According to the Environmental Protection Agency (EPA) and the National Academy of Sciences, standard chemicals are up to ten times more toxic to children than to adults, depending on body weight. This is due to the fact that children take in more toxic chemicals relative to body weight than adults and have developing organ systems that are more vulnerable and less able to detoxify toxic chemicals. (ii,iii)

According to EPA’s “Guidelines for Carcinogen Risk Assessment,” children receive 50% of their lifetime cancer risks in the first two years of life. (v)

According to the Food and Drug Administration, half of produce currently tested in grocery stores contains measurable residues of pesticides. Laboratory tests of eight industry-leader baby foods reveal the presence of 16 pesticides, including three carcinogens. (x,ix)

In blood samples of children aged 2 to 4, concentrations of pesticide residues are six times higher in children eating conventionally farmed fruits and vegetables compared with those eating organic food. (iv)

According to the US Department of Health and Human Services, organophosphate pesticides (oP) are now found in the blood of 95% of Americans tested. OP levels are twice as high in blood samples taken from children than in adults. Exposure to OPs is linked to hyperactivity, behavior disorders, learning disabilities, developmental delays and motor dysfunction. OPs account for half of the insecticides used in the US. (vi, vii, xvi)

The US Centers for Disease Control reports that one of the main sources of pesticide exposure for US children comes from the food they eat. (vi)

The US Department of Agriculture strictly prohibits mixing different types of pesticides for disposal, due to the well known process of the individual chemicals combining into new highly toxic chemical compounds. There are no regulations regarding pesticide mixture on a consumer product level, even though, in a similar manner, those same individual pesticide residues interact and mix together into new chemical compounds when conventional multiple ingredient products are made. 62% of food products tested contain a measurable mixture of residues of at least three different pesticides. (xi,xii,xiii,xiv,xv)

Currently, over 400 chemicals can be regularly used in conventional farming as biocides to kill weeds and insects. For example, apples can be sprayed up to 16 times with 36 different pesticides. None of these chemicals are present in organic foods. (i)

Over 300 synthetic food additives are allowed by the FDA in conventional foods. None of these are allowed in foods that are USDA certified organic.

Data assembled in July 2005

U.S. GOVERNMENT FACTS:
Children’s Chemical & Pesticide Exposure via Food Products

All sources of the data below are listed on the other side. Please reference those sources for further information. The majority of this data comes from US Government agencies and their respective reports.

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SOURCES FOR:
U.S. GOVERNMENT FACTS: CHILDREN’S CHEMICAL EXPOSURE VIA FOOD PRODUCTS


vii) Saullk Institute: Loss of neuropathy target esterase in mice linking organophosphate exposure to hyperactivity. Journal Nature Genetics, March 03


xiii) Porter, et al (1999): Endocrine immune and behavioural effects of aldicarb (carbamate), atrazine (triazine) and nitrate (fertiliser) mixtures at groundwater concentrations, Toxicology and Industrial health, (ix) 133–150.


xvi) Environmental Protection Agency: America’s Children and the Environment (March 2003) www.epa.gov/envirohealth/children/