# Pesticides in Your Food

**Apples** 

**Pesticide Residues** 

43% OF ALL VEGETABLES AND FRUIT CONTAIN DETECTABLE LEVELS OF **PESTICIDES** 



Pesticide Residues from more than 7 chemicals

#### 19 hormone disrupting pesticides

(Endocrine System Disrupters) have been identified by the European Union. Evidence of endocrine disrupting includes genital abnormalities, decreasing sperm counts and semen quality.



#### Aldicarb

commonly used on potatoes, without warning signs, is one of the most acutely toxic pesticides ever manufactured: less than a gramme is enough to kill a dog.

**Potatoes** 

**Pesticide Residues** 14,500 tonnes of Sulphuric Acid are used on UK potatoes every year

#### TOXIC WATER

Rainwater in parts of Europe contains such high levels of dissolved pesticides that it would be illegal to supply it as drinking vater. Lindane has been found in rainwater in Spain.



Pesticide Residues

ROUNDUP...very low

doses of glyphosate

were toxic to either

human embryonic cells, foetal cells or

placental cells.



# 31,000 tonnes of pesticides are sprayed on UK land every year

Long-term effects of regular exposure to pesticides often cause chronic illnesses, including cancer, reproductive and neurological effects. The World Health Organisation believes that pesticides cause 772,000 new cases of disease each year.

### SYMPTOMS OF CHRONIC TOXICITY

SAFETY TESTING OF PESTICIDES ASSUME HEALTHY ADULTS

It does not take into account vulnerable groups whose hormonal systems are rapidly changing: FOETUSES BABIES ADOLESCENTS OLD AND INFIRM

"Children's exposure to pesticides

from all pathways (food, water, air, other) are likely to be higher, because they eat more food, drink more water, and breathe more air per pound of body weight."

5. KEGLEY, A. KATTEN, M. MOSES, SECONDHAND PESTICIDES: AIRBORNE PESTICIDE DRIFT IN CALIFORNIA, 2003

BANNED

37 pesticides have

been banned in the UK

and 50% of the 1000

pesticides registered

across the EU have been

phased out over the

last 10 years.

1988 CYHEXATIN BANNED Evidence of birth

Organochlorine, classified as a

Toxic persistent organochlorine,

probable carcinogen. Suspected

1986 DDT

1991 ALDRIN

probable carcinogen.

to cause breast cancer.

2002 LINDANE

BANNED

BANNED

CENTRAL NERVOUS & AUTONOMIC SYSTEMS Eyes, Ears, Nose & Throat conjunctivitis, rhinitis, sore throat and eye damage incoordination; fits; unsteadiness; numbness; tingling; acute depression symptoms that mimic recognised neurological diseases; neurobehaviou SYSTEM asthma; burning and irritation; deficits in children: Parkinson's disease lung damage HAEMATOLOGICAL & SKIN anaemias; clotting problems; white cel depression; leukae (especially of non-Hodgkin's hands); eczema GASTRO-INTESTINAL SYSTEM odd taste in mouth; HEART & CARDIOVASCULAR SYSTEM chest pains circulatory

failure; heart disruption of nzyme systems low tolerance to chemicals and SYSTEM alcohol URINARY SYSTEM

hyperthyroidism hyperglycaemia suppression of endocrine function REPRODUCTIVE

SYSTEM sterility; foetus malformation; stillbirth; spontaneous Musculo-SKELETAL SYSTEM tenderness low muscle strength

Are Safety Levels Safe?

2 examples of pesticide

with adverse effects at

much lower levels than

established safety levels

Birth Defects 'Official' No Effects Level

Permethrin

150 pesticides have been identified as potential human carcinogens

One teaspoon of agricultural pesticide

poured down the drain, could contaminate the drinking water of 200,000

people for a day

#### AGRICULTURAL WORKERS AT RISK

An estimated 25 million agricultural workers may suffer at least one incident of pesticide poisoning each year. 99% of all poisoning cases occur in developing countries where regulatory, health and education systems are weakest

In Brazil alone, the Ministry of Health suggest there are 300,000 poisonings a year and 5,000 deaths.

**FROGS CHANGE** 

**SEX WITH** 

ATRAZINE

A herbicide used widely

to kill weeds in maize, is

turning frogs into

hermaphrodites

Studies on frogs indicate that concentrations of atrazine as

low as 0.1 parts per billion

(one tenth of a teaspoon in an Olympic-sized swimming

pool) causes males to develop

female sexual characteristics.

This concentration is

allowed in drinking water

in the UK.

#### **Pesticide Residues**

Exposure to pesticide drift, even at minute dose levels, has been

linked by medical researchers to birth defects, cancer and sterility. Research in US has shown that in a zone of up to 154 metres around application sites, airborne concentrations of pesticides MITC,

chlorpyrifos and diazinon exceeded official Reference Exposure Levels for adults and/or children.

Bananas

Pesticide Residues Imazalil - one pesticide listed as likely cancer causing by US EPA

Medical opinions

The Ontario College of Family Physicians strongly recommends that people reduce their exposure to pesticides wherever possible after finding consistent links to serious illnesses such as cancer, reproductive problems and neurological diseases.

The British Medical Association says, We do not know whether many pesticides are harmful or not in day-to-day use."



**Pesticide Residues** Increase from 38% in 2001

#### Cocktail Effect

Studies have shown combinations of low-level insecticides, herbicides and nitrates can affect our bodies in ways chemicals in isolation do not. Studies have shown that three pesticides consumed together equal up to 100 times the effect of any one on its own.



**Pesticide Residues** Banned Lindane is found in most non-organic chocolate



Pesticides are a global HAZARD

Seals and cod in the

Arctic Circle have pesticide residues as these chemicals are transported on wind, rain and ocean currents from more southern latitudes

**Pesticide Residues** Farmed salmon have 16 x more PCBs (persistent cancer-causing toxins) than wild salmon

ENVIRONMENT WORKING GROUP "POBSIN FARMED SALMON" 2004

### Violation of Your Fundamental Human Rights

At present there is no legal requirement for pesticide users to: Notify the public in advance of spraying.
Disclose to those affected which chemical has been used.
Leave no-spray safety zones.

## SUPPORT PESTICIDE ACTION NETWORK UK

An independent, non-profit organisation which promotes healthy food, agriculture and an environment not dependent on toxic chemicals. admin@pan-uk.org www.pan-uk.org

DDT has been found in 67% of feta cheese samples

WORKING PARTY ON PESTICIDE RESIDUES ANNUAL REPORT 1999

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