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OP-ED COLUMNIST

Cancer From the Kitchen?

By [NICHOLAS D. KRISTOF](#)

The battle over health care focuses on access to insurance, or tempests like the one that erupted over new mammogram guidelines.

But what about broader public health challenges? What if breast cancer in the United States has less to do with insurance or mammograms and more to do with contaminants in our water or air -- or in certain plastic containers in our kitchens? What if the surge in asthma and childhood leukemia reflect, in part, the poisons we impose upon ourselves?

This last week I attended a fascinating symposium at Mount Sinai School of Medicine in New York, exploring whether certain common chemicals are linked to breast cancer and other ailments.

Dr. Philip Landrigan, the chairman of the department of preventive medicine at Mount Sinai, said that the risk that a 50-year-old white woman will develop breast cancer has soared to 12 percent today, from 1 percent in 1975. (Some of that is probably a result of better detection.) Younger people also seem to be developing breast cancer: This year a 10-year-old in California, Hannah, is fighting breast cancer and recording her struggle [on a blog](#).

Likewise, asthma rates have tripled over the last 25 years, Dr. Landrigan said. Childhood leukemia is increasing by 1 percent per year. Obesity has surged. One factor may be lifestyle changes — like less physical exercise and more stress and fast food — but some chemicals may also play a role.

Take breast cancer. One puzzle has been that most women living in Asia have low rates of breast cancer, but ethnic Asian women born and raised in the United States don't enjoy that benefit. At the symposium, Dr. Alisan Goldfarb, a surgeon specializing in breast cancer, pointed to a chart showing breast cancer rates by ethnicity.

“If an Asian woman moves to New York, her daughters will be in this column,” she said, pointing to “whites.” “It is something to do with the environment.”

What's happening? One theory starts with the well-known fact that women with more lifetime menstrual cycles are at greater risk for breast cancer, because they're exposed to more estrogen. For example, a woman who began menstruating before 12 has a 30 percent greater risk of breast cancer than one who began at 15 or later.

It's also well established that Western women are beginning puberty earlier, and going through menopause later. Dr. Maida Galvez, a pediatrician who runs Mount Sinai's pediatric environmental health specialty unit, told the symposium that American girls in the year 1800 had their first period, on average, at about age 17. By 1900 that had dropped to 14. Now it is 12.

A number of studies, mostly in animals, have linked early puberty to exposure to pesticides, P.C.B.'s and other chemicals. One class of chemicals that creates concern — although the evidence is not definitive — is endocrine disruptors, which are often similar to estrogen and may fool the body into setting off hormonal changes. This used to be a fringe theory, but it is now being treated with great seriousness by the [Endocrine Society](#), the professional association of hormone specialists in the United States.

These [endocrine disruptors](#) are found in everything from certain plastics to various cosmetics. “There’s a ton of stuff around that has estrogenic material in it,” Dr. Goldfarb said. “There’s makeup that you rub into your skin for a youthful appearance that is really estrogen.”

More than 80,000 new chemicals have been developed since World War II, according to the [Children's Environmental Health Center](#) at Mount Sinai. Even of the major chemicals, fewer than 20 percent have been tested for toxicity to children, the center says.

Representative Louise Slaughter, the only microbiologist in the House of Representatives, introduced legislation this month that would establish a comprehensive program to monitor endocrine disruptors. That's an excellent idea, because as long as we're examining our medical system, there's a remarkable precedent for a public health effort against a toxic substance. The removal of lead from gasoline resulted in an 80 percent decline in lead levels in our blood since 1976 — along with a six-point gain in children's I.Q.'s, Dr. Landrigan said.

I asked these doctors what they do in their own homes to reduce risks. They said that they avoid microwaving food in plastic or putting plastics in the dishwasher, because heat may cause chemicals to leach out. And the symposium handed out a reminder card listing “safer plastics” as those marked (usually at the bottom of a container) 1, 2, 4 or 5.

It suggests that the “plastics to avoid” are those numbered 3, 6 and 7 (unless they are also marked “BPA-free”). Yes, the evidence is uncertain, but my weekend project is to go through containers in our house and toss out 3's, 6's and 7's.

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