# CHILDREN'S SUSCEPTIBILITY

The following, fully referenced statements come from "The Risks that Pesticides Pose to Children" by Becky Riley, October 2000. Report published by Northwest Coalition for Alternatives to Pesticides.

- \*Children's brains and nervous systems are not completely developed, making them more susceptible to the effects of nerve poisons. Several major classes of insecticides are nerve poisons.
- \*Children's livers and kidneys are unable to detoxify or filter and excrete certain chemicals as quickly as adults. This contributes to greater toxicity of some substances to infants and young children.
- \*Children are growing and their cells are dividing more quickly than those of adults, making them vulnerable to the effects of cancer-causing chemicals.
- \*Children's immune systems are not fully developed until adolescence. This means they may be more susceptible to harm from exposure to foreign compounds such as pesticides.
- \*Children receive relatively greater doses Than adults when exposed to pesticides in their environment, due to the fact that they breath in a greater volume of air and have a greater skin surface area relative to their smaller body weights.
- \*Children who eat a diet of organic food show a level of pesticides in their body that is six times lower than children who eat a diet of conventionally produced food.

### **RESOURCES**

#### http://www.cehn.org

Children's Environmental Health Network 1604 Solano Avenue Berkeley, California 94707 Phone: 510/ 526-0081

#### http://www.healthychild.org

Healthy Child Healthy World 12300 Wilshire Blvd, Suite 320, Los Angeles, CA 90025 310/820-2030 Their mission is to protect the health and well being of children from harmful environmental exposures.

"Home, Safe Home: Protecting Yourself and Your Family from Everyday Harmful Household Products" by Debra Dadd (Putnam, 1997).

## http://www.rachel.org

Provides understandable scientific information about human health and the environment.

http://www.panna.org/panna/
Pesticide Action Network North America
49 Powell Street, Suite 500 San Francisco,
CA 94102 415/981-1771 A comprehensive
list of alternatives to pesticides for virtually
every pest problem.

#### www.ehnca.org

**EHN [of California] Environmental Health Network** P.O. Box 1155, Larkspur, California, 94977-1155 415/541-5075

## http://foodnews.org

Discover how many pesticides your child is consuming due to contaminated food supply; a good reason to choose organic.

# www.healthandenvironment.org

Collaborative on Health & the Environment Research information source.



# YOUR CHILD

PERSONAL CHOICES

A GUIDE TO REDUCING ENVIRONMENTAL RISKS

Pesticide Free Zone Box 824 Kentfield, CA 94914 www.pesticidefreezone.org 888/590-3993 PROBLEMS SOLUTIONS

**STATEMENT:** Toxins can be absorbed from the air we breathe, through our skin and from the food we eat.

**PROBLEM:** An estimated 80% to 90% of all cancer in humans is caused by exposure to carcinogens found in the environment.

Philip Landrigan, M.D. and Herbert Needleman, M.D., Raising Children Toxic Free 1996.

**FACT:** Childhood cancer has risen 10.8% in the past decade. *Miller. BA, et al (ed), SEER Cancer Statistics Review 1973-1990. National Cancer Institute, NIH pub. #93-2789, 1993* 

**FACT:** Among children ages 1-14, cancer causes more deaths in the U.S. than any other disease. American Cancer Society, Cancer Facts & Figures 1996.

**FACT:** Asthma is now the leading cause of hospital admissions for children. EPA News Release, September 11, 1996.

**FACT:** 17% of American children (12 million) suffer from one or more, developmental, behavioral or learning disorders. Report on Environment & Health presented at The National Academy of Sciences by Timothy Wirth, President, United Nations Foundation, June 2000.

**FACT:** Learning disabilities alone may affect up to 10% of children in public schools.

PROBLEM. Scientists estimate that each year up to 7 million Americans become sick from contaminated tap water, which can also be lethal. (NRDC)

**FACT** Inspector general reported EPA data audits show that about 77% of known monitoring and reporting violations, and 35% of known health standard violations, are not included in EPA's compliance database so they lied about compliance gains in 2003-4.

**PROBLEM:** Pesticides are a major toxic contaminate found in fruits, dairy products, vegetables, meats and water.

**FACT:** Children in families that use pesticides are 6.5 times more likely to get childhood leukemia. Lowengart, rl, et al, "Childhood Leukemia and parents' Occupational and Home Exposure, Journal of Pesticide Reform, Summer, 1986,pp. 2-3.

**FACT:** 50% of an average one-year old's top ten favorite foods (apple juice, grape juice, oats, bananas, milk, apples, orange juice, pears, wheat and peaches) will have some pesticide residue. Mott, L., MS. Our Children at Risk, Natural Resources Defense Council, 1997, p. 65.

FACT: The US government has not conducted even basic toxicity testing for up to 75% of the top-volume chemicals in commercial use today and up to 90% of the largest volume chemicals in respect for their toxicity to children. Environmental Defense Fund, Toxic Ignorance: The Continuing Absence of Basic Health Testing for Top-Selling Chemicals in the United States, 1197, pp, 5.

PROBLEM: Nitrate, a preservative found in approximately 7% of our food reacts with chemicals in food to make nitrosamine, one of the most potent known carcinogens. Schoemacher. J.M., PhD and VataIe. C.Y., PhD, Healthy Homes, Healthy Kids, Island Press, 1991, p 126.

**PROBLEM:** Excess use of fluoride in water & toothpaste has been shown to contribute to dental fluorosis and osteoporosis.

**FACT** Dental fluorosis is identified by mottled, white spots, which typically turn brown.

**SOLUTION:** Be aware of what substances including cleaners, pesticides, lawn care products, personal care products & foods pose threats in your household. Replace toxic agents with non-toxic alternatives. See Resources.

**SOLUTION:** Eat organic foods. Not only will children avoid consuming pesticides; foods taste better and contain more vitamins & minerals. Organic Retailers & Growers Association of Australia

**SOLUTION:** Eat foods low in fat. Trim the fat from meat, fish and poultry - many toxins are stored in fat cells. Consider buying dairy and meat raised without bovine growth hormone (BGH). Choose foods without nitrate as a preservative.

**SOLUTION:** Thoroughly wash and peel your produce, especially if it is waxed & dyed, which tend to hold in pesticides. Discard outer leaves of lettuce. This reduces but does not completely remove pesticides.

**SOLUTION:** Drink filtered or R.O. water. (Reverse Osmosis)

**SOLUTION:** Inquire if your town water is up to standards. Test your well for:

- bacteriological quality
- physical characteristics
- chemical characteristics
- volatile organic chemicals
- insecticides: carbaryl, chlordane, chlopyrt/os, DDT-DDE, diazinon, dicofol, isenphenfos, lindane, malathion, methoxychlor
- herbicides:
   2, 4-D, dicamba, dacthal,
   MCPA, MCPF, trtfiuralin
- fungicides: chloroth