Threadbare Cloth Beneath Cloak of Safety

Floy Lilley
August 2006

World Headquarters for Whole Foods
Without chemicals, we would need the land area of both South and North America (15-16 million sq. miles) to produce today’s food supply.

Without chemicals, 30-40 million sq. miles of land will be needed to feed a projected human population in the year 2050 (8-12 billion people).

30 million sq. miles is land equivalent to

North America
South America

Europe and much of Asia

“Moving now to a chemical-free agriculture on the basis of current knowledge, and thus forcing expansion of cropland to compensate for lower yields, would represent the greatest wildlife loss since the extinction of the dinosaurs.”

Dennis T. Avery
Saving the Planet with Pesticides and Plastic

“Of what are Americans fearful?

- Nothing much, really, except the food they eat,
- the water they drink,
- the air they breathe,
- the land they live on, and
- the energy they use.”

-M. Douglas & A. Wildavsky
Risk and Culture
“Human Intake of Nature’s Toxins is 10,000 Times Higher Than Intake of Man-made Pesticide Residues.”

CANCER FROM...

99.99% of All Pesticides You Eat Everyday Are Natural

Cancer Is Only “Up” Because Age is Up

“As Dr. Ames sees it, ‘Much of cancer is built in; a good part of it is due to aging.’
Green Vegetables Will Cut in Half All Cancers and All Degenerative Diseases

There Is No Cancer Epidemic

Only 9% Americans Have 4-5 Portions Fruits & Vegs Daily

False label?

Alar? Delaney? Carson’s germs?
Nature’s Carcinogen FUSARIUM Infected Wheat, Rye, Barley and Oats

Death to One-third of Ireland’s Population

Fungicide like Captan Could Have Averted Tragedy

FOOD QUALITY PROTECTION ACT

Lowered Acceptable Daily Intake Levels

New “Safety Factors” For Children

Cumulative Effects of Pesticides with Common Toxicity Mechanisms; Organophosphates or carbamates
The THREADBARE Weave of Five Foolish Threads

1. Dose-response is Linear
2. Proof of a Negative is Required
3. Correlations are Causations
4. Men are Cancer-Prone Rodents
5. All Risks are Equal

EPA’S SAFETY POSE ON DIOXINS & PCBs:
• Adverse effects on reproductive, hormone, and immune systems
• Abnormal fetal development
• Cancer from current exposure levels

Threadbare Regulation?
Sources of Dioxin in the U.S. Environment:
• 82.0% Natural and Other
• 5.6% Motor Vehicles
• 5.2% Metals Production
• 2.0% Electricity Generation
• 1.3% Wood Combustion
• 1.1% Pulp/Paper
• 1.0% Medical Waste Incinerators
• 0.7% Municipal Waste Combustors
• 0.42% Pesticides, Fungicides
• 0.42% Cement Production
• 0.30% Hazardous Waste Incineration

*By 2006 regulatory and litigation costs associated with dioxin will balloon far above the more than $100 million estimated a few years ago.

EPA forces GE to begin removing traces of PCBs from the Hudson River.
No evidence of harm exists.
Cost estimated $750 million.
“Our immune system actually uses chlorine, bromine and iodine to halogenate and kill invading microorganisms . . . . Chlorination is apparently as natural a biological process as blood clotting or salivation.”

— Gordon W. Gribble, Ph.D.
Dartmouth College

“Naturally produced organo-chlorine compounds have been found in groundwater samples dating back 5,200 years.”

— Gordon W. Gribble, Ph.D.
Dartmouth College

Vitamin R?

Lung Cancer Decreases with Increases in Radon

— Bernard Cohen & T.D. Luckey

76k deaths?

HORMESIS:
Net Beneficial effect from low levels of exposure to otherwise toxic substances, e.g. copper, selenium, fluoride, nickel, and ionizing radiation.

Science in Tatters Today

Harvard’s School of Public Health bestows its highest award on Erin Brockovich.

Best-selling advice book of 2005 by Kevin Trudeau on Natural Cures says tap water can kill you and organic food is our only hope.

Microsoft plans to eliminate PVC plastics from their products due to “health concerns.”
EATING IN THE DARK claims:
Genetically Modified Foods fail like nuclear energy technology fails. Three Mile Island and Chernobyl proved the limitations of scientists.

Rachel Carson was right about cancer causes.

Man has disrupted the web of life.

Faulty regulation by the government has allowed genetic pollution to occur so that it is now virtually impossible to obtain organic foods that are a hundred percent free of pollution from genetically engineered crops.

Lessons from Science
• Dose-response is not linear.
• Proof of a negative is not scientific.
• Correlations are not causations.
• Mice are not little men.
• All risks are not equal. Risks can be ranked.

Cloak of safety?
“The strongest argument made against the current criteria used to regulate chemical exposures in the U.S. today is that there are no health benefits.”
- A. Wildavsky

SERIOUS PROBLEMS in DEVELOPING NATIONS
• Diseases - Malaria, Typhoid Fever, Tuberculosis
• Insufficient Drinking Water
• Soil Erosion - Deforestation, Over-tilling
• Soil Nutrient Loss - Lack of Fertilizer
• Lack of Sewage Treatment
• Lack of Refrigeration
• Few Means of Food Distribution
Aaron Wildavsky: “Searching for zero-risk safety is the most dangerous game to be played.”
FEAR

SELF-RELIANCE & AWARENESS

...CHOOSE WELL