Scare tactics on pesticides mislead public

by C. Everett Koop, former Surgeon General of the U.S. Reprinted with permission from The Grass Roots, Wisconsin GCSA

Back in my former incarnation as a surgeon, I was distressed when cyclamates were taken out of soft drinks. I had found Fresca very much to my liking.

The reason these substances were banned was because of experiments on rodents. The scientists found that high doses of cyclamates cause cancer in rats.

Translating those scientific studies to someone my size, I would have had to drink four bathtubs full of Fresca daily for about eight years to have an equivalent dosage.

Those who read murder mysteries know that with poison, it is the dose that counts. With coffee, it takes 96 cups to deliver a toxic dose of caffeine, and with turkey, 3.8 tons to deliver a toxic dose of malonaldehyde.

In the days of my early surgical career, the state of the art in detecting the concentration of toxins was beginning to approach a sensitivity of one part per million. Anything below that was considered to be zero residue.

In 1965 we were able to test for parts per billion; by 1975 parts per trillion. And now we are approaching the time when we will be able to test for parts per quadrillion.

Even parts per million is minuscule measurement. Converted to time, it is one second per two years. Parts per billion converts to one second every 32 years. And parts per trillion comes out in time to a sensitivity of one second every 32,000 years.

Americans are concerned because they are confused. They are confused because no one sorts out for them various components of what has become the food safety issue. The public does not have a very good grasp of the relationship between the dose of a toxic substance and its risk in human beings. Their information comes from those who revel in using

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scare tactics instead of science to warn the public about dangers in the food supply.

These scare tactics lead us down the wrong path. We end up creating concern where it isn't necessary and ignoring concerns that are real.

For instance, some people think that all man-made substances, such as

pesticides, should be removed from our food supply, and that everything occurring in nature is beneficial.

To sell nothing except foods untreated by pesticides would not only leave storekeepers with rotting food but would also fail to protect the consumer against molds that in high enough concentration can be lethal.

People who are so worried about pesticides fail to realize that the cancer rates have dropped over the past 40 years. Stomach cancer has dropped more than 75 percent, while rectal cancer has dropped more than 65 percent.

In the food supply — as in all other public health questions—we need better understanding of the difference between risk and hypothetical risk.

There is risk in almost everything we do, so we need to concentrate on the differences. The chances of your being killed in a motor vehicle (1 in 6,000) are much more real than are threats from pesticides. Yet that doesn't keep us off the road, either as passengers or as pedestrians.



There is another concern I have. By focusing on a hypothetical risk, like that from pesticides, not only do people find their anxiety levels elevated, but by focusing on a straw man, they also feel they are doing something to improve their health.

In doing so, they often neglect all the other things that they could be doing more readily, more legitimately and with greater effect, such as paying attention to smoking, alcohol, exercise, balanced diet and so on.

Our food is not only the safest but also the most abundant in the world. Science and good sense will eventually prevail, but not until the pesticide terrorists have had another lick or two.

EDUCATION NOTES

Bethesda Country Club will host a GCSAA technical training seminar on Thursday, November 18. These meetings are designed to provide additional training for the superintendent's support staff.

Specifically, Bethesda's seminar is designed for Irrigation Specialists discussing irrigation efficiency and system maintenance. Participants will learn about:

 Soil-plant-water relationships to improve field judgment
Reducing water usage by

raising efficiency

Using evapotranspiration values to calculate plant needs

Measuring soil infiltration rates

 Troubleshooting components
Evaluating water quality and effluent use

Head layout and sprinkler

performance

Cost: \$95 per person. **Reservations** can be made (with a credit card) through GCSAA: phone-913-832-4444 or fax-913-832-4449.

As always, if you need further information, please contact me at 301-365-0100.

Dean Graves, Education Chairman



