

Pesticides and You

News from the National Coalition Against the Misuse of Pesticides (NCAMP)

One in a Series of NCAMP "How-To's"

Synthetic vs. Natural Carcinogens

Since Bruce Ames did an about-face and started promoting a relaxed attitude towards synthetic carcinogens, we are being faced with the need to provide a rebuttal to his arguments. Here are some ideas.

On Ames' Science: "Cancer rates are not increasing when smoking is ignored."

Ames is mistaken. When all age groups are taken into account, cancer rates are increasing. Not all lung cancers are due to smoking, as evidenced by an increase in lung cancer among non-smokers in the past 20 years. Aside from increases, the cancer rate is exceedingly high with 1 out of 3 per-

sons contracting the disease (Epstein, *The Ecologist*, 17:91).

"The risk of cancer from naturally occurring compounds in plant foods is higher than the risk from synthetic pesticides."

Ames' methods are intrinsically biased toward higher potencies for the naturally-occurring chemicals. He underestimates exposures to bioaccumulating pesticides, the importance of occupational exposures, uses questionable methodology in extrapolating cancer potency estimates from the Ames test, a mutagenicity screen.

On Ames' Policy: "Because of the high background level of

carcinogens and other hazards and the high costs of regulation, we should give low priority to reducing use of synthetic chemicals."

Ames statement considers only pesticide residues in food, ignoring that society's decision to rely on pesticides also results in exposures during manufacture, transportation, storage, mixing and loading, spills, application, runoff and drift, and disposal.

Regardless of the validity of the relative measurements of risk, exposure to many synthetic carcinogens is avoidable and could be eliminated or drastically reduced, often with increases in production efficiency, if we make appropriate policy choices. It is inappropriate to weigh involuntary, unnecessary risks against those which are voluntary or necessary.