### Pesticides in our food

In anything as complicated as pesticide exposure or even cigarette smoke, science can never prove beyond a shadow of a doubt that "X" causes "Y".

There is always room for a researcher employed by the Crop Protection Association (the pesticide trade group) or Philip Morris to say, "Couldn't this disease be partly caused by some factor that you haven't taken into consideration? Couldn't this disease partly be caused by some factor you haven't even thought of." And the honest answer must always be: "Yes there is a slim chance that it could be."

Yet, you don't need to have a medical degree to know that anything which kills insects and other living creatures is not likely to be very good for you. Pesticides are toxic by design. They kill bugs, fungi, weeds, rodents and other pests. Right now, if (like me) you're skeptical about government and chemical company claims that pesticides are 'safe', buying organic food is your best option to reduce your intake of pesticides



A report released by the Pesticide Action Network Of North America and Commonwealth finds that Americans can experience up to 70 daily exposures to residues of a class of toxic chemicals known as "persistent organic pollutants" or POPs, including such chemicals as dioxin and DDT, through their diets.

The report, "Nowhere to Hide: Persistent Toxic Chemicals in the U.S. Food Supply," analyzes chemical residue data collected by the Food and Drug Administration (FDA) and finds persistent chemical contaminants across ALL food groups.

Exposure to POPs has been linked to serious diseases and developmental disorders, including:

- Nervous system disorders
- <u>Immune system</u> suppression
- Breast and other types of <u>cancer</u>
- Reproductive damage
- Disruption of hormonal systems

### Pesticides banned in the U.S. are still used in other countries

In the U. S., many of the chemicals responsible for contaminating the food supply have been banned. However, other countries continue to manufacture and use those chemicals, and their residues are carried across the globe by air, water currents and precipitation. "United States consumers have a right to know that chemicals banned in this country years ago continue to contaminate their food," said Kristin Schafer of Pesticide Action Network.

The group's evaluation of POP residue data yielded hard-to-believe findings, including the following:

- Virtually ALL food products are contaminated with POPs which have been banned in the U.S., including baked goods, vegetables, fruit, poultry, meat and dairy products.
- It is not unusual for daily diets to contain food items contaminated with 3 to 7 POPs.
- A typical holiday dinner menu of 11 food items can deliver 38 "hits" of exposure to POPs a "hit" is one persistent toxic chemical on one food item.
- The sample daily meal plans used in the study were each found to deliver between 63 and 70 hits. separate exposures to POPs per day.
- The 2 most pervasive POPs found in food are dieldrin and DDE. Dieldrin is a very persistent and highly toxic organochlorine pesticide banned since the late 1970s. DDE is a breakdown product of DDT, which has been banned in the United States since 1972.

The report shows rather convincing and compelling evidence that organic foods are much less likely to have any residues. That when organic foods have residues they have fewer and that the levels of the residues are generally lower.

The report's findings are based on pesticide residue data collected on a wide variety of foods by the United States Department of Agriculture from 1994 to 1999, tests conducted on food sold in California by the state's Department of Pesticide Regulation from 1989 through 1998, and tests by Consumers Union in 1997. The combined data covered more than 94,000 food samples from more than 20 crops. 1,291 of those samples were organically grown, about 1.3%.

The Agriculture Department data showed that 73% of the conventionally grown foods had residue from at least one pesticide and were 6 times as likely as organic foods to contain multiple pesticide residues. Only 23% of the organic samples of the same groups had any pesticide residues.

The data obtained from the FDA shows that levels of contaminants in food are often at, or near, the levels found by the federal government to cause public health concern. In addition, recent scientific studies have discovered that exposure to miniscule levels of POPs at crucial times in fetal

and infant development can damage or disrupt human hormone, neurological, reproductive and <u>immune systems</u>.

### **Pesticides in YOUR food**

The following link:

http://www.foodnews.org/gardensalad.php

offers you an interesting way to see just how prevalent pesticides are in our foods. Mix up your favorite garden salad and find out what pesticides are in it. Based upon tens of thousands of government tests of pesticide residue, their system picks both conventional and organic samples and tell you what pesticides were detected in those samples.

FoodNews checks government data on pesticide residues for the foods you picked. For each food you select, the FoodNews computer picks a lab test result at random from several databases. The main database contains the results of more than 160,000 government lab tests (USDA's Pesticide Data Program, PDP) for food contaminants for the years 1992 through 2000. Once you see the results for the sample you picked, you'll see that multiple exposures are daily events. If you eat in this country, you eat pesticides.

Some of you might be asking themselves why some organic food samples contain pesticides? You thought 'organic' meant 'no pesticides'?

Organic standards prohibit the use of pesticides in the production of food. But that doesn't mean food can't get contaminated.

Some pesticides, such as DDT, were banned 30 years ago but still persist in the environment and find their way into organic food. The banned pesticides found most often in organic food are DDT and its metabolite DDE, heptachlor and dieldrin. About 3% of 600 organic samples had detectable levels of persistent banned pesticides.

Pesticide residues have been found in state and federal food tests. In 2002, an analysis by Baker, C. Benbrook, Groth, and K. Benbrook showed that organic food did have some pesticide residues, but found that, compared to conventional food:

- the rate of contamination in organic is far lower
- the number of pesticides found is much lower and multiple residues are rare on organic samples
- where organic has residues, the residue levels are much lower.

It should also be noted that, since organic farming excludes genetic engineering, buying organic food as much as possible is the best way to avoid <u>Genetically Engineered foods</u>, which I will discuss in another article.

## When you can't buy organic produce

Unfortunately many of you do not have access to organic foods. For those in many rural areas, it is simply not available, and for others cost is a problem. If you don't have access to organic vegetables, please do not use this as an excuse to not eat vegetables.

Non-organic vegetables are better than no vegetables at all. One of the many major benefits they provide is <u>normalization of one's pH</u>. That pH normalizing capacity is only slightly modified if the vegetables are non-organic.

There is also a practical option available to you for removing the pesticides from your body. A micro algae called <u>chlorella</u> binds very effectively to pesticides. It is also useful for helping you remove <u>mercury</u> from your body.

When you can't buy organic foods, try to buy fruits and vegetables which are consistently low in pesticides.

Analysis of the latest government test results shows that the following fruits and vegetables have the least pesticide contamination among conventionallygrown foods.



### **Fruits**

- 1) Pineapples
- 2) Plantains
- 3) Mangoes
- 4) Bananas
- 5) Watermelon
- 6) Plums
- 7) Kiwi Fruit
- 8) Blueberries
- 9) Papaya
- 10) Grapefruit

# **Vegetables**

- 1) Avocado
- 2) Cauliflower
- 3) Brussels <u>Sprouts</u>
- 4) Asparagus
- 5) Radishes
- 6) Broccoli
- 7) Onions
- 8) Okra
- 9) Cabbage
- 10) Eggplant