



“The Poisoning of Our Foods”

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The last 30 years has seen witness to the fastest growth of agricultural chemicals ever to be dumped on our planet’s soil. It is estimated that, world wide, the agricultural chemical industry is producing about 45,000 to 50,000 different pesticides based on approximately 600 active ingredients. In one year the UK alone sold 23,504 tonnes of active ingredients for the purpose of use in agriculture. This amounts to 420 grams of chemicals for every adult and child in this country. Cereal crops receive an average of eight applications of chemicals, between the times when they are planted and eaten. It is not unusual for fruit and vegetables to be sprayed 10 to 15 times. Is this in our best interests, or should we be campaigning for organic food in the name of our health and our children’s futures?

DEFINING ORGANIC

There have been numerous attempts around the world to define this word. The most globally excepted definition was compiled by the U.S. Department of Agriculture, which states the following:

“Organically grown food is food grown without pesticides; grown without artificial fertilisers; grown in soil whose humus content is increased with applications of natural mineral fertilisers; and has not been treated with preservatives, hormones, antibiotics, etc.”

CLASSES OF PESTICIDES

Pesticides are divided into the following categories. Each are designed for specific purposes and based on similar chemical compounds. Each also carries associated health risks. For example, new evidence suggests that some types of pesticides, known as organochlorides containing DDT, have estrogen properties and can bring on premature labour. Studies in Brazil and India show levels of DDT significantly higher in miscarried foetuses and premature babies.

Insecticides

Used to kill aphids, weevils and other insects including the insect predators that feed on them (a counter-productive effect). Most insecticides are compounds containing phosphorus and chlorinated hydrocarbons. These chemicals do not degrade easily and can accumulate in the body resulting in, amongst other things, liver failure. The use of insecticides has increased 17 times in the last two decades.

Herbicides

Used to kill plants. Some kill everything they come into contact with while others are species specific. Herbicides consist of highly varied chemicals that kill the plant by blocking its metabolism. When ingested by humans some may only cause mild to moderate symptoms while others are fatal if consumed. The use of herbicides has grown 15 times over the last two decades.

Rodenticides

Designed to kill rodents. Many contain anti-coagulants, causing the animal to bleed to death, such as warfarin. Metal phosphides are also used such as zinc and aluminum. Strychnine is also commonly applied. The risks to human health, if ingested, are enormous.

Fungicides

Used to kill fungi that infect growing crops, fruit and stored seeds. For this reason they are mostly sprayed directly onto the part of the food that is to be eaten. These fungi are often microscopic and include mildews, pin moulds, yeasts and rusts. They are usually based on compounds containing metals such as copper or mercury or hydrocarbons containing sulphur. The use of fungicides has doubled every year for the past 20 years.

Waxing of Produce and Pesticide Residues

Produce is regularly waxed in an attempt to retain its moisture. Beeswax and shellac are mostly used and are not considered toxic enough to cause concern. The real problem arises when they are mixed with some pesticides or fungicides. The resulting chemical cocktail, especially when captan or folpet is involved, is highly carcinogenic (cancer causing).

Pesticide Residues in Animal Products vs. Plant Based Foods

Most people's concerns about organic foods are centred on fruits and vegetables. Although these crops are subjected to an array of chemicals the real problem appears to be the meat and dairy. This is because most pesticide residues are known as lipophilic, which means they are attracted to fat. They lodge in the fat tissues of the animal, bird or fish becoming more and more concentrated as they move up the food chain. The Centre for Science in the Public Interest, who are a consumer watchdog group, reported that pesticide residues are more frequently found in meat, poultry, fish, butter and lard than fruit and vegetables. In his book "Diet For A Poisoned Planet" David Steinman processed a vast amount of data from the Total Diet Study conducted by the FDA. He concluded that foods could be divided into three categories according to the number of toxins found in them. He named these categories "red" (for most toxic), "yellow" (for moderate), and "green" for lowest in poisonous substances. With the exception of raisins and peanuts* all the foods in the "red" group were meat and dairy products.

* Raisins are derived from drying fruits that are notorious for being subjected to chemical spraying. Peanuts often contain a highly toxic carcinogen called aflatoxin, which is caused by the mould *aspergillus flavus*, and are not recommended by the author as a safe food unless their freshness can be guaranteed.

WATER

A recent survey of drinking water identified that in 298 cases the water was contaminated with chemical pesticides at a concentration exceeding the Maximal Admissible Concentration (MAC) by one quarter. Altogether, sixteen different active pesticide ingredients were found plus other industrial pollutants. It was concluded that the increasing amounts of nitrogen-based fertilisers being added to the soil was to blame. Only about half of fertilisers are taken up by the crop, the remainder is washed into our waterways.

YOUR HEALTH

An in-depth study was done by the London Food Commission on the ingredients currently permitted for the use in pesticide manufacture. The results revealed that almost 40% of pesticides currently in use could damaged the body in at least one way. Of the 426 chemicals listed 68 were found to be carcinogenic, 61 capable of mutating genes, 35 to have various reproductive effects ranging from impotence to birth defects, and 93 to cause skin irritations and other symptoms. Of all the studies researched by the author the condition most frequently referred to in relation to agricultural chemicals is cancer.

NUTRIENT DEPLETION

The poisoning of our foods is only part of the story, there are also implications regarding their nutrient value. According to Leslie Kenton in her book "Endless Energy", there is no way to compensate for the structural information missing when the organic matter in the soil has been destroyed by chemical farming. Dr Paavo Airola, in his classic book "How to Get Well", warned us back in 1974 "Organically grown fruits and vegetables contain more vitamins and minerals, as has been shown in many tests. They also contain more enzymes than the produce grown on depleted, chemically fertilised soils. Such foods have a greater health-building and disease-preventative potential." He went on to say "Researchers reported recently that anti-malignancy factors are apparently present in organically grown foods." In contrast, the Institute of Food Technology reported in 1990 that there is "no evidence that organically grown foods are more healthful than those produced conventionally."

Well, dear reader, what reason can you think of that might have lead them to that conclusion? If they were named the "Institute for Human Health" we might take them more seriously.

THE FAR REACHING IMPLICATIONS -- WHY ENCOURAGE ORGANIC FARMING?

We can only be as healthy as the planet upon which we live. The six primary benefits of organic farming have been listed by the International Federation of Organic Agriculture Movement:

1. Localism. The farm draws upon local resources rather than importing long distance.
2. Soil Improvement. Re-establishes the health and quality of the soil rather than raping it of its nutrients.
3. Pollution abatement. The poisoning of earth, water, foods and wildlife is reduced.
4. Quality of produce. Emphasis is placed on nutritional content rather than appearance of foods.
5. Energy use. The use of fossil fuels such as oil is kept to a minimum.
6. Employment. Results in more employment of a superior rewarding nature both ethically and financially.

MAKING THE BEST CHOICES

Not everything labeled as "organic" is fit for human consumption.

"Organic" shampoo is a case in point! The word has, like all words that ride on fashionable consumer bandwagons, become perverted in its meaning. The following guidelines will help you make the healthiest and safest choices:

1. In the USA each state has its own governing body that sets standards for organic produce. The state of California is the strictest. Look for produce that carries their certification entitled the California Organic Foods Act of 1990.
2. Maximise your consumption of plant based foods and avoid all meat and dairy.
3. Buy local produce whenever possible.
4. Focus on buying foods that are in season.
5. Be suspicious of produce displaying perfect flawless shape and un-naturally shiny skin.
6. Rub as well as wash produce. Farmers do not invest large amounts of money into chemicals that will wash off with the first drop of rain!
7. Non-organically grown apples and soft fruits are heavily sprayed. If organic alternatives are not available you are better off peeling them even though vital nutrients in the skin will be lost. If grapes are your preferred choice, search for a dedicated partner who is willing to peel them for you!
8. Support local organic farmers.
9. Best of all, "grow your own." It is possible to grow more than most people think even in the smallest of places. Even window boxes can produce a plentiful harvest. Gardening is also a very effective form of stress management too. Have you ever seen a frenetic, time obsessed gardener?
10. Choose bottled water to drink in preference to tap water.

It is an unfortunate but realistic fact that money is more of a driving force in industry than health. If humankind is to survive we need to reverse the destruction of the planet on which we live and reclaim our health. The choices we make today as consumers not only effect our own health but have a profound impact upon our children's futures. The best way forward is for us to all develop enquiring minds, an unquestionable pursuit of that which is in accordance with natural law and a mistrust of anything that appears perfect! Remember, your purse has more voting power than your voice. I vote organic -- what's your vote?