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## If Cyclamate Is Banned, Should Hundreds of Other Products Be Removed From Market?

If cyclamate is banned on the basis of the few tests performed so far, then hundreds of other products should also be removed from the daily market.

This is the opinion of Drs. Stanley L. Inhorn, director of the Wisconsin State Laboratory of Hygiene, and Lorraine F. Meisner, instructor of preventive medicine at the University of Wisconsin.

pressed surprise that the decision to ban cyclamate was founded on such incomplete evidence.

“In view of the many products, both foods and drugs, which have been proven to cause cancer or mutations and are still available to the American public, we believe that this action (the cyclamate ban) was premature and of too great import to be made by one or a few government officials at a ‘hurried meeting’ without thorough investigation and review by the scientific community,” they state.

“The decision, as reported to the press, was based primarily on the result of experiments wherein six of twelve rats, given fifty times the maximum recommended human daily consumption for their lifetime, developed an ‘unusual’ form of bladder cancer,” the authors continue.

In additional testing, tumors resulted from direct implantation of pellets of cyclamate and cholesterol in the mouse bladder. However, the control of this experiment, using plain cholesterol, also produced bladder tumors in 12 per cent of the mice.

In a third experiment, malformations appeared in 15 per cent of chick embryos injected with cyclamate. But the test proved negative when other animals were used.

Before the ban on cyclamate becomes final, Drs. Inhorn and Meisner think these experiments should be repeated in other laboratories and on larger groups and different species of animals. Frequently a substance is disease-causing in only one type of animal.

Furthermore, if positive results are obtained, the Wisconsin scientists believe basic research should be conducted to determine the reasons for the reaction.

Finally, they suggest that a human population exposed to cyclamate since its introduction twenty years ago be compared with a group which has not been exposed. Such a study should show an increased incidence of bladder cancer in the exposed population if cyclamate is the causative agent.

However, they believe such a relationship is doubtful. “In the twenty-year

period during which cyclamate has been so widely used, there has been no increase in the mortality from bladder cancer," they state.

There are, on the other hand, several examples of substances proven to cause cancer which are on the market today. The letter cites a few.

"For over fifty years, cancer of the bladder has been recognized as an occupational disease in persons working in the coal-tar aniline dye industry. While many measures are taken to protect the health of these workers and of the consumers of their products, this industry has not been eliminated. Crayons and haircoloring are readily available," the Wisconsin researchers add.

Tryptophane, an amino acid found in meat protein, has also been shown to cause cancer in the urinary bladder in man. Drs. Inhorn and Meisner wonder "if the Food and Drug Administration would have us all become vegetarians."

Both laboratory and human population studies conclusively demonstrate that cigarette smoking causes many diseases, one of which is bladder cancer. But cigarettes have not been banned.

A variety of foods and drugs also cause malformation and mutation in various animals. These include excess vitamin D in rabbits, hypervitaminosis A and aspirin in rats, and cortisone in mice. All of these are available for human use.

X-rays are known to cause both cancer and mutations.

In addition, work at the Wisconsin State Laboratory has shown "no mutagenic effect when very high concentrations of cyclamate were put into cultures of normal human cells," the authors state.

Drs. Inhorn and Meisner believe the restriction on cyclamate will have more serious consequences than its consumption could ever cause. Artificial sweeteners play an important part in treatment of persons susceptible to diabetes as well as in control of the disease.

The dental profession has acclaimed the role of cyclamate in the prevention of tooth decay. Those who seek to fight the major American nutritional problem—obesity—will also be handicapped.

In an interview, Drs. Inhorn and Meisner explain further their lack of faith in the FDA decision. The amount of cyclamate fed to the rats in the first experiment was equivalent to drinking 350 bottles of diet drink per day. In tests using lesser amounts, none of the rats developed bladder tumors.

Also, the scientists point out, "This experiment was based on examination of rats who survived for two years while most of their group had previously succumbed to old age. Since it is true that most types of malignancy increase markedly in old age, perhaps older bladders are more susceptible to cancer and will respond to any of a variety of foreign substances if they are ingested in massive amounts."

Furthermore, the rats were fed not pure cyclamate but Sucaryl, which is composed of cyclamate and saccharin. "How can the FDA be positive that the cyclamate and not the saccharin is causing the tumors?" the researchers wonder.

Government news releases promise a new artificial sweetener to be placed

on the market early in 1970. This is reputed to be saccharin with a little sugar added to kill the bitter aftertaste. Saccharin has not received the ten years of testing which cyclamate did before it was released. In massive doses, saccharin has proved more mutagenic than cyclamate. But it is already being used in soft drinks.

“We are very much alarmed that the cyclamate in food products is even now being replaced with saccharin as the sweetening agent. In forcing this change, the FDA may be responsible for creating a national disaster in the future,” Drs. Inhorn and Meisner state.

“You are told on every pack that ‘cigarette smoking may be hazardous to your health’; yet you are free to use cigarettes at your own discretion.

“While we might agree with the merits of regulating the recommended total daily intake and possibly prohibiting this product for children, as is done with alcohol and cigarettes, we can see no reason for a total ban on cyclamate consumption based on the data currently available,” the Wisconsin scientists conclude.