With all the media coverage of alleged "carcinogens," it is no wonder that Americans are confused as they try to distinguish the real from the hypothetical causes of human cancer. Over the past few years alone, the media have reported claims from various so-called "environmental" groups about cancer threats from PCB traces in farmed salmon, acrylamide in French fries, nitrite in hot dogs, PCBs in the Hudson River, dioxin in paper towels, and trace levels of naturally occurring arsenic in drinking water. As I write this, the media is hyping a new "report" from the Environmental Working Group that claims that a spectrum of commonly used cosmetics elevates the risk of breast cancer.

In almost all of these cases, the term "carcinogen" is derived from the observation of increased cancer rates in laboratory animals but does not necessarily imply human cancer risk. And in the case of arsenic, which in high dose is indeed a known human carcinogen, there is no evidence that human exposure to very low levels increases cancer risk. It is "the dose that makes the poison."

In all this confusion, there is a national organization--an "authority figure"--which could help us and clearly separate the known causes of cancer, particularly those within our control, from the hype based only on animal testing. That organization is the National Cancer Institute, an organization boasting the most distinguished cancer epidemiologists in the world.

Thus it was with extreme disappointment that I read a relatively new publication from NCI, *Cancer and the Environment: What You Need to Know, What You Can Do*. After reading this booklet, consumers will be more confused than ever before.

In their discussion of what causes or is likely to cause human cancer, the National Cancer Institute abdicates its authority to the National Toxicology Forum, a group that every two years releases its "Report on Carcinogens," a mixed-up list of chemicals and substances some of which cause cancer in humans, while some are simply animal carcinogens. The top cancer epidemiologists in the world delegated their discussion of what causes human cancer to a group of toxicologists!

Like the NTP list, the NCI publication's list of "known or likely" causes of cancer lumps together tobacco, pesticides, and dioxin. In the discussion of pesticides as a cause of human cancer, the focus is on occupational studies of cancer patterns in farmers (studies that have produced conflicting results)--but surely consumers reviewing the NCI list of "causes of cancer" will be frightened and rush to the health food store to buy organic, pesticide-free produce. In reality, there is no evidence whatsoever that the approved, regulated use of pesticides contributes to the toll of human cancer.

In addressing how scientists identify "cancer causing substances," the NCI publication embraces
anti-chemical rhetoric and uncritically accepts the mouse-is-a-little-man premise, noting:

"[O]ver the past 30 years scientists have worked hard to identify substances...in the environment that cause cancer. This is a challenging task because there are more than 100,000 chemicals commonly used by Americans in household cleaners, solvents, pesticides, food additives, lawn care products |" Such a statement clearly communicates the message that these chemicals are likely to be involved in the causation of cancer--when indeed they are not.

Regarding the use of animal tests to predict human cancer risk, the NCI tells us that laboratory animals "are generally similar to humans in their response to carcinogens," not pointing out that animal cancer responses vary dramatically from one animal species to the next--let alone between rodents and humans. There is a passing reference to "naturally occurring carcinogens" but nowhere is it noted that an abundance of both natural and synthetic chemicals have been shown to be carcinogenic in laboratory animals--and the vast majority of scientist believe that human exposure to trace levels of such animal carcinogens pose no known risk for human cancer.

The reader is left with the unspoken but resoundingly clear message from NCI that in the interest of prudence, we should prevent human exposure to any level of any industrial chemical that at high dose causes cancer in rodents.

This fall, the American Council on Science and Health (ACSH) will be releasing its new book America's War Against Carcinogens: Reassessing the Use of Animal Testing in Predicting Human Cancer Risk. In this book ACSH is highly critical of the NCI for abdicating its responsibility in educating American consumers on the causes of cancer. We note that over the past decade ACSH has on numerous occasions contacted NCI asking the Institute to make a statement about the latest media cancer scare. Most recently, we contacted NCI and asked them to make a statement to the effect that eating farmed salmon posed no known risk of human cancer. Similarly, we requested such a statement regarding acrylamide traces in French fries and other high-carbohydrate foods. NCI has repeatedly refused to make such clarifications to the public. Now, with its blurred presentation on what does and does not constitute a human cancer risk, NCI has further muddied the waters about this critically important subject.

Why does our repository of national cancer experts refrain from giving useful guidance to the American public on the real causes of human cancer? At ACSH, we wonder if it may be because the cancer agency is trying to avoid stepping on the toes of its sister agency, the Environmental Protection Agency, for political rather than health or scientific considerations. If so, NCI does a deadly disservice to the public they should be serving.

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