

Rachel's Environment & Health News

#356 - Browner Announces Plan To Kill Delaney

September 22, 1993

Americans have been led to believe that pesticide residues on food are the exception rather than the rule. The truth is quite different: if you eat in this country, you eat pesticides. Of special concern is the diet of infants and children. Infants and children are routinely exposed to combinations of 2 or 3 (in rare cases as many as 8) pesticides on each food they consume.

A report in June from the Environmental Working Group (EWG) in Washington, D.C.[1] analyzed pesticides in the diets of children, based on pesticide data from two different sources: 14,595 samples taken by the U.S. Food and Drug Administration (FDA), plus 4,500 samples taken by a private testing laboratory hired by supermarkets. (Page numbers inside square brackets refer to pages in the EWG's report.)

Analyses of 4,500 samples of fruits and vegetables taken from supermarket warehouses from 1990 through 1992 found 2 or more pesticides on 62 percent of orange samples, 44 percent of apple samples, and from one-quarter to one-third of cherry, peach, strawberry, celery, pear and grape samples.

Analysis of 14,595 samples of the same crops from the FDA for the period 1990-1992 confirmed the finding of multiple pesticides on typical foods. In addition, the FDA data revealed 108 different pesticides on just 22 fruits and vegetables: 42 different pesticides were detected on tomatoes, 38 different pesticides were detected on strawberries, and 34 different pesticides were detected on apples. [pg. 1]

The plain truth is that American children are continuously exposed to a complex, low-level mixture of pesticides in food. The health effects of these exposures are not known and are not being investigated.

The Environmental Working Group's report in June revealed that, when cancer risks from just 8 pesticides on 20 fruits and vegetables are added together, the average child exceeds the EPA [U.S. Environmental Protection Agency] lifetime one-in-a-million risk standard by his or her first birthday.

In addition to pesticides in food, millions of American children are also exposed to pesticides in their drinking water. By the time the average midwestern child is old enough to walk he or she may surpass EPA's lifetime acceptable cancer risk (one-in-a-million) from pesticides in drinking water if the water is drawn from a surface water source. By age 6 these same children may have accumulated more than 10 times the EPA's lifetime "acceptable" cancer risk, which is one-in-a-million. [pgs. 49-50]

The cornerstone of the "food safety" system in the U.S. is a mathematical technique called risk assessment. For each proposed use of each chemical on each food type, a risk assessment is completed to estimate the risk. The cumulative risks, taken together, are never considered.

The fundamental assumption of the system is that scientists can accurately assess the risks from residues of 20,000 different pesticidal formulations. This is a false assumption for many reasons:

** We know children are being exposed to multiple pesticides simultaneously, yet science has no way to study effects of multiple simultaneous exposures.

** Risk assessors assume that infants, children and adults all respond identically to identical chemical exposures. No consideration is given to special sensitivities of infants or children.

We know that children may be more sensitive than adults to pesticide exposures because scientific studies have shown that children are more sensitive than adults to many chemical compounds, such as aspirin; hexachlorobenzene; hexachlorophene; lead; mercury; nitrate; phenobarbital; tetracycline; and tobacco

smoke. [pg. 7] Children are known to be more sensitive than adults to radiation. It is only reasonable to assume that children will be more sensitive than adults to some pesticides.

Furthermore, no consideration is given to the fact that diseases that develop slowly, such as cancers, will have longer to develop in exposed children than in exposed adults.

** Risk assessors assume that children eat the same foods, in the same quantities as adults. This is a false assumption. Children ages one through 5 eat 3 to 4 times more food per unit of body weight than the average American. For example, the average American eats 15 grams (about half an ounce) of food for each kilogram (2.2 pounds) of body weight each day; but a one-year old eats 45 grams of food per kilogram of body weight each day. [pg. 11]

In addition, children eat foods that are different from the food eaten by average Americans. One-year-olds eat 69 foods at greater than twice the national average (per unit of body weight) and consume 24 foods at greater than 5 times the national average. [pg. 13]

For example, infants less than one year old eat coconut oil at 39 times the national average; apple juice at 15 times the national average; fresh pears at 12 times the national average; fresh peaches at almost 9 times the national average; oats at 8 times the national average; carrots at 8 times the national average; rice at 7 times the national average; milk at nearly 7 times the national average; fresh apples at 6 times the national average. [pg. 13]

These are average consumption rates. Naturally, some children will eat above-average amounts, and thus will accumulate pesticide risks at above-average rates. [pg. 14] Risk assessments make no allowances for special populations, such as Native Americans who may consume above-average amounts of, say, fish or strawberries.

** Risk assessment assumes that government scientists are capable of measuring all of the pesticides presently used on food crops by U.S. farmers. This is false. The FDA [Food and Drug Administration] seriously under-reports pesticide residues in the food supply: from 80 to 100 percent of residue analyses at 5 of 12 FDA regional laboratories were not capable of finding 80 percent of pesticides used in agriculture today. [pg. 2]

** Some foreign food suppliers are using pesticides that FDA has no way to detect;

** Risk assessments for pesticides in food assume that individuals are exposed to pesticides in certain foods only. Pesticide exposures from milk and from drinking water are officially not considered.

** The "inert" ingredients in pesticides may be toxic themselves, but in risk assessments they are ignored. In 1991, EPA released a list of 1820 different chemicals used as "inert" ingredients. Some popular "inert" ingredients are xylene, toluene, vinyl chloride, ethyl benzene, and methylene chloride. [pg. 10] For 1450 of the 1820 chemicals listed (80 percent), EPA has no toxicity information.

** Exposures to other pesticides that may cause similar effects are ignored;

** Exposures to the same pesticides from other sources (structural, agricultural, or lawn and garden applications) is similarly ignored. [pg. 6]

In sum, present techniques for estimating the risk of pesticides--especially the risks to children--are based on false assumptions and false or missing data. Risk assessment is a technique that can be manipulated to reach any conclusion the risk assessor wishes to reach.

For this reason, the environmental community was angry and dismayed this week when the Clinton administration announced its

plan to kill the Delaney clause and, in its place, substitute risk assessment.

The Delaney clause is an existing law that forbids known cancer-causing chemicals in processed foods, such as ketchup and soup. Under Mr. Clinton's new proposal, the zero carcinogen rule would be replaced by a "one-in-a-million" risk standard. In other words, under the administration's proposal, cancer-causing pesticides would be allowed in processed foods (as well as in raw foods) and the amount that's allowed would be decided by using "risk assessment."

Environmentalists had hoped the administration's legislative proposal would go the other way, strengthening and expanding Delaney to bring raw foods under its "zero carcinogen" umbrella. A strengthened Delaney clause might also allow zero amounts of pesticides known to harm (in humans or animals) the nervous system, reproductive system, immune system, or endocrine system, or known to cause developmental disorders, liver damage or kidney damage.

Instead the administration proposes to do away with Delaney entirely, substituting the use of "risk assessment" in its place. It is a stunning victory for the pesticide/chemical industry.

"[The Delaney clause] is really the backbone of our nation's food safety laws," said Al Meyerhoff, a scientist with the Natural Resources Defense Council (NRDC).[2] "The administration promised that, if it abolished [Delaney], it would replace it with something stronger. They failed to keep their promise."

Jay Feldman of the National Coalition Against Misuse of pesticides (NCAMP) said, "Any food safety package... that allows cancer-causing pesticides in foods is rotten to the core."

"At this point, the entire environmental community is united in opposition to the administration's food safety proposal," said Richard Wiles of the Environmental Working Group in an interview.

Observers of the Washington scene note that the administration apparently believes it can afford to alienate the entire environmental community because the environmentalists have nowhere else to place their loyalties, politically. According to this view, Mr. Clinton can count on the environmental community supporting him in 1996 no matter what environmental programs he pursues. Under these circumstances, it makes a kind of cynical sense for Mr. Clinton to kill Delaney and pursue other anti-environmental policies that might attract chemical company money, and Wise Use advocates, to his camp at election time.

--Peter Montague

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[1] Richard Wiles and Christopher Campbell, PESTICIDES IN CHILDREN'S FOOD (Washington, D.C.: Environmental Working Group, 1993). Available for \$15.00, plus \$3.00 shipping and handling, from: Environmental Working Group, Suite 600, 1718 Connecticut Avenue, N.W., Washington, DC 20009; phone (202) 667-6982; fax: (202) 232-2592.

[2] Gary Lee, "Administration Urges Overhaul of Food Safety Laws," WASHINGTON POST September 22, 1993, pgs. A1, A20.

Descriptor terms: pesticides; food safety; childhood cancer; diet; environmental working group; fda; agriculture; farming; supermarkets; testing; oranges; apples; cherries; peaches; strawberries; celery; pears; grapes; risk assessment; epa; aspirin; hexachlorobenzene; hexachlorophene; lead; mercury; nitrate;

phenobarbital; tetracycline; tobacco smoke; radiation; cancer; milk; native americans; fish; xylene; toluene; vinyl chloride; ethyl benzene; methylene chloride; lawns; delaney clause; nrdc; al meyerhoff; jay feldman; ncamp; richard wiles; pesticides in children's food;