are not carcinogenic.

#### Glycolic Acid

Penetration enhancer which alters skin structure, allowing other chemicals to penetrate deeper into the skin, increasing the amounts of other chemicals that reach the bloodstream, skin or sense organs. As a sensitizer it can instigate immune system response that can include itching, burning, scaling, hives, and blistering of skin. Toxicant, neurotoxin, kidney toxicant, gastrointestinal or liver toxicant. Found in creams, lotions, cosmetics.

## GMO/Genetically Modified Organism

Plants, animals or foods that have been genetically modified, genetically engineered or BT/Biotechnology modified. Genetic engineering enables scientists to create plants, animals and micro-organisms by manipulating genes in a way that does not occur naturally. Minimal testing shows that animals fed GMO feed, refuse to eat it. When force-fed the feed (corn, soy, tomatoes etc.) the animals developed stomach lesions and malformations of organs. GMO food is

not labeled as such in the U.S. Almost all other countries have banned the use of GMO in food and body products due to insufficient testing. *See GMO section for more information.* 

## High Fructose Corn Syrup/HFCS

High fructose consumption has been fingered as a causative factor in heart disease. It raises blood levels of cholesterol and triglycerides. It makes blood cells more prone to clotting, and it may also accelerate the aging process. See Sugars, Insulin Resistance and Glycemic Index section for more information.

## Hydrogenated/Partially Hydrogenated Oils

Hydrogenated oils contain high levels of trans fats. A trans fat is an otherwise normal fatty acid that has been radically changed by high heat. Trans fats are poison: just like arsenic. Partially hydrogenated oils will not only kill you in the long term by producing diseases like multiple sclerosis and allergies that lead to arthritis, but in the meantime they will make you fat! See Hydrogenated and Partially Hydrogenated Oils section for more information

## Hydroquinone

A severely toxic and very powerful chemical. Banned in the United Kingdom, but still used in the U.S. Found in skin lightening products and hair dyes, this chemical alters the skins natural structure inhibiting the production of Melanin. Without natural protection, the skin is more susceptible to skin cancer. Prolonged use of Hydroquinone will thicken collagen fibers damaging the connective tissues. The result is rough blotchy skin leaving it with a spotty caviar appearance.

### Hydroxymethylcellulose

Used in cosmetics. Inhalation could cause chemical pneumonitis.

## Isobutylparaben

Potential breast cancer risk. Itching, burning and blistering of skin. Found in body products.

## Isoproponal/Isopropyl Alcohol

Moderately toxic chemical causing flushing, pulse rate decrease, blood pressure lowering, anesthesia, narcosis, headache, dizziness, mental depression, drowsiness, hallucinations, distorted perceptions, respiratory depression, nausea, vomiting and coma. Used to clean/disinfect skin, lower temperatures. Found in some body products.

## Kajoic Acid

A chemical that inhibits melanin production. Used in skin lightening products, it damages the skin and makes it more susceptible to cancer.

## Kaolin (Clay)

Suffocates and weakens skin. Found in face powders and cosmetics.

## Lacquer

Can cause eyelashes to fall out. Found in mascara.

#### Lanolin

While lanolin itself is skin beneficial, it may contain carcinogenic pesticides such as DDT, lindane, dieldrin and other neurotoxins. Can cause rashes. Found in body products.

### Lye

Can dry and damage skin. Found in bars of soap.

## Magnesium Stearate / Stearic Acid

May contain phosphatidyl choline which collapses cell membranes and selectively kills T-Cells which breaks down the immune system. An execeptant that is used to bind medicinal tablets and make them smooth it is also used in pharmaceuticals, foods, talcum powder, ammunition, and as a drying agent in paints.

#### Methylisothiazoline, or MIT

Causes neurological damage. Found in shampoo.

## Methyl Methacrylate

May cause fingers and nails to inflame. Found in nail polish.

### Methylparaben

Potential breast cancer risk and endocrine disruptor raising concern for impaired fertility or development of fetus, and increased risk for certain cancers, itching, burning and blistering of skin. A close cousin of benzoic acid: poisonous and moderately toxic it is found in body products.

#### Mineral Oil

A derivative of petroleum, this additive clogs pores, locks in toxins, suffocates and dries skin and inhibits your skins natural oil production further increasing dehydration. Causes testicular tumors in the fetus, deposits accumulate in the lymph nodes and prevent absorption of vitamin A from the intestines. Found in blush, baby oil, lotions, foundation and creams.

## Monosodium Glutamate/MSG

MSG is an excitotoxin, which causes nerve damage and allergic reactions. Found in hundreds of foods, often under other names. See our Monosodium Glutamate / MSG section for more information

#### Neotame

Neotame is a reformulated aspartame that will require smaller amounts than aspartame to achieve the same sweetness. Neotame, like aspartame, contains aspartic acid, phenylalanine, and a methyl esther. Animal studies reveal aspartic acid and glutamic acid load on the same receptors in the brain, cause identical brain lesions and neuroendocrine disorders, and act in an additive fashion. People who are sensitive to processed free glutamic acid (MSG) experience similar reactions to aspartame, and people who are sensitive to aspartame experience similar reactions to MSG. People who currently react to MSG and/or aspartame should expect to react similarly to Neotame. Found in soft drinks, pharmaceuticals, processed foods of all kinds.

#### Nitrate - Nitrite

While nitrate itself is harmless; it is readily converted to nitrite. When nitrite combines with compounds called secondary amines, it forms nitrosamines: extremely powerful cancer-causing chemicals. The chemical reaction occurs most readily at the high temperatures of frying. Nitrite has long been suspected as being a cause of stomach cancer. (See Sodium Nitrite)

#### **Nitrosamines**

Extremely powerful, cancer-causing chemicals formed at high temperatures when the preservative nitrite combines with compounds called secondary amines.

#### Olestra

While fat-free, this additive has a fatal side effect: it attaches to valuable nutrients and flushes them out of the body. Some of these nutrients, called carotenoids, appear to protect us from such diseases as lung cancer, prostate cancer, heart disease, and macular degeneration. Olestra replaces fats in 'fat-free' foods.

## Padimate-O (PABA)

Nitrosamines, potent carcinogens, may form in products that contain Padimate-O. There is no way of knowing if they have formed. Found in cosmetics and sunscreens.

#### Paraffin

Possible carcinogen. Found in cosmetics and food.

#### **PEG Stearates**

Potentially contaminated with or breaking down into chemicals linked to cancer or other significant health problems. Found in cosmetics, creams and foods.

# PEG (Polyethylene, polyethylene glycol, polyoxyethylene, oxynol: any ethoxylated compound, including SLES)

May contain ¼-dioxane which is a possible carcinogen, estrogen mimic and endocrine disruptor. Can only be removed from a product through vacuum stripping during processing. Avoid all ethyoxylated products as a precaution. Found in foods and body products.

#### PEG-12 Distearate

May contain harmful impurities or form toxic breakdown products linked to cancer or other significant health problems. Found in creams, lotions, cosmetics and foods.

#### PEG-80 Sorbitan Laurate

May contain harmful impurities or form toxic breakdown products linked to cancer or other significant health problems, gastrointestinal or liver toxicity hazards. Found in cosmetics, creams, lotions and foods.

#### PEG-14M

May contain harmful impurities or form toxic breakdown products linked to cancer or other significant health problems. Found in foods, lotions, creams and cosmetics.

#### Petroleum (Petrolatum)

Suffocates skin and traps toxins in body, clogs pores. Found in lotions, skin creams, and body jelly.

## Phenoxyethanol

Possible connection to reproductive or developmental harm to fetus, potential for reduced fertility, classified as toxic and an irritant, potential risks to wildlife and environment through excretion of body product toxins and disposal of cosmetics.

#### **Phthalates**

Proven damage to liver, lungs, kidneys and reproductive system, especially forming testes. Also found in vinyl flooring, plastic wallpaper, and children's toys. Accumulates in body. Found in perfume, hair spray, deodorant, nail polish, hair gel, mousse, body and hand lotion. Usually not listed on label! Banned in Europe but still used in the U.S.

## Polyethylene Glycol /PEG

Moderately toxic, eye irritant and possible carcinogen. Many glycols produce severe acidosis, central nervous system damage and congestion. Can cause convulsions, mutations, and surface EEG changes. Found in cosmetics, body products, foods, lotions.

## Polypropylene

Possible carcinogen. Found in lipstick, mascara, baby soap, eye shadow.

## Polyscorbate-60

Used in cosmetics. Inhalation could cause chemical pneumonitis.

## Polyquaternium-7

May contain harmful impurities or form toxic breakdown products linked to cancer or other significant health problems. Found in body products.

#### Potassium Bromate

An additive that increases the volume and crumb of bread, is banned worldwide except in the U.S. and Japan. Considered carcinogenic.

## Propylene Glycol

Kidney damage, liver abnormalities, inhibits skin cell growth, damages cell membranes causing rashes, surface damage and dry skin. Absorbed into blood stream and travels to all organs. Many glycols produce severe acidosis, central nervous system damage and congestion. Can cause convulsions, mutations, and surface EEG changes. It is derived from petroleum products. The Material Safety Data Sheets on propylene glycol warns against contact with eyes, skin and clothing. It also says inhalation can cause irritation of nasal passages, ingestion can cause nausea, vomiting and diarrhea. Research also shows that it alters cell membranes and causes cardiac arrest. Found in shaving gel, lotions, shampoo, conditioners, foods, deodorant.

## Propylparaben

Potential breast cancer risk and endocrine disruptor raising concern for impaired fertility or development, and increased risk for certain cancers, itching burning and blistering of skin, gastrointestinal or liver toxicity hazard. A close cousin of benzoic acid: poisonous and moderately toxic. Found in body products.

#### Quaternium-7, 15, 31, 60 etc.

Toxic, causes skin rashes and allergic reactions. Formal-dehyde releasers. Substantive evidence of casual rela-

tion to leukemia, multiple myeloma, non-Hodgkin's lymphoma and other cancers. Found in body products.

## Sodium Chloride

Table salt (processed at high heat). Eye irritation, some hair loss, and dry and itchy skin. Found in shampoo as a thickener.

## Sodium Hydroxymethylglycinate

Potentially contaminated with or breaking down into chemicals linked to cancer or other significant health problems. Found in facial moisturizer, facial cleanser, facial treatments, skin fading and lightening products, anti-aging products, eye makeup remover, concealer, makeup remover, around eye cream, acne treatment, shampoo, conditioner, styling lotion and gel, styling mousse and foam, hair spray, hair relaxer, tanning oil and sunscreen, after tanning products, body cleanser and wash, body exfoliants, body firming lotion, baby soap, baby lotion, baby wipes, baby bubble bath, pain and wound products, hand sanitizer.

#### Sodium Nitrite

Makes meat look red rather than gray, and gives meat an overly long shelf life of months. Clinically proven to cause leukemia, brain tumors and other forms of cancer.

#### Soy

Contains several naturally occurring compounds that are toxic to humans and animals. Soy foods block calcium and can cause vitamin D deficiencies. One health agency estimates than 100 grams of soy protein provides the estrogenic equivalent of the pill. Processing and all modern soy foods contain MSG, which cause neurological problems. Soy products inhibit thyroid function, which may lead to fatigue and mental issues. Infants on soy formula are vulnerable to developing autoimmune thyroid disease when exposed to high amounts of isoflavones over time. These Isoflavones have been found to have serious health effects, including infertility, thyroid disease or liver disease, on a number of mammals. Long term feeding with soy formulas inhibits thyroid peroxidase to such an extent that long term elevated thyroid stimulating hormone levels can also raise the risk of thyroid cancer. It is said that two glasses of soy milk a day over the course of a month contains enough of the chemical to change the timing of a woman's menstrual cycle. Only eat soy if it has been fermented: such as soy, misu and tamari and if it is labeled as organic or non-GMO. See our Genetically Modified Foods section for more information

## SLS (Sodium Lauryl Sulphate)

Builds up in heart, lungs, brain and liver from skin contact and may cause damage to these organs. Corrodes hair follicles and may cause hair to fall out. Damages immune system. Contain endocrine disruptors and estrogen mimics. Impairs proper structural formation of young eyes. May contain carcinogenic nitrosamines. This is a detergent derived from coconut oil and may be labeled natural or even organic. Found in toothpaste, soap, shampoo, body wash, bubble bath, facial cleansers.

## SLES (Sodium Laureth Sulfate)

Ether mixtures may contain carcinogenic nitrosamines. Avoid ethoxylated compounds as a precaution. May form 1.4 dioxane, a potential carcinogen, endocrine disruptor and estrogen mimic. Allows other chemicals to penetrate skin more deeply and enter bloodstream. May cause hair loss when applied to scalp. Found in shampoo, toothpaste, bubble bath, body wash, soap.

#### Stearalkonium Chloride

Toxic and causes allergic reactions. Used in hair conditioners.

#### Sulfites

Can cause reactions in asthmatics, and lead to death. Sulphites are now banned on all foods except raw potatoes, wine and dried fruit.

#### Talc

Carcinogenic when inhaled, may result in fallopian tube fibrosis. Found in blush, condoms, baby powder, feminine powders, foot and body powders.

#### Toluene

Poison to humans. Hallucinations, bone marrow changes, may cause liver and kidney damage and birth defects, endocrine disruptor and potential carcinogen linked to brain cancer. Irritates respiratory tract. Found in nail polish and cleaning products.

#### Triclosan

Found in a lot of antimicrobial soaps and toothpaste products, it can react with chlorine in the tap water to create Chloroform. This is a toxic chemical that can give you cancer. If you breathe enough chloroform, you will die. When you wash your hands with antibacterial soap that contains Triclosan, you are getting the fumes emitted from this chemical reaction.

#### Zinc Stearate

Carcinogen. Found in blush and powder foundation.

## **GMO/GENETICALLY MODIFIED FOODS**

Genetically Modified Foods, Plants, Animals, Additives, Body Products, Fish, Crops and Trees have had their genes manipulated, changed, and put into other species that normally they would not mate with, blend with, consume, or grow in. Incredible combinations have been produced, and have been found to have mutations, diseases, abnormalities and trigger other diseases that otherwise may have remained dormant.

Very little testing has been done on the health effects of humans ingesting and applying genetically modified products. Tests that have taken place show animals that refuse to eat Genetically Modified feed, who upon being force-fed the Genetically Modified feed develop lesions, abnormalities, disease...and some have died.

Dozens of countries have banned the import, sale, use and planting of Genetically Modified Organisms due to lack of testing and long term study of human health and environmental effects.

The U.S. does not only NOT ban GMO's, manufacturers are not required to identify or label a GMO ingredient in their food or body products. A conservative estimate concludes that 75+ % of American foods and body products contain genetically modified organisms. Regardless of dozens of scientific warnings, the FDA has approved widespread use of GMO ingredients in America's foods and body products.

The following countries have banned or restricted the import, distribution, sale, utilization, field trials and commercial planting of GMO's:

Africa: Algeria, Egypt

Asia: Sri Lanka, Thailand, China, Japan, Phillipines

Europe: The European Union, Norway, Austria, Germany United Kingdom, Spain, Italy, Greece, France, Luxembourg, Portugal

Latin America: Brazil, Paraguay

Middle East: Saudi Arabia

(North America) Maryland has banned GE (genetically engineered) fish and North Dakota and Montana have filed bans on GE wheat. The Municipalities of Burlington, Vermont (declared a moratorium on GE food), Boulder, Colorado (bans on GE crops) and the City and County of San Francisco (urged the federal government to ban GE food) are the only towns or states to take some sort of stand against plants, animals, foods, crops and body products that are, or contain Genetically Modified Organisms.

NOTE: The U.S. government, and the FDA do not require anything Genetically Modified to be identified on ingredient lists. Genetically Modified foods and products are in widespread use and distribution throughout the U.S.

Pacific: American Samoa, Cook Islands, Fiji, Kiribati, Federated States of Micronesia, Marshall Islands, Nauru, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, Australia, New Zealand

Percentage of crops that are Genetically Modified in the U.S.:

Soy (85%)
Cotton (Cottonseed) (76%)
Canola (75%)
Corn (40%)
Hawaiian papaya (more than 50%)
Zucchini and Yellow Squash (small amount)
Quest brand tobacco (100%)

## Partial List of Foods That Contain Genetically Modified Corn Oil and Corn Products, Soy, Canola Oil, Cottonseed Oil:

Salad Dressings, Bread, Rolls, Pastry, Canned rolls and breads, Infant Formula, Baby Cereal, Hamburgers and Hotdogs, Processed Meats, Margarine, Mayonnaise, Crackers, Chocolate, Cookies, Candy, Fried Foods, Frozen Foods, Chips, Tofu, Veggie Burgers, Soy Burgers, Meat Substitutes, Aspartame, Ice Cream, Frozen Yogurt, Tamari, Soy Sauce, Soy Cheese, Soy Nuts and Products, Processed Cheese, Pasteurized Cheese, Tomato Sauce, Marinades, Barbeque Sauce, Soups, Canned Stews, Sauces, Dried and Dehydrated Soups/Sauces, Condiments, Drinks, Protein Powder,

Baking Powder, Alcohol, Vanilla, Peanut Butter, Pasta, Enriched Flour, Powdered Sugar, Children's snacks, Cereals, Cake and Baking Mixes, Frozen pie and pastry shells.

Body Products That Contain Genetically Modified Corn Products and Oil, Soy, Canola Oil and Cottonseed Oil:

Cosmetics, Shampoo, Bubble Bath, Soaps, Creams and Lotions, Detergents.

## A Method to Help Identify Genetically Modified Foods

The stickers that contain the PLU code (Price Lookup Code) tell you if the fruit was conventionally grown, genetically modified, or organically grown. The PLU code for conventional produce has four numbers, GM fruit has five numbers preceded by the number 8, while organically grown produce has five numbers, preceded by the number 9. Organically grown fruit will not be Genetically Modified or contain pesticides. Look for the number 9!

## Other Ways To Ingest Genetically Modified Products:

- -Drink milk from or consume dairy products from cows fed GMO corn and who have been injected with rbGH (genetically modified growth hormone)
- -Eat meat from animals fed genetically modified grain diets (rather than grass-fed) and who have been injected with rbGH (genetically modified growth hormone)
- -Use of genetically modified food additives such as Aspartame, flavorings and enzymes
- -Honey and Bee pollen that may have GM sources of pollen

## Names Of Ingredients That Have a Very High Chance of Being Genetically Modified

As the U.S. does NOT require labeling of Genetically Modified Foods, consider the following ingredients on food labels to be Genetically Modified unless the ingredient is Certified Organic or labeled NON-GMO:

Vegetable Oils: soy, corn, cottonseed, canola Margarine Soy Flour, Soy Protein, Soy Lecithin Textured Vegetable Protein Cornmeal, Corn Syrup Dextrose Maltodextrin Fructose Citric Acid Lactic Acid

## HYDROGENATED AND PARTIALLY HYDRO-GENATED OILS

Many European countries have either banned hydrogenated and partially hydrogenated oils altogether or have instituted future dates for elimination of their use in foods due to studies that link trans fatty acid (hydrogenated and partially hydrogenated oil) consumption from processed foods to the development of diabetes, cancer and cardiovascular disease.

Hydrogenation of oils, with removal of essential fatty acids, is used in the food industry for the sole purpose of prolonging the shelf life of processed foods which maximizes their profits.

## Hydrogenation

Hydrogenation is the process of heating an oil and passing hydrogen bubbles through it. The fatty acids in the oil then acquire some of the hydrogen, which makes it denser. If you fully hydrogenate, you create a solid (a fat) out of the oil. But if you stop part way, you create a semi-solid partially hydrogenated oil that has a consistency like butter, only cheaper.

Until the 1970's, food producers used coconut oil. The American obesity epidemic began when it was replaced with partially hydrogenated vegetable oil - usually soybean oil.

## Health Hazards of Hydrogenation

Unlike butter or virgin coconut oil, hydrogenated oils contain high levels of trans fats. A trans fat is an

otherwise normal fatty acid that has been radically changed by high heat.

Trans fats are poison: just like arsenic.

## Partially Hydrogenated Fat

Partially hydrogenated oils will not only kill you in the long term by producing diseases like multiple sclerosis and allergies that lead to arthritis, but in the meantime they will make you fat!

If you are consuming lots of saturated fats, you really have no choice but to become fat, because saturated fats contain only small quantities of the polyunsaturated fats that contain the essential fatty acids you need. The key to being thin, then, is to consume foods containing large amounts of polyunsaturated oils. (Those foods include fish, olives, nuts, and egg yolks.) Over the long term, those foods remove your sense of hunger.

#### Your Metabolism Slows Down

Most partially hydrogenated oil is partially hydrogenated soybean oil. Soybean oil depresses the thyroid, which lowers your energy levels. Product after product contains partially hydrogenated soybean oil. The result: this country is experiencing epidemic levels of diabetes, obesity, heart disease, and cancer.

Because a saturated fat is inert, it can't be hurt much by heat. If you're going to fry, fry in a fully saturated fat like coconut oil or butter, which consists mostly of short-chain saturated fats that are easily burned for fuel, plus conjugated linoleic acid (CLA) which improves health and is burned for energy instead of being stored as fat. Also, 50% of coconut oil consists of lauric acid, a medium-chain fatty acid that's anti-bacterial, anti-viral, anti-fungus, and anti-yeast.

## Foods Almost Always Made With Partially Hydrogenated Oils:

Cake mixes, biscuit, pancake and cornbread mixes, frostings
Cakes, cookies, muffins, pies, donuts
Crackers
Peanut butter (except fresh-ground)

Frozen entrees and meals
Frozen bakery products, toaster pastries, waffles, pancakes
Most prepared frozen meats and fish (such as fish sticks)
French fries
Whipped toppings
Margarines, shortening
Instant mashed potatoes
Taco shells
Cocoa mix
Microwave popcorn

## Check The Ingredients On Different Brands of these Foods. Many Brands are Made with Partially Hydrogenated Oils

Breakfast cereals
Corn chips, potato chips
Frozen pizza, frozen burritos,
Most frozen snack foods
Low-fat ice creams
Noodle soup cups
Bread
Pasta mixes
Sauce mixes

## CONTAINS MSG OR CONVERTS TO MSG WHEN PROCESSED

MSG is an excitotoxin: an ingredient known to cause nerve damage by overexciting nerves. This is exactly how MSG enhances the taste of foods: by overexciting the taste buds on the tongue.

Note: when you see the following words on any ingredient label, it is essentially, another name for MSG

Hydrolyzed vegetable protein (HVP)
Hydrolyzed yeast extract, Tortula yeast, Autolyzed yeast, Yeast extract
Dextrose
Textured protein
Soy protein, Soy protein concentrate, Textured Soy protein
Maltodextrin
Glutamic acid
Sodium Caseinate

Carrageenan (processed)
Citric Acid (when processed from corn)
Pectin Protease
Ultra-Pasteurized
Protease enzyme ... and anything enzyme modified
Flavors, flavoring, natural flavors and flavoring
Gelatin
Whey protein isolate, Whey protein
Barley malt, Malt extract
Natural Pork, Beef and Chicken flavoring
Stock
Anything fermented
Anything protein fortified

When any product contains 79% free glutamic acid with the balance being made up of salt, moisture, and up to 1 per cent contaminants, the product is called Monosodium Glutamate.

The second way of producing MSG is through breakdown of protein. A protein can be broken into its constituent amino acids by autolysis, hydrolysis, enzymolysis, and/or fermentation.

There are over 40 food ingredients besides Monosodium Glutamate that contain processed free glutamic acid (MSG). Each, according to the FDA, must be called by its common name:

Autolyzed yeast Maltodextrin Sodium caseinate

soy sauce, etc., are the common or usual names of some ingredients that contain MSG. Unlike the ingredient called Monosodium Glutamate, they give the consumer no clue that there is MSG in the ingredient.

## SUGARS, INSULIN RESISTANCE AND GLY-CEMIC INDEX

The average American consumes an astounding 2-3 pounds of sugar each week, which is not surprising considering that highly refined sugars in the forms of sucrose (table sugar), dextrose (corn sugar), and high-fructose corn syrup are being processed into so many foods such as bread, breakfast cereal, mayonnaise, peanut butter, ketchup, spaghetti sauce, frozen foods and microwave meals.

Maltodextrin is also a refined product usually made from either corn or potatoes. It is very readily absorbed and has a very high glycemic index.

Dextrose is an industry term for glucose. Glucose is the most prevalent sugar in humans and is the only molecule that the brain can metabolize. Dextrose is refined from cornstarch. It has a very high glycemic index, as it is glucose!

High fructose corn syrup is made by treating corn (which is usually genetically modified corn) with a variety of enzymes, some of which are also genetically modified, to first extract the sugar glucose and then convert some of it into fructose. The result is a mixture of 55% fructose and 45% glucose, that is called 'high fructose corn syrup.'

- -In 2001 CORN sweeteners (genetically modified) accounted for 55% of the sweetener market.
- -Consumption of high fructose corn syrup went from zero in 1966 to 62.6 pounds per person in 2001.
- Per capita intake of refined sugar is almost 150 pounds a year. HFCS accounts for 51.7 pounds of that, and sucrose for 64.5 pounds, according to the U.S. Department of Agriculture. That translates to about 60 pounds of fructose per person.

Some of the problems associated with high fructose corn syrup:

- -Increased LDL's (the bad lipoprotein) leading to increased risk of heart disease.
- -Altered Magnesium balance leading to increased osteoporosis.
- -Fructose has no enzymes or vitamins thus robbing the body of precious micro-nutrients.
- -Fructose interacts with birth control pills and can elevate insulin levels in women on the pill.
- -Increased risk of Adult Onset Diabetes Mellitus.
- -Fructose inhibits copper metabolism leading to a deficiency of copper, which can cause increased bone fragility, anemia, ischemic heart disease and defective connective tissue formation among others.

-Accelerated aging.

The list below shows how much sugar, mostly in the form of high fructose corn syrup, is in each of these single servings:

Sunkist soda: 10 1/2 teaspoons of sugar

Berkeley Farms low-fat yogurt with fruit: 10 teaspoons

of sugar

Mott's applesauce: 5 teaspoons of sugar

Slim-Fast chocolate cookie dough meal bar: 5 tea-

spoons of sugar

1-tablespoon ketchup: 1 teaspoon of sugar

Hansen's Super Vita orange-carrot Smoothie: 10 tea-

spoons of sugar

Reference: Stryer Biochemistry Fourth Edition

"Sugar coated We're drowning in high fructose corn syrup. Do the risks go beyond our waistline?"

Kim Severson, San Francisco Chronicle Staff Writer

## Glycemic Index

The glycemic index is a measure of how a given food affects blood-glucose levels, with each food being assigned a numbered rating. The lower the rating, the slower the absorption and digestion process, which provides a more gradual, healthier infusion of sugars into the bloodstream.

A high glycemic index rating means that blood-glucose levels are increased quickly, triggering the release of insulin, which the body uses to keep blood-sugar at a constant and safe level. Insulin also promotes the storage of fat, so that when you eat products high in sugar, you can experience rapid weight gain and elevated triglyceride levels, both of which have been linked to cardiovascular disease.

Complex carbohydrates tend to be absorbed more slowly, lessening the impact on blood-sugar levels. Sugars on the other hand raise the insulin level, which inhibits the release of growth hormones, which in turn depresses the immune system.

Below is a short Glycemic index foods list.

## **Dairy Foods**

Milk, skim: 32 Milk, full fat: 27 Ice Cream, full fat: 61 Yogurt, low fat, fruit: 33

#### Fruits

Dates: 103 Watermelon: 72 Banana: 55 Mango: 55 Kiwi: 53 Orange: 44 Peach: 42 Apple: 38

Pineapple Juice: 46 Gatorade: 78

#### Cereals

Rice Chex: 89 Cornflakes: 84 Cheerios: 80 Puffed Wheat: 80

Total: 76

Shredded Wheat: 67 Cream of Wheat: 66

Porridge: 46 All-Bran: 42

## Candy

Jelly Beans: 80 Lifesavers: 70 Mars Bar: 65 Chocolate Bar: 49

#### **Breads**

Baguette: 95 Dark Rye: 76 Plain Bagel: 72 White Bread: 73 Croissant: 67 Hamburger Bun: 61 Sourdough: 57 Pumpernickel: 41

Heavy Mixed Grain: 30-45

#### Legumes

Canned Baked Beans: 48

Lentils: 28 Navy Beans: 38 Garbanzo: 34

## Vegetables

Sweet Corn: 56 Parsnips: 97 Yam: 54

Potato, baked: 85

New Potato, steamed: 56

Instant Potato: 73

#### Miscellaneous

Saltine Crackers: 74

Maltose: 105 Glucose: 100 Table Sugar: 64 Rice Cakes: 80 Fettuccine: 32 Couscous: 65 Donut: 76

Tofu Frozen Dessert: 115

Rice, instant: 88 Rice, white: 70 Cornmeal: 68 Rye flour: 65

#### Sugar Can:

- · suppress the immune system
- · upset the body's mineral balance
- · cause kidney damage
- · increase the risk of Crohn's disease and ulcerative colitis
- · increase the risk of coronary heart disease
- · increase systolic blood pressure
- · contribute to hyperactivity, anxiety, depression, concentration difficulties, and crankiness in children
- · cause toxemia during pregnancy
- · produce a significant rise in triglycerides
- · increase blood platelet adhesiveness which increases risk of blood clots and strokes
- · cause drowsiness and decreased activity in children
- · reduce helpful high density cholesterol (HDLs)
- · promote an elevation of harmful cholesterol (LDLs)
- · cause hypoglycemia
- · contribute to a weakened defense against bacterial infection
- · lead to chromium deficiency

- · copper deficiency
- · interfere with absorption of calcium and magnesium
- · increase fasting levels of blood glucose
- · promote tooth decay
- · produce an acidic stomach
- · raise adrenaline levels in children
- · lead to periodontal disease
- · increase total cholesterol
- · contribute to weight gain and obesity
- · contribute to diabetes
- contribute to osteoporosis
- · cause a decrease in insulin sensitivity
- · lead to decreased glucose tolerance
- · cause cardiovascular disease
- · cause food allergies
- · cause free radical formation in the bloodstream
- · contribute to eczema in children
- · overstress the pancreas, causing damage
- · cause atherosclerosis
- · compromise the lining of the capillaries
- · cause liver cells to divide, increasing the size of the
- · increase the amount of fat in the liver
- · increase kidney size and produce pathological changes in the kidney
- · cause an increase in delta, alpha and theta brain waves, which can alter the mind's ability to think clearly
- · increase insulin responses in those consuming high-sugar diets compared to low sugar diets
- · increase bacterial fermentation in the colon
- · speed the aging process, causing wrinkles and grey
- · cause depression
- · increase the body's fluid retention
- · cause hormonal imbalance
- · cause hypertension
- · cause headaches, including migraines

Excessive intake of all carbohydrates, especially the high-glycemic type, is the primary culprit in the development of insulin resistance.

## Here is a list of some of the most common symptoms of people with Insulin Resistance:

(Many symptoms manifest themselves immediately following a meal of carbohydrates, and others are more or less always present. Keep in mind that these symptoms may also be related to other problems).

Fatigue
Brain fogginess
Low blood sugar
Sleepiness
Intestinal bloating
Increased triglycerides
Increased weight
Depression
Increased blood pressure

Type-2 Diabetes occurs when the body no longer responds to insulin. As a result, levels of insulin in the blood become elevated and over time, can raise the risk for kidney failure and blindness, as well as heart disease.

## HARMFUL INGREDIENTS IN HOUSEHOLD CLEANING PRODUCTS

Look on just about any cleaning product and you will notice a lack of an ingredient list. Could it be because so many have ingredients that are toxic? Here is a short list of harmful ingredients that are in many household cleaners and are of particular concern because they are carcinogens, endocrine disrupters or known or suspected reproductive toxins.

#### Ammonia

Irritation to eyes and mucous membranes. Breathing difficulty, wheezing, chest pains, pulmonary edema, skin burns. High exposure can lead to blindness, lung damage, heart attack or death.

## 2-butoxyethanol/ Ethylene glycol butyl ether

One of many glycol ethers used as a solvent in carpet cleaners and specialty cleaners. Can be inhaled or absorbed through the skin and may cause blood disorders, as well as liver and kidney damage. May also cause reproductive damage with long-term exposure.

#### 1,4 dichlorobenzene (1,4 DCB)

Has been linked to a reduction in pulmonary function. Found in space deodorizing products, such as room fresheners, urinal cakes, toilet bowl fresheners and cleaning products it is also used as an insecticide for moth control.

## Ethoxylated nonyl phenols (NPEs)

Known as "gender-benders," nonyl phenols can induce female characteristics in male fish, for example. The

threat posed to the environment by nonyl phenols prompted the European Union to ban them from all cleaning products manufactured or used in the EU. Still used in the U.S.

### Methylene chloride

Methylene chloride is listed as a possible human carcinogen by the International Agency for Research on Cancer and is commonly found in paint strippers. In 1987, regulators in the U.S. compelled manufacturers to put warning labels on products containing methylene chloride.

## Naphthalene

Either naphthalene, or another chemical called paradichlorobenzene, is used in mothballs and moth crystals. Naphthalene is listed by California's Office of Environmental Health Hazards Assessment as a substance "know to the state to cause cancer," while paradichlorobenzene is listed by IARC as a possible human carcinogen. Avoid all moth products that contain either of these two ingredients.

#### Silica

Made from finely ground quartz, silica is carcinogenic as a fine respirable dust. Silica is found in that form in some abrasive cleansers, which are often used on a regular basis around the home.

#### Toluene

Toluene is a potent reproductive toxin, which is used as a solvent in numerous products, including paints. It is also sold as the pure product and is listed by California's Office of Environmental Health Hazard Assessment as a reproductive toxin that may cause harm to the developing fetus. Pregnant women should avoid products containing toluene.

### Trisodium nitrilotriacetate (NTA)

NTA is listed as a possible human carcinogen by the International Agency for Research on Cancer. It is used as a builder in laundry detergents and also has an adverse environmental impact as it can impede the elimination of metals in wastewater treatment plants. NTA's action can cause metals that have already settled out to be re-mobilized back into the liquid waste stream.

#### **Xylene**

Another extremely toxic ingredient that is often found in graffiti and scuff removers, spray paints and some adhesives. A suspected reproductive toxin that has shown reproductive harm in laboratory experiments, it is also a neurotoxicant that can cause memory loss on repeated exposure.

## Bleach (Sodium hypochlorite)

When bleach is mixed with acids (typically found in toilet bowl cleaners), it reacts with them to form chlorine gas. When it is mixed with ammonia, it can create chloramine gas, another toxic substance.

In the environment, sodium hypochlorite is acutely toxic to fish. The chlorine in bleach can also bind with organic material in the marine environment to form organochlorines, toxic compounds that can persist in the environment.

There may be some circumstances where bleach use is necessary for disease control, but there is little need for it on a regular basis. Tests have shown that washing counters and other surfaces with soap and water removes most bacteria and there are a number of oxygen-based alternatives for laundry uses of bleach.

## Phosphates

Manufacturers have since reduced or even eliminated phosphates from laundry products, but no action has ever been taken on dishwasher detergents. Most of the products available from major manufacturers contain 30-40 per cent phosphates. Some also contain high levels of chlorine-based sanitizing ingredients.

#### THE DANGERS OF PESTICIDES TO HUMANS

Pesticides accumulate in the fat deposits in the body where they remain and cause damage. Infants and young children consuming breast milk ingest pesticides. Pregnant women can pass pesticides on to their fetus. Women who eat fruits and vegetables that have been sprayed with pesticides, pass the pesticides on to their nursing children. Women who eat meat that has been injected with growth hormones and antibiotics, pass these chemicals on to their nursing children. Children eating foods that have been treated with hormones, antibiotics or pesticides, have them in their bodies.

'A study funded by the U.S. Environmental Protection Agency (EPA) and published in the September 2005 issue of Environmental Health Perspectives shows eating organic foods provides children with "dramatic and immediate" protection from exposure to two organophosphate pesticides that have been linked to harmful neurological effects in humans.

The pesticides—malathion and chlorpyrifos—while restricted or banned for home use, are widely used on a variety of crops, and according to the annual survey by U.S. Department of Agriculture (USDA) Pesticide Data Program, residues of these organophosphate pesticides are still routinely detected in food items commonly consumed by young children.

Over a fifteen-day period, Dr. Chensheng "Alex" Lu and his colleagues from Emory University, the University of Washington, and the Centers for Disease Control and Prevention measured exposure to malathion and chlorpyrifos in 23 elementary students in the Seattle area by testing their urine.

The participants, aged 3-11-years-old, were first monitored for three days on their conventional diets before the researchers substituted most of the children's conventional diets with organic foods for five consecutive days. The children were then given their normal foods and monitored for an additional seven days.

"Immediately after substituting organic food items for the children's normal diets, the concentration of the organophosphorus pesticides found in their bodies decreased substantially to non-detectable levels until the conventional diets were re-introduced," said Dr. Lu.

During the days when children consumed organic diets, most of their urine samples contained zero concentration of the malathion metabolite. However, once the children returned to their conventional diets, the average malathion metabolite concentration increased to 1.6 parts per billion with a concentration range from 5 to 263 parts per billion. A similar trend was seen for chlorpyrifos. The average chlorpyrifos metabolite concentration increased from one part per billion during the organic diet days to six parts per billion when children consumed conventional food.

A second study, published in the February 2006 issue of Environmental Health Perspectives, confirmed these results. Once again, another group of 23 children from the Seattle area aged 3-11 years participated. When the conventionally grown foods in their diets were replaced with comparable organically grown foods, concentrations of compounds in the children's urine indicating exposure to organophosphate pesticides immediately dropped to non-detectable levels

and remained non-detectable until they once again consumed conventionally grown foods.

The children were first monitored for three days on their normal diet. Then, most of the conventionally grown items in their diets were replaced with comparable organically grown items for 5 days. Substituted items included fruits and vegetables, juices, processed fruit and vegetable products and wheat or corn based products. Lastly, the children returned to their normal diets for a further 7 days.

Researchers analyzed two spot daily urine samples, first-morning and before-bedtime voids, throughout the 15-day study period. Urinary concentrations of compounds indicating the children were ingesting the organophosphorus pesticides, malathion and chlorpyrifos, became undetectable immediately after the introduction of organic diets and remained undetectable until the conventional diets were reintroduced.' Emory University Health Sciences Center

The repetition of this research clearly demonstrates that an organic diet provides a dramatic and immediate protective effect against exposures to organophosphorus pesticides, which are commonly used in agricultural production. Organophosphate pesticides account for approximately half the insecticide use in the U.S. and are applied to many conventionally grown foods important in children's diets.

Organophosphates work by poisoning the nervous system in pests.

Pesticides effects on humans are damage to the nervous system, reproductive system and other organs, developmental and behavioral abnormalities, disruption of hormone function as well as immune dysfunction.

Following is a list of common pesticides in household products and sprayed on foods:

('Not Classified' means that no tests have been done to prove whether or not it is a carcinogen: causing or leading to cancer)

Acrylonitrile - Carcinogenic

Alpha BHC - Carcinogenic, tumorigenic

Beta BHC - Carcinogenic

Chlordane - Convulsions and death. Not classified

1,4 dichlorobenzene (1,4 DCB) – Has been linked to a reduction in pulmonary function.

DDD - Carcinogenic

DDE - Probable carcinogen

DDT - Carcinogenic

Di-n-butyl phthalate - Kidney and bladder changes. Not classified

Dichloroethane - Kidney damage and coma. Not classified

Dinoseb - Carcinogenic, tumorigenic

Endosulfan II – Tremors, convulsions, death. Not classified

Endothall - Poison

Endrin - Vomiting and convulsions. Not classified

Gamma Chlordane - Vomiting, gastritis. Not classified

Heptachlor/Heptachlor Expoxide - Liver and kidney damage, respiratory collapse. Not classified

Heptachlorinated dibenzo-p-dioxins – Alters genetic makeup

Lindane - Carcinogenic

Napthalene - Liver damage, vomiting, convulsion, coma. Not classified

Pentachlorophenol - Carcinogenic

Phenol - Kidney, liver, pancreas and spleen damage. Not classified

Toxaphene - Carcinogenic

Silvex - Carcinogenic

Xylene - confusion, muscle coordination problems. Not classified

O-Xylene - nausea, vomiting, abdominal pain, dermatitis

245T - cardiac arrest, death. Not classified

## Fruits and Vegetables Highest in Pesticides

These 12 fresh fruits and vegetables are consistently the most contaminated with pesticides. Buy these organic if at all possible.

- ·Apples
- · Bell Peppers
- ·Celery
- ·Cherries
- · Grapes (imported)
- ·Nectarines
- · Peaches
- ·Pears
- ·Potatoes
- · Red Raspberries
- ·Spinach
- · Strawberries (contain the highest pesticide content of any fruit)

## Fruits and Vegetables Lowest in Pesticides

These 12 popular fresh fruits and vegetables consistently have the lowest levels of pesticides. If you cannot find or afford all organic, these are safer for consumption than the above list.

- ·Asparagus
- ·Avocados
- ·Bananas

- ·Broccoli
- · Cauliflower
- · Corn (sweet) (this may be GMO)
- ·Kiwi
- ·Mangos
- ·Onions
- · Papaya (this may be GMO)
- ·Pineapples
- · Peas (sweet)