

THE FEAR PROFITEERS:

Do ‘Socially Responsible’ Businesses Sow Health Scares to Reap Monetary Rewards?

Edited by

Bonner Cohen, Ph.D.

John Carlisle

Michael Fumento

Michael Gough, Ph.D.

Henry Miller, M.D.

Steven Milloy

Kenneth Smith

Elizabeth Whelan, Sc.D., M.P.H.

Hundreds of thousands of deaths a year from smoking is old hat, but possible death by toxic waste, now that's exciting. The problem is, such presentations distort the ability of viewers to engage in accurate risk assessment. The average viewer who watches story after story on the latest alleged environmental terror can hardly be blamed for coming to the conclusion that cigarettes are a small problem compared with the hazards of parts per quadrillion of dioxin in the air, or for concluding that the drinking of alcohol, a known cause of birth weight and cancer, is a small problem compared with the possibility of eating quantities of Alar almost too small to measure. This in turn results in pressure on the bureaucrats and politicians to wage war against tiny or nonexistent threats. The "war" gets more coverage as these politicians and bureaucrats thunder that the planet could not possibly survive without their intervention, and the vicious cycle goes on.

—Michael Fumento, *Science Under Siege*

CONTENTS

EXECUTIVE SUMMARY	i-iii
PREFACE.....	I-III
ACCIDENTALLY POISONOUS APPLES: Does Everything Cause Cancer?.....	1-13
History of Alar.....	2
Consumer Interest	6
Natural Resources Defense Council	8
Fenton Communications.....	12
THE SILICONE DEBATE	15-28
Safety	16
Media Frenzy	17
Consumer Groups Press the Issue	23
FDA Under Fire	24
Command Trust Network	25
DEADLY DAIRY FARMS: Mother's Milk Doesn't Do the Body Good.....	29-39
ENDOCRINE DISRUPTERS, PLASTIC, DIOXIN AND DEATH--What's That All About?	40-62
Endocrine Disrupters	41
Our Stolen Future Authors.....	48
W. Alton Jones Foundation.....	49
Publicity.....	51
Endocrine Disrupter Legacy.....	52
Plastics	53
Dioxin	54
Endocrine Disrupters in Plastics	59
Dynamics of Accusations.....	61
The Accusing Organizations	62
SIX DEGREES OF FINANCIAL SEPARATION: Washed Up in the Tides of the Environmental Movement.....	64-67
The Tides Foundation	65
Final Comments.....	68-69
About the Editors.....	70

**FEAR PROFITEERS:
Are America's Socially Responsible Businesses Sowing Health Scares to Reap
Monetary Rewards?**

Executive Summary

Rarely do consumers get the whole truth. We are constantly inundated with marketing ploys and goaded into buying things that supposedly will make us look younger or feel better. While we often listen without questioning the source, it is time to look more closely at some of the agendas that affect your purchasing habits.

Recent research has uncovered a tangled web of non-profit advocacy groups with a public relations "ring leader" playing spider. On several fronts--mostly those related to the environment or your health--these groups, have executed a series of "scare campaigns" whose success plays on consumer fears and emotion. These groups have names that you might trust and equate with good causes. But they deceive. Who would have thought that "non-profit" could mean "big profit?"

Fenton Communications, a Washington, DC-based public relations firm, bills itself as the nation's leading "public-interest" firm. It is a founding member of the so-called "Business for Social Responsibility." Yet Fenton has played a key role in a growing number of health scare campaigns involving both his non-profit and for-profit clients. Their practices combine junk science with a hidden agenda to scare consumers away from safe products, supposedly all in the name of protecting public health and the environment. Examples of these scare campaigns included:

- **Alar.** On behalf of the Natural Resources Defense Council (NRDC), Fenton convinced "60 Minutes" to devote a segment in February 1989 to the NRDC report, *Intolerable Risks: Pesticides in your children's food*. The NRDC report linked alar, a chemical growth regulator used on apples, with cancer. But the report's science was faulty and not reviewed by independent experts before its release. Though *Intolerable Risk* lacked scientific merit, the campaign actually *succeeded!* It caused hundreds of millions of dollars in losses, ruined some apple farmers and resulted in the manufacturer's voluntary withdrawal of the product from use. The report's flaws subsequently became well-known, but too late to repair the damage. A safe and useful product was fatally branded as cancer-causing without factual basis. David Fenton claimed in an interview that the main goal of the Alar scare was to increase the NRDC's profile and their bank roll: "The PR campaign was designed so that revenue would flow back to NRDC from the public." (*Propaganda Review*, Summer 1998). Consumer health and safety was not the issue.
- **Give Swordfish a Break.** Fenton recently tried to engineer another scare involving swordfish. Also on behalf of the NRDC, the campaign claimed swordfish were an endangered species. Fenton

pushed the *Give Swordfish A Break* campaign, announcing that 78 Washington, DC restaurants banned swordfish from their menus. The scare campaign had two problems: 1) many of the restaurants on Fenton's boycott list never officially joined the boycott and continued to serve swordfish, and 2) the federal government never classified swordfish as endangered. NRDC declared "victory" and called off the boycott, though it was probably more an expression of capitulation than victory. Again, millions of dollars in damages to the industry and ruined fisherman victims left in the wake.

- **Leaky Breast Implants.** During the 1990s, Fenton handled communications for the Command Trust Network, a support group for women with breast-implant problems. The real motives behind the effort became clear when notorious breast implant lawyer, John O'Quinn, appeared on Fenton's client roster. According to a 1998 *Chicago Tribune* article, O'Quinn's law firm signed Fenton "to a multimillion-dollar contract" to flack for O'Quinn's lucrative litigation. Fenton pushed junk science in the media and turned the Command Trust Network recruiting outfit for silicone breast implant plaintiffs – all despite numerous studies reporting no special health problems among women with silicone breast implants.
- **Health Care Without Harm.** In 1998, Fenton Communications and its non-profit media relations arm, Environmental Media Services, launched another scare campaign called Health Care Without Harm, ostensibly on behalf of the National Environmental Trust. Health Care Without Harm pointed to a danger of phthalates, chemicals used to make plastic flexible for products such as IV bags, teething rings, nipples, and toys. The National Environmental Trust sought a ban on phthalates in toys and asked for more federal regulation. Former Surgeon General C. Everett Koop later chaired a commission to investigate the claims and found no associated health risk.
- **Our Stolen Future.** In 1996, Fenton Communications raised fears about a worldwide decline in sperm production to promote a book published by Fenton client Penguin Books. The book, *Our Stolen Future*, alleged that synthetic chemicals were causing developmental and reproductive problems in humans, such as low sperm counts, impotence and even homosexuality. Four years after *Our Stolen Future* Later, its allegations remain unsubstantiated.
- **Bovine Growth Hormone.** In 1997, Fenton and Environmental Media Services managed the media during a lawsuit by Ben & Jerry's for the right to label their ice cream as free of the bovine growth hormone (rBGH). Ben & Jerry's claimed rBGH could cause

cancer. The U.S. Food and Drug Administration, though, has said rBGH is safe.

If you have been scared about food or pesticides in the last 10 years, chances are Fenton Communications played a key role in provoking that fear. The scares just don't ever stop. But they all have one thing in common -- a lack of evidence and abundance of deceit. The claims involved in the scares have all been refuted in public. By the time the scares have been debunked, however, the campaigns have taken such a strong hold that the truth usually is irrelevant.

There is no reason why the public should unwittingly continue being the victims of campaigns that play on its fears. There is no reason why a "socially responsible business -- which Fenton Communications claims to be -- should not be held to the same ethical standards by which every other business is judged.

The following report has been published through the efforts of the National Center for Public Policy and Junkscience.com. For more information on this and related topics, you can also visit <http://www.NoMoreScares.com>.

PREFACE

In “Analyze This,” a *Wall Street Journal* article from February 8, 2000, Jonathan Eig looks at the most recent plague to hit the American public. “Anxiety,” he writes, “has overcome depression to become the nation’s most prevalent mental-health problem.” Eig’s commentary discusses our susceptibility to fear and how ironic it is that we tend to internalize and believe our fears more when we are experiencing prosperous times, as if this anxiety fills an unbearable emptiness. Our most prosperous times are often our most vulnerable times. We are incredibly vulnerable to the media and those who seek to manipulate it. We have no control over what we are told, who is relaying the information and why, how we interpret it, or the way we receive it, with the exception of avoiding any or all media outlets altogether, which is certainly not being encouraged here. As an example, Eig’s article points to today’s low crime rate and how it pales in comparison to the most colorful media account of individual murders, and this gives us reason to continue fearing crime at a heightened level. It is important to emphasize that the media are not the instigator of this plague of anxiety. In fact, we need the media to help us sort the barrage of information we are presented with every day. But, at the same time, our vulnerability and fears hinge on that need. In other words, instead of being placated by the norm, we cling to the drama.

Everything we see and do, good or bad, invokes our fears to some extent—even progress, which many fear because it requires investigating, learning, and understanding the unknown. Our nation has clearly progressed. Science and technology are affording us numerous benefits—curing diseases, enhancing communication, developing Third World countries, and contributing to the relief of world hunger; yet, we cannot help but seek out adverse effects to these advancements. Our penchant for fear allows this, and those who abhor the notion of progress propagate that fear by making sure their voices are heard in this democratic society. There is no doubt that we are progressing rapidly. That being said, we should certainly consider all potential ramifications of acquiring new knowledge, making sure all of this “intelligence” is used to benefit society and the world as a whole. But, we should not stop in our tracks and allow our fears to get the best of us.

There are many who fear opening new economic frontiers and technology shun technological and scientific advancements. Some do this out of genuine fear and steadfast belief, others, for profit. The latter are undeniably the most dangerous and the most deceptive. Their practice is an *art* in progress they have developed over decades; and it is so deceptively interwoven that, in many cases, it goes unnoticed. Through fear, fraud, and abuse, they utilize the media to capitalize on public health scares under the guise of seemingly worthy causes. They are “extreme radicals,” certain “environmentalists,” and even some of our “socially responsible businesses.” They use a variety of means to disseminate their messages. Research has shown that one of the most efficient and effective vehicles for such feats is a socially responsible, environmentally conscious, consumer-protective, experienced, and well-connected public relations firm.

This paper is a case study intended to point to the rituals of particular groups whose “causes” were to effect and give birth to millions of victims for their own profitable gain. These victims are the American public that is so easily misled by well-staged, grandiose, and colorful media gestures designed to garner attention. These victims are the industries whose accomplishments have put us where we are today.

In terms of development, almost everything is relative to the United States. In many cases, this country has set the high standard, and it has proven to be a profitable model. The economy has continued to prosper as a result of technological developments and industrialization, and that has enabled our collective prosperity. Naturally, progress has not been entirely without some unwanted side effects. We have environmental and social challenges due to industrialization, increased population, and increased demand—for everything.

Before pointing fingers and rashly blaming the obvious targets, we ought to reconsider. Consider what happened when we thought we were cleaning the air by adding MTBE to gasoline. The gasoline additive touted for burning cleaner gasoline is now a major detriment to our water supply. What was apparently instant gratification to many environmentalists has gone awry and seriously backfired, not to mention necessitating the allocation of millions in federal funds

to remedy the situation.[†] So much for cleaning the air. Likewise, consider the dilemma we are currently facing with regard to genetically modified crops. Fearful critics proselytize that we should only eat *natural* foodstuffs. But, what exactly is natural? Moreover, if we do follow this dogma, would we then be consuming something natural that is tainted (perhaps undetected prior to consumption) by something worse that could have been controlled by something *unnatural*? Perhaps we should think this through before jumping to conclusions most likely reached as a result of deceptive media campaigns and demonstrative statements that intended just that kind of knee-jerk reaction.

It is important to remember that nobody lives in a glass house, not the rich and not the industry that made our country so *rich*. We all breathe the same air, have access to the same household goods and food. We all have children for whom we want better lives. In order to progress and manage the effects of that progress pragmatically, we need to strip the issues down to a point where risk–benefit analyses are feasible.

We should heed the fact that science with its technical jargon does not always provide the most entertaining, media-friendly stories, regardless of merit. Within the last year, major newspapers published 124 accounts of plane crashes with fatalities. In contrast, there were no stories about the standard, expected safe landings. The only place to find out how many thousands of flights landed safely would be through the records of individual airlines. Based on coverage alone, the media’s interpretation of risk is not one that allows for or can be translated into qualitative risk–benefit assessments. Scares sell newspapers and magazines; people do not rush out to buy the *New England Journal of Medicine* the day it hits the stores. We should return the authority to where it belongs—with our respected scientific and academic experts. Only then can we trust what we are told and make responsible decisions that are not based on fear.

The following paper details a case study that demonstrates a clear history of one firm that abused public trust and profited through the creation of unfounded public fears.

[†] Environmental Protection Agency, “EPA Takes Action to Address MTBE Contamination,” *PR Newswire*, July 6, 2000.

ACCIDENTALLY POISONOUS APPLES

Does Everything Cause Cancer?

DOES EVERYTHING CAUSE CANCER?

It was once believed that giving a teacher an apple would earn you favor. However, if this were done in or around February 1989, the teacher probably would have recoiled and whisked you to the principal's office because of the overt death threat that had been placed on the teacher's desk. During that time, apples were deemed poisonous by the general population due to the use of the pesticide Alar in their production.

History of Alar

The history of Alar began when Uniroyal Chemical Company first registered the pesticide with the United States Department of Agriculture (USDA), then the governing body of pesticides, in 1963.¹ Alar is the trade name for daminozide. It is a "systemic growth regulator" that was originally used on potted chrysanthemums. Alar was registered for food use in 1968.² One of its common uses was on apples. Alar allowed for a single, simultaneous harvest, partially by enabling the apples to stay on trees longer without dropping. This resulted in less bruising as well as making them shinier and more red.³ Alar also doubled their shelf life.⁴

In February 1989, activists and the media seeded the public with the notion that the apples they were eating contained a noxious cancer-causing chemical. In an infamous must-see episode of *60 Minutes*, "A is for Apple," Ed Bradley alerted the public that the apples they, and especially their children, were consuming were tainted with "the most potent cancer-causing agent in our food supply."⁵ Thus began the Alar scare.

The source of Bradley's claim was a report, *Intolerable Risk: Pesticides in Our Children's Foods*, published by the Natural Resources Defense Council (NRDC).⁶ The report claimed that Alar posed a massive public health threat to children and

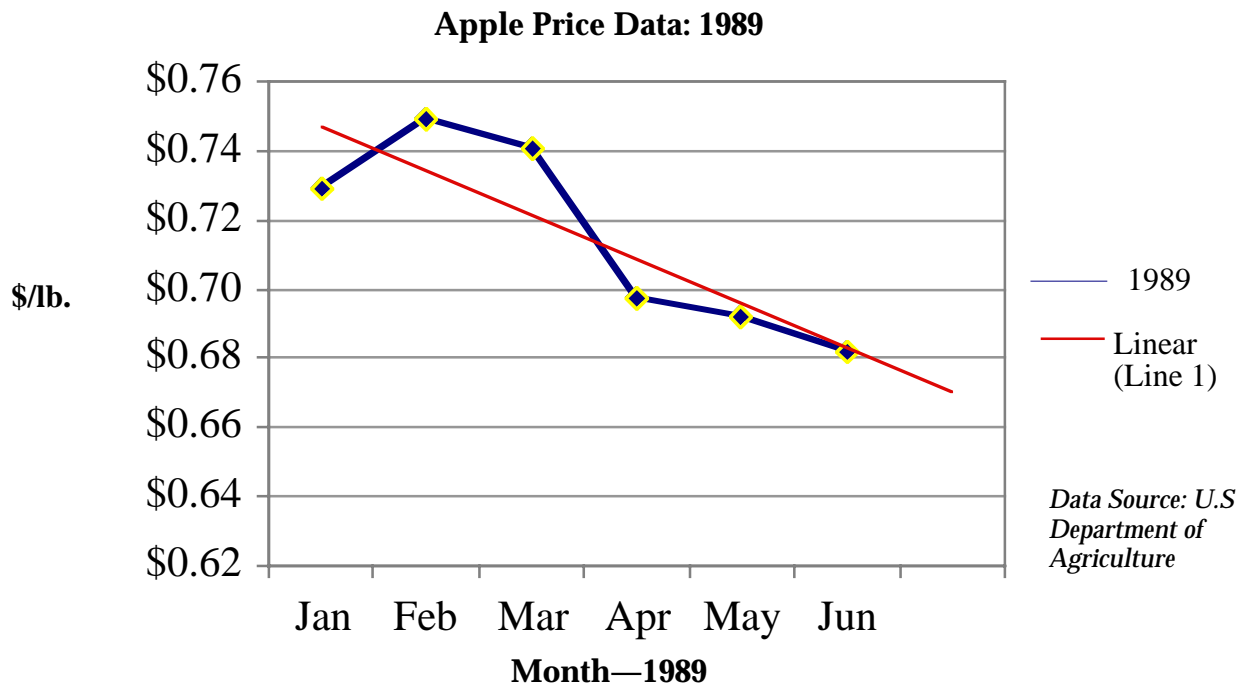
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1. Environmental Protection Agency, "Registration Eligibility Decision (R.E.D)," Office of Prevention, Pesticides and Toxic Substances." R.E.D. Facts. Document No. EPA-738-F-93-007, September 1993.
 2. *ibid.*
 3. Mark Stein, "The Chemical—What is It and Why is It Used?" *Los Angeles Times*, March 14, 1989.
 4. Michael Fumento, "The Politics of Cancer Testing," *American Spectator*, August 1990.
 5. *Grady Auvil et ux; et al. v. CBS "60 Minutes,"* U.S. District Court for Eastern District of Michigan. NO. CS-90-553-RJM. CBS *60 Minutes*, "A is for Apple," February 26, 1989.
 6. Bradford Sewell and Robin Whyatt, *Intolerable Risk: Pesticides in our Children's Foods*. New York: Natural Resources Defense Council, February 1989.

DOES EVERYTHING CAUSE CANCER?

that cancer risks were one hundred times higher than what the Environmental Protection Agency had originally estimated.⁷

As one would expect, the result was public mayhem and a disaster for apple farmers. School districts pulled apples and applesauce off their menus, consumers immediately questioned their pediatricians, and many grocery stores began to advertise Alar-free apples while the price of apples plummeted to its nadir.⁸

The chart below represents apple price data from the USDA.⁹ Looking closely at the trend in apple prices, one can see the effect the Alar scare had on the price of the popular food in addition to the implied effect on farmers.



The price of apples begins to decline in February, presumably due to the *60 Minutes* special. To quell the public discontent, on March 16, 1989, the Food and Drug Administration (FDA) issued a statement on Alar that included the following:

7. "EPA to Phase out Use of Alar by 1991," *The Seattle Times*, September 2, 1989.
8. Michael Fumento, *Science Under Siege: Balancing Technology and the Environment* (New York: William Morrow & Company, 1993), 19-20.

DOES EVERYTHING CAUSE CANCER?

The federal government believes that it is safe for Americans to eat apples, and the responsible agencies are working together to reassure the public of this fact. . . . The FDA, EPA, and the U.S. Department of Agriculture believe there is not an imminent hazard posed to children in the consumption of apples at this time, despite claims to the contrary.¹⁰

Unfortunately, the Food and Drug Administration did not have a well-connected public relations firm to approach *60 Minutes* to release its findings, so the public didn't pay attention to the release. Instead, the public had absorbed the initial *60 Minutes* story as gospel. In Washington state, the leading apple producer in the country, the price of the red delicious apple dropped 10 percent within a week of the report's release.¹¹ As shown in the chart on page two, the price continued to decline until June, which is also when Uniroyal voluntarily removed Alar from the market. But, if Alar was safe, why all the fuss?

Questions on the safety of Alar began back in 1973 when scientist Bela Toth published a study indicating that asymmetrical dimethylhydrazine (UDMH) was the cause of tumors in mice.¹² The pesticide Alar (by itself) normally contains approximately 1 percent UDMH. However, when broken down, and especially when heated, Alar goes through a hydrolysis, which increases the UDMH content to 5 percent.¹³ Thus, in certain products, such as applesauce, the percentage is even higher due to the further processing of the apple. Toth did a subsequent study replacing UDMH with Alar and he found similar results. The conclusion: Alar was causing tumors in mice.¹⁴

In 1980, as a result of Toth's "new" data, the Environmental Protection Agency decided to conduct a review of the pesticide. However, the review was foregone until litigation with the NRDC forced them to revisit the subject in 1984.¹⁵ According to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), a Scientific Advisory Panel had to review the presented data.¹⁶

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9. United States Department of Agriculture, Apples, Dollars Per Pound by Month for 1989, March 2000.
 10. Food and Drug Administration, Press Release, March 16, 1989. FDA Site. URL: / www.fda.gov/bbs/topics/NEWS/NEW00128.html, April 2000.
 11. Janet Key, "Seeds of Debate," *Chicago Tribune*, March 19, 1989.
 12. Joseph Rosen, "Much Ado About Alar," *Consumers' Research Magazine*, February 1991.
 13. *ibid.*
 14. *ibid.*
 15. *ibid.*
 16. *ibid.*

DOES EVERYTHING CAUSE CANCER?

The FIFRA scientific advisory panel announced its conclusions regarding the Toth studies in September 1985. According to the panel, there were many incongruities with Toth's data, and the Environmental Protection Agency therefore did not have sufficient evidence to ban Alar. They cited several problems as evidence of its ruling. A major criticism the panel cited was the incredibly high doses of UDMH and Alar that Toth had administered to the animals:

In both studies, Toth treated the animals with such high doses—29 milligrams per kilogram of body weight each day, higher even than the highest dose the EPA subsequently considered studying—that it was possible that the toxicity and attendant biochemical changes produced the tumors.¹⁷

That is to say that it was possible that the toxicity, not carcinogenicity, killed the animals. Toxicity is “the degree to which a chemical substance elicits a deleterious or adverse effect upon the biological system of an organism exposed to the substance over a designated time period.”¹⁸ Carcinogens are agents that can produce cancer.¹⁹ For example, if a person drinks a gallon of ammonia, will he die? Yes, but not from cancer. He will die because ammonia is poisonous in high doses, just like UDMH, or even alcohol, can be. Does this test the carcinogenicity of ammonia? No. It is in such high doses that its carcinogenic effects never had a chance to be measured. In a similar vein, water, when consumed in sufficient doses, will drown a person. It should be said that minimal exposure either to water, ammonia, or UDMH *may* be carcinogenic, but that does not mean they are toxic. In other words, despite the fact that all carcinogens are toxins, not all toxins are carcinogens. The difference is the volume, and as far as toxicity goes, “the dose makes the poison.”²⁰

In “Much Ado About Alar,” Joseph Rosen explains the technical process that makes high-dose testing problematic. “Extremely high doses of a chemical can kill cells, and the animal responds by producing new cells. This time of rapid cell growth is precisely the point at which cells are at greatest risk for cancer-

17. *ibid.*

18. Environmental Protection Agency, Integrated Risk Information System. EPA Web Site. URL: <http://www.epa.gov/ngispgm3/iris/gloss8.htm>, April 30 2000.

19. *ibid.*

20. “Alar Three Years Later, Science Triumphs Over Fear,” American Council on Science and Health: Special Reports, February 8, 1992.

DOES EVERYTHING CAUSE CANCER?

initiating events.”²¹ Thus, raising the dose increases the probability of cancer but does little to test the carcinogenicity of the chemical in question.

Other problems with the Toth studies included inappropriate control subjects, and a secondary look at the evidence showed a lower incidence of tumors than the initial conclusions indicated.²² Case closed, Alar sales should have continued. Not so fast. Regardless of the scientific advisory panel’s findings, the EPA did not rule out the possibility that Alar was a human carcinogen and requested that the manufacturer submit more test results.²³ As an agency charged with the responsibility of ensuring public health, we can appreciate that they are cautious; they have to be. The fact that they didn’t immediately yank Alar-treated apples from the shelves says something about the truth to the NRDC report.

Consumer Interest

Meanwhile, consumer advocacy groups, such as the NRDC and Ralph Nader’s Public Citizen, began their smear campaign to ban Alar: “Through threats, intimidation, and their access to media outlets, they waged war against Alar.”²⁴ Nader even admitted this on *The Phil Donahue Show* when he described how he personally contacted venues where apples were sold: “We’re going to start a campaign to get Alar out of apples but why don’t you save us a lot of trouble and yourself by saying that you’re not going to buy any apples or apple products with Alar from your growers.”²⁵ So, the stores began clamoring to get rid of apples and capitalized on Alar-free marketing practices by advertising “organic and natural” products.

Meanwhile, Uniroyal continued its studies on Alar and UDMH, which continued to show no increased incidence of tumors in rats or mice.²⁶ In the middle of the studies, however, the Environmental Protection Agency raised the “maximum tolerated dose” (MTD) to the level used in the Toth studies.²⁷ The

21. See note 12.

22. Fumento, *Science Under Siege*, quoting Joseph Rosen, *The Death of Daminozide. Pesticides and Alternatives*, (1990): 59.

23. See note 12.

24. See note 8, 24.

25. Phil Donahue, transcript, 1987, p. 2. Quoted in *Science Under Siege*.

26. See note 12.

27. Robert Bidinotto, “The Plot Against Alar.” Interview by American Council on Science and Health. *Readers Digest*, October 1990.

DOES EVERYTHING CAUSE CANCER?

maximum tolerated dose is the level at which any chemical must be tested in order to be deemed safe. Raising the dosage made no difference in the effect on rats, but it did differ in mice: “It was when mice were given doses of UDMH above the accepted toxicity threshold that tumors appeared.”²⁸ Regardless of the fact that everyone knew this would probably kill the animals, Uniroyal had to comply and change their tests. This move by the EPA put Uniroyal at a clear disadvantage considering that the dose had already been designated toxic (not carcinogenic) and lethal. Rosen commented that, “The dose was so high that 80 percent of the mice died prematurely because of toxicity.”²⁹

If the data obtained from tests on animals are representative of effects on humans, dosage must be taken into account. It is one thing to “err on the side of caution,” but the possibility of being too cautious exists. At certain quantities, practically everything can be harmful to both animals and humans. The EPA mandate required Uniroyal to test levels in male mice that were over 35,000 times higher than the highest estimate of preschoolers’ daily intake of the same substance.³⁰ In terms of apple juice consumption, humans would have to consume 500 gallons each day for 70 years to match the UDMH dosage given to the mice.³¹

Despite the fact that no study ever revealed Alar to be a human carcinogen, the EPA took preliminary action on February 1, 1989. Acting Administrator John Moore released a statement linking UDMH exposure to cancer.³² Despite the link, however, the EPA was proposing a ban that would occur after 18 months because, Moore stated, “We don’t think that the added burden of risk (over the next 18 months) is of sufficient magnitude to warrant this kind of (emergency) action.”³³ Interestingly, *60 Minutes* tried to encourage the EPA to refrain from making its announcement until the program’s Alar exposé, but the agency declined.³⁴

Thus was the stage set immediately prior to the release of the NRDC report on *60 Minutes*. Alar was there but not yet in the spotlight.

28. See note 12.

29. *ibid.*

30. *ibid.*

31. “Does Everything Cause Cancer?” *Consumers Research Magazine*, May 1989.

32. See note 8, 26.

33. Joseph Hebert, “EPA Proposes Banning Pesticide Regulating Apple Growth,” *Associated Press*, February 1, 1989.

34. See note 27.

DOES EVERYTHING CAUSE CANCER?

Natural Resources Defense Council

The NRDC is a private non-profit membership organization that has more than 170,000 members and contributors in the United States and abroad.³⁵ It also “serves as the litigation arm of the environmentalist movement.”³⁶ Note the description “litigation” is used instead of a more scientific label. The NRDC’s official scientific report was neither published by appropriately accredited scientists nor submitted for standard academic peer review. It is not surprising that the NRDC used the Toth data in its study.³⁷ In *Readers’ Digest*, award-winning journalist Robert Bidinotto explains, “[The NRDC report] was written by two NRDC staffers with master’s degrees in public health when a doctoral degree is considered a minimum standard to publish such a document, and by an NRDC lawyer.”³⁸

Any lack of peer review can have serious ramifications on both consumers and the credibility of the scientific community. According to the Food and Drug Administration’s Frank Young, M.D., Ph.D., “This was one of the worst instances where statements were made without the benefit of scientific review.”³⁹

While it is true that the NRDC report alone was enough to scare any skeptic, the organization also took a precautionary measure. In October 1988, to ensure complete success in its campaign to “raise awareness” of Alar, it spent \$26,000 to hire a Washington D.C.-based public relations firm.⁴⁰ The initial agreement with Fenton Communications was for five months, but the NRDC remains a Fenton Communications client as of this writing.^{41, 42} A *Wall Street Journal* article, “How a PR Firm Executed the Alar Scare,” reprinted extracts from one of Fenton

35. NRDC Profile. Capital Research Center, URL: <http://www.capitalresearch.org>, March 2000.

36. See note 8, 27.

37. See note 12.

38. See note 27.

39. William Gladwell, “Some Fear Bad Precedent in ALAR Alarm,” *Washington Post*, April 19, 1989.

40. Eleanor Randolph, “How a Pesticide Story Turned into a Public-Relations Hot Potato,” *The Seattle Times*, March 5, 1989. Nathan George, Farm Column, *Des Moines Register*, February 25, 1990.

41. “How a PR Firm Executed the Alar Scare.” Extract From Fenton Communications Memorandum. *Wall Street Journal*, October 3, 1989.

42. Fenton Communications Web Site. URL: <http://www.fenton.com>, April 2000.

DOES EVERYTHING CAUSE CANCER?

Communications President David Fenton's memoranda where he described the strategy and mechanics of the campaign:

The idea was for the 'story' to achieve a life of its own, and continue for weeks and months to affect policy and consumer habits. . . . Consumer feedback devices were built into the campaign, including self-published book sales and the first use of a 900 phone number by a non-profit group.⁴³

Fenton explained the strategy his organization used to execute the campaign in a May 22, 1989 press release:

Usually public interest groups release similar reports by holding a news conference, and the result is a few print stories. Television coverage is rarely sought or achieved. . . . Our goal was to create so many repetitions of NRDC's message that average American consumers (not just the policy elite in Washington, D.C.) could not avoid hearing it from many different media outlets within a short period of time.⁴⁴

With that end in mind, Fenton Communications negotiated months in advance to give *60 Minutes* an exclusive on the story. Then it arranged follow-up interviews with a variety of morning shows and news and women's magazines (not the most scientifically literate audience) for the next day to set off a whole new round of stories. When print media like *Newsweek* got wind of the controversy, Fenton Communications even sent Meryl Streep (Mothers and Others for Pesticide Limits) over to *Newsweek* to try to get the story killed. The story ran anyway, but it wasn't enough to ruin the public relations firm's strategy.⁴⁵

The NRDC's hiring of Fenton Communications proved to be a *fruitful* investment in more ways than one. Besides crippling the apple growers (by an estimated \$250 million), the Alar scare proved a fundraising boon to the NRDC, according to Fenton, who indicated that fundraising—and not raising awareness—was the ultimate point of scaring the wits out of American mothers.⁴⁶ In his memo, he wrote, "A modest investment by the NRDC re-paid itself many-fold in tremendous and substantial revenue."⁴⁷ Fenton reiterated this in an

43. "How a PR Firm Executed the Alar Scare." extract from Fenton Communications Memorandum. *Wall Street Journal*, October 3, 1989.

44. Fenton Communications, Press Release, May 22, 1989.

45. Kenneth Smith, "Alar Five Years Later: Science Triumphs Over Fear," American Council on Science and Health Special Reports, February 28, 1994, pp. 1-18.

46. Eleanor Randolph, "Venture in Managing News Backfires: Environmental Group Wins Attention but Angers Officials," *Washington Post*, March 3, 1989.

47. "How a PR Firm Executed the Alar Scare," extract from Fenton Communications Memorandum, *Wall Street Journal*, October 3, 1989.

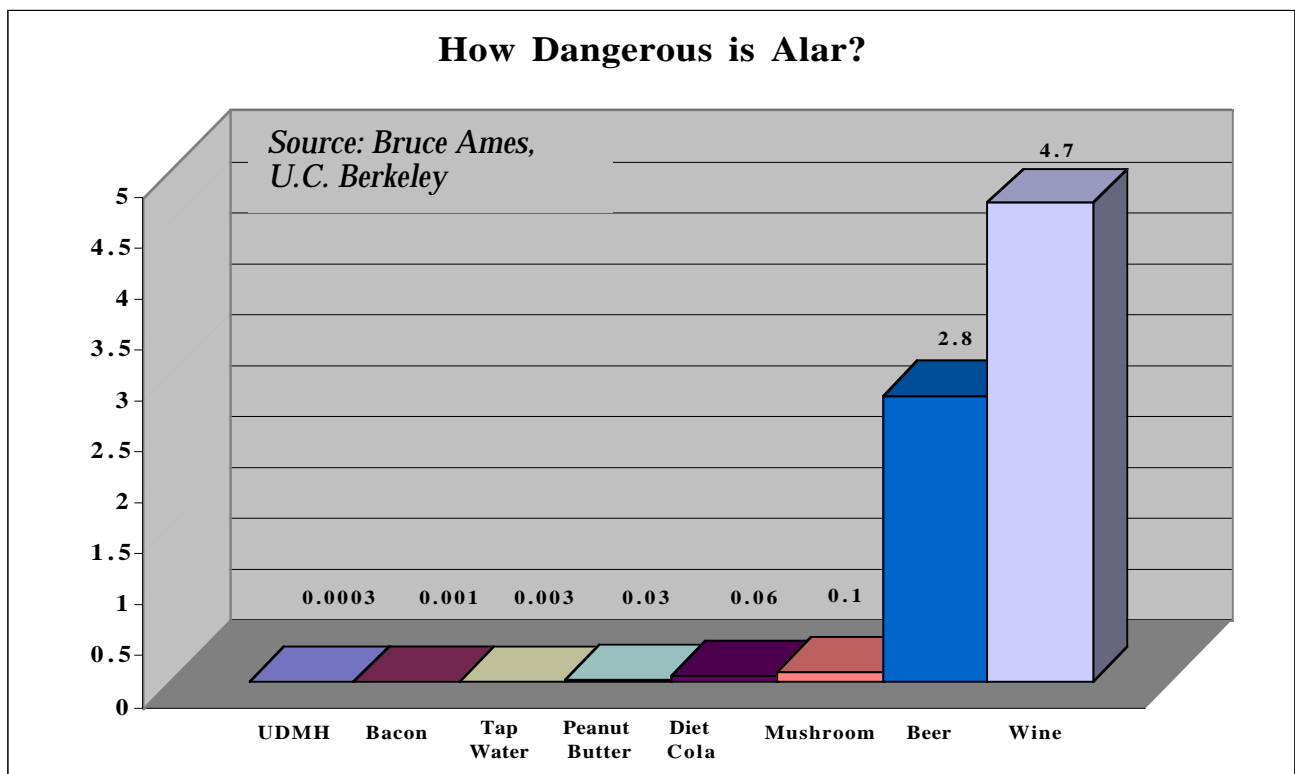
DOES EVERYTHING CAUSE CANCER?

interview with *Propaganda Review*, “The PR campaign was designed so that revenue would flow back to NRDC from the public.”⁴⁸

The NRDC was not the only group to profit from the Alar alert, which suggests there were more than a couple of players on this team: “Overnight, suppliers of organic produce cannot keep up with demand. Traditional supermarkets are opening up pesticide-free sections.”⁴⁹

Likewise, the apple growers were not the only victims. On June 2, 1989, Uniroyal Chemical Company voluntarily removed the pesticide from the market. Uniroyal still stood behind the claims that Alar was safe but said it was being removed due to public concern and confusion.⁵⁰

Bruce Ames, a Berkeley professor of biochemistry and molecular biology, and Lois Gold developed the most widely used test to determine the level of carcinogenicity of various chemicals. The following chart shows where ALAR (UDMH) is on the scale:



48. Jack Raso and Kenneth Smith, “Apples and Crossbones,” *Environment News*, <http://www.heartland.org/environment/may99/acsh.htm>, March 2000.

49. “How a PR Firm Executed the Alar Scare.” extract From Fenton Communications Memorandum, *Wall Street Journal*, October 3, 1989.

50. Joseph Hebert, “Alar Sales Halted By Manufacturer,” *Associated Press*, June 2, 1989.

DOES EVERYTHING CAUSE CANCER?

Obviously, none of the Alar propaganda put it next to its other common carcinogenic brethren.

The Alar scare has found a place in history as the quintessential scare campaign. Usually linked with “environmental flack” David Fenton, it is often referred to as the “phony apple scare.” Regardless, it laid out the blueprints for other equally ambitious organizations to follow. Indeed, the campaign was truly brilliant. It blew the hinges off the doors keeping activists at bay, and accelerated a movement by proffering educational lessons that enlightened even David Fenton himself:

Usually, it takes a significant natural disaster to create this much sustained news attention for an environmental problem. We believe this experience proves there are other ways to raise public awareness for the purpose of Congress and policymakers.⁵¹

Another environmentalist, Stephen Schneider, author of *The Genesis: Climate and Global Survival*, elaborates on his own practices and suggests the “other ways” to which Fenton was referring. In discussing how to gain support, Schneider says,

That, of course, entails getting loads of media coverage. We have to offer up scary scenarios, make simplified, dramatic statements, and make little mention of any doubts we may have . . . each of us has to decide what the right balance is between what is right and what is honest.⁵²

Since there isn't a judge standing at the line of ethics to slap wrists when it is crossed, the public can only hope that individuals will operate with the public's best interests in mind. The Alar case is not very encouraging.

51 “How a PR Firm Executed the Alar Scare.” excerpt From Fenton Communications Memorandum. *Wall Street Journal*, October 3, 1989.

52 See note 8, 361.

DOES EVERYTHING CAUSE CANCER?

Fenton Communications

Fenton Communications calls itself “the nation’s leading public interest communications firm.”⁵³ As such, it provides a wide range of media services for its clients, and the firm’s roster runs the gamut of client types from non-profit organizations to grant-making foundations to large corporations.

Among other non-profit/advocacy groups, the firm works for The Environmental Working Group, Greenpeace, The National Environmental Trust, the World Wildlife Fund, Citizen Action, and Public Citizen.⁵⁴ Coincidentally, Fenton shares the aforementioned clients, along with Island Press, with Environmental Media Services (EMS).

The founder of EMS, Arlie Schardt, is both a friend of David Fenton and paid consultant to Fenton Communications.⁵⁵ Schardt is also the former Executive Director of the Environmental Defense Fund, and a current board member of Friends of the Earth.⁵⁶

Renting Fenton Communications’ office space and sharing some personnel as well, EMS is a *non-profit* communications clearinghouse whose stated goal is to expand media coverage of public health and environmental issues.^{57, 58} EMS, according to Julian Morris, director of the Environment Programme at the Institute of Economic Affairs in London, is “the second largest project of the Tides Center (offshoot of Tides Foundation).”⁵⁹ EMS is known for assisting, if not completely organizing, the World Trade Organization (WTO) protests in Seattle last December: “EMS sponsored or was associated with 12 events in Seattle, including a rally outside the convention center on November 29, which preceded

53. Fenton Communications Home Page. URL: <http://www.fenton.com>, April 2000.

54. Fenton Communications Home Page. URL: <http://www.fenton.com/docs/clients.html>, April 2000.

55. Julian Morris, “From Seattle’s Frontlines: Environmentalists, Organized Labor Attempt to Capture WTO Agenda.” Capital Research Center, January 2000. Capital Research Center Web Site. URL: <http://www.capitalresearch.org/trends/ot-0100.html>.

56. Environmental Media Services Web Site. URL: <http://www.ems.org/about.html>, April 2000.

57. Matt Labash, “Scaremonger,” *Weekly Standard*, April 29, 1996.

58. Environmental Media Services Web Site. URL: <http://www.ems.org/about.html>, April 2000.

59. See note 55. Note: The Tides Center was established and registered by activist Mark Ritchie, who leads the Institute for Agriculture and Trade Policy (IATP). IATP is also a Fenton/EMS client.

DOES EVERYTHING CAUSE CANCER?

the violent rally the next day.”⁶⁰ Morris, who attended the WTO talks in Seattle, credited EMS with organizing the protest.⁶¹

A number of EMS’ news conference announcements list Fenton Communications’ employees as contacts though they can only be identified through Fenton Communications’ telephone number.⁶² For example, Fenton Communications and EMS worked together to release a World Wildlife Foundation (WWF) report; discuss the Bonn, Germany climate negotiations; hold a panel to discuss “citizen suits” against violators of the Clean Air Act (*Friends of the Earth v. Laidlaw Environmental Services*); and discuss climate negotiations in Buenos Aires with the NRDC.⁶³ Recently, they have also teamed up in several conferences related to biotechnology and genetically modified crops. Fenton Communications’ Stacia Tipton is the contact for the majority of the EMS events listed above. On some of the media advisories, she is of Fenton Communications; on others, she is from EMS. For example, on a January 2000 announcement for an event debating the pros and cons of biotechnology, Tipton is a Fenton contact with EMS’ phone number.⁶⁴

Fenton Communications and EMS work hand in hand. In fact, EMS Director Arlie Schardt admits that EMS hires Fenton Communications with tax-exempt, non-profit money every week.⁶⁵ A few of their recent collaborative campaigns include the “Give Swordfish a Break” campaign and attempts to eliminate the recombinant bovine growth hormone rBGH from the food supply.

Fenton Communications also works for a number of corporations and major grant-making foundations, such as The W. Alton Jones Foundation, Pew Charitable Trusts, and the Ford Foundation. Incidentally, the NRDC was established by a grant from the Ford Foundation; and the Ford Foundation (with the help of the Tides Foundation) funded, or at least “provided the seed money”

60. *ibid.*

61. *ibid.*

62. “Funding of a study recently published in the British Medical Journal, *The Lancet*, which Suggests Harmful effects of Genetically Engineered Foods,” Environmental Media Services Briefing, *Federal News Service Daybook (FNS)*, October, 21, 1998.

63. *FNS Daybook*, October 27, 1998; September 30, 1999; November 12, 1999; October 21, 1999; September 24, 1999.

64. “Explaining the Debate: Pros and Cons of Biotechnology,” Environmental Media Services Event Briefing, *FNS Daybook*, January 24, 2000. Environmental Media Services Web Site. URL: <http://www.ems.org/biosafety-protocol/pr.01.24.00.ems.html>, March 2000.

DOES EVERYTHING CAUSE CANCER?

for the NRDC's *Intolerable Risks* report.⁶⁶ Fenton is also one of the very few PR-lobbying firms that receives federal tax dollars for its work. In 1997, Fenton Communications had a \$2 million contract with the U.S. Department of Labor.⁶⁷

As seen with the Alar scare, it is obvious that Fenton Communications operates on more than one level. On one hand, this founding member of the Business for Social Responsibility poses as the altruistic vehicle, motivated by public concern.⁶⁸ On the other hand, they admit to engineering campaigns for client profit. The fact that Fenton Communications is paid to achieve its clients' goals, and attempts to do so, is not especially provocative, even if this sometimes presents an uncompromising conflict of interest. Its gross negligence toward the people it claims to be helping is what stands out when looking closely at the Alar scare. This behavior steadily becomes more reproachful as time and more scares pass. Leveraging the public's trust in non-profit, do-good front names, Fenton Communications uses front groups to kick back support, money, and media coverage which benefits other for-profit clients.

65 See note 57.

66. See note 55.

67. The Heritage Foundation Web Site. URL: <http://www.heritage.org/library/categories/govern/gip15.html>, April 2000.

68. Fenton Communications Web Site. URL: <http://www.fenton.com>; BSR Homepage; <http://www.bsr.org>, April 2000.

THE SILICONE DEBATE

THE SILICONE DEBATE

The silicone breast implant scare erupted in the early 1990s, but use of the implants began back in 1963 when Dow Corning, which would become one of the major manufacturers of the product, began marketing them.⁶⁹ Today, silicone is most frequently associated with breast implants, but has many other medical uses as well. One of the first uses for liquid silicone was as a lubricant for syringes in World War II, enabling them to function reliably in combat conditions.⁷⁰ The administration of drugs and parenteral fluids, as well as hemodialysis and cardiac-bypass technology, is greatly dependent on liquid silicone.⁷¹

Silicone in general has even wider medical applications. “Annually, some 1.5 million patients receive silicone eye lenses; another 670,000 get artificial silicone joints. All told, about 7.5 million medical devices are implanted in Americans each year,” wrote Michael Fumento in his 1995 *Reason* magazine article, “A Confederacy of Boobs.” “Many of these devices such as pacemakers, heart valves, and shunts which draw fluid off the brain are life savers.”⁷²

SAFETY

The safety of silicone implants was first called into question by the Food and Drug Administration (FDA) not because of a silicone-related incident but rather due to a change in regulation. In 1976, the medical device amendment was added to the Federal Food, Drug, and Cosmetic Act of 1938 primarily due to a high number of deaths and injuries resulting from heart valves, pacemakers, and intrauterine devices.⁷³

By this time, women had been using silicone implants for 13 years, and the FDA considered them safe. “Since breast implants were already on the market, they were ‘grandfathered’ into the list of acceptable devices,” according to Marcia Angell, M.D., executive editor of *The New England Journal of Medicine*. “Given their long track record, they were presumed reasonably safe, although there was no

69. Command Trust Network, “Silicone Breast Implants: A Brief Review of History and Research,” *PR Newswire*, November 9, 1998.

70. Jack Fisher, “The Silicone Controversy—When Will Science Prevail?” *New England Journal of Medicine*, June 18, 1992, vol. 326, pp. 1966–1968.

71. *ibid.*

72. Michael Fumento, “A Confederacy of Boobs,” *Reason*, vol. 27, October 1995, pp. 36–43.

73. Michael Fielding, Statement before the Subcommittee on Health and Environmental Committee on Commerce, U.S. House of Representatives, April 30, 1997. FDA Web Site. URL: <http://www.fda.gov/ola/1997/devices.htm>, April 2000.

THE SILICONE DEBATE

evidence of safety.”⁷⁴ Skeptics argue that this grandfathering was an oversight by the FDA. Regardless, implants remained available with few complaints.

The controversy began to boil in the early 1980s when silicone “anecdotes” started appearing in various medical journals, according to Dr. Angell. The articles correlated silicone, and by extrapolation, silicone implants, to what is called connective tissue or autoimmune disease, in which the body’s immune system goes awry. The anecdotes and articles in question, Angell writes, were problems associated with silicone injections directly into the breasts of Japanese prostitutes during the postwar occupation. Notwithstanding that this had nothing to do with implants, which comprise a flexible silicone packet into which the gel is sealed, the issue had now popped up on the public’s radar screen. Soon that radar image would grow from the size of a sparrow to that of a 747.

Much of the publicity came from a single court case, *Mariann Hopkins et al. v. Dow Corning Corporation*. A northern California woman received a staggering \$7.3 million when her attorney convinced a jury that her myriad illnesses were all the result of a post-mastectomy implant she had received some years earlier.⁷⁵

In response to the growing concern, the FDA began getting involved in 1988. The “grandfather” clause would no longer apply; rather the agency requested that manufacturers provide safety data by July 1991.⁷⁶

MEDIA FRENZY

Meanwhile, the media began to pick up on, and contribute to, the growing hysteria. In 1990, reporter Connie Chung interviewed women claiming to suffer from implant-related connective tissue disease for her sensationalist show, *Face-to-Face* which aired on CBS. Their symptoms included dizziness, swollen glands, fever, chills, sweats, sore throats, fatigue, and arthritis-like pain in the joints.⁷⁷

“For almost 30 years,” Chung began, “American women have been getting breast implants, [with] an astounding average of 350 implant operations each day. But what is shocking is that these devices haven’t been approved by the federal

74. Marcia Angell, “Shattuck Lecture — Evaluating the Health Risks of Implants,” *New England Journal of Medicine*, June 6, 1996, vol. 334, 1513–1518.

75. *Mariann Hopkins et al. v. Dow Corning Corporation*, U.S. Cit. Appeals, 9th Cir. (1991).

76. See note 74.

77. CBS, *Face-to-Face With Connie Chung*, December 10, 1990.

government. Only now is the government looking at the dangers. But, for some women, it may be too late.”⁷⁸

That’s scary enough, but it got worse. Chung referred to silicone gel leakage as “slimy gelatin that could be poisoning” women.⁷⁹

Angell elaborated on the tone of Chung’s commentary in her May 1996 Shattuck Lecture before the Massachusetts Medical Society, saying she “conveyed the clear message that implants were dangerous devices foisted on unsuspecting women. Without questioning the presumed link between the implants and the illness, Chung implicitly blamed the FDA for permitting hazardous devices to be sold.”⁸⁰

But Chung was merely a trendsetter. Soon the media would be bombarding women with horrific headlines like “Toxic Breasts,”⁸¹ “The Hazards of Silicone,”⁸² and “Time Bombs in the Breasts.”⁸³

After the July 1991 deadline, an FDA advisory panel on general and plastic surgical devices began reviewing the implant safety data.⁸⁴ In November it announced its findings. There was not sufficient data yet to do an appropriate risk-benefit analysis, but in the meantime the devices should be left available to any woman who wanted them.⁸⁵

“We felt breast implants should stay available to women who, with informed consent, wanted to use them,” said Dr. Elizabeth Connell, a professor of gynecology and obstetrics at Emory University and the chair of both of the FDA’s breast implant panels, in an interview with *Reason* magazine’s Fumento.⁸⁶

By 1995, though, she had a much stronger opinion about the safety of the devices than when she headed the panels. “We could say at this time [that silicone implants should remain available] with a great deal more assurance,” she said. “A

78. *ibid.*

79. *ibid.*

80. See note 74; for an expanded version of Angell’s Shattuck Lecture, see Marcia Angell, *Science on Trial: The Clash of Medical Science and the Law in the Breast Implant Case* (New York: W.W. Norton & Co., 1996).

81. Nicholas Regush, “Toxic Breasts,” *Mother Jones*, vol. 17, January–February, 1992, pp. 24–31.

82. Jane Seligmann, “The Hazards of Silicone,” *Newsweek*, vol. 117, April 29, 1991, p. 56.

83. Andrew Purvis, “Time Bombs in the Breasts,” *Time*, Vol. 137, April 29, 1991, p. 70.

84. United States Food and Drug Administration, “FDA’s Role in Women’s Health Issues,” URL: <http://www.fda.gov/opacom/backgrounders/womenhe.html>, April 2000.

85. Public Broadcasting Service Web Site. URL: www.pbs.org/wgbh/pages/frontline/implants/chron.html, April 2000.

THE SILICONE DEBATE

whole new literature has been developed since that time. We were operating on anecdotal evidence and case history. Now the evidence has been gathered by good people in well-designed studies so it is an entirely different situation.”⁸⁷

Yet none of this mattered to FDA Commissioner David Kessler, M.D. In January 1992, he announced a moratorium on the sale of implants. Importantly, he did not declare that silicone implants caused connective tissue disease or other serious illness. Instead, the commissioner claimed the data provided had not proved safety in accordance with FDA standards. In addition, Kessler referred to *new* data that had not been factored into the panel’s decision. “I’m calling for a delay in the use of these products until our advisory panel can meet to discuss new information that was not available in November,” he said.⁸⁸

The moratorium on silicone breast implants was the coup de grace for the devices, and the public’s already heightened alarm jumped off the scale. The few lawsuits over implants multiplied exponentially. “Kessler’s reversal had immediate and devastating repercussions,” Matthew Rees would later write in *The Weekly Standard*. “It prompted a litigation explosion. In the two years after Kessler’s 1992 announcement, women with breast implants filed roughly 16,000 lawsuits. More than 1,000 lawyers were involved. Their most visible target: Dow Corning, which collapsed under the weight of lawsuits and declared bankruptcy in May 1995.”⁸⁹

The direct impact of Kessler’s action was evident in trial lawyer advertisements, such as “THE FDA WARNS THAT SILICONE-GEL FILLED BREAST IMPLANTS PRESENT HEALTH RISKS.”⁹⁰ That Kessler had said no such thing was irrelevant; what mattered was that he had enacted a moratorium, allowing many in the media and the public to believe they were harmful.

While lawyers were fighting silicone implants in court, scientists were hard at work trying to find out what, if any, real health threat they posed. Their results would vary according to subjects, controls, and availability of evidence, but a scientific verdict was taking shape. Other than a hardening of the scar tissue

86. See note 72.

87. *ibid.*

88. Deborah Mesche, “FDA Calls for Halt in Silicone Breast implants,” *Associated Press*, January 6, 1992.

89. Matthew Rees, “What Makes David Kessler Run,” *The Weekly Standard*, vol. TK, June 3, 1996.

THE SILICONE DEBATE

surrounding the implant, which can occur with both silicone-gel and saline breast implants, which can be uncomfortable or even painful in some cases,⁹¹ silicone implants were safe.

The FDA's general and plastic surgery devices panel met again in February 1992 and restated that there was no causal relationship between silicone implants and connective tissue disease. However, it did recommend limiting the use of the devices to post-cancer reconstruction until more safety evidence was provided.⁹²

Meanwhile, litigation continued and awards got larger. In December 1992, a jury awarded a single plaintiff \$25 million, for both actual and punitive damages.⁹³ John O'Quinn, a prominent Houston attorney, argued the case. *The Wall Street Journal* has called him the "Master of Disaster,"⁹⁴ while he and his partner were featured on the cover of *Fortune* magazine under the headline "Lawyers from Hell."⁹⁵ And while "ambulance chasing" is fairly common among trial lawyers, O'Quinn did something unusual. He was so blatant about it he got caught. He was indicted, both for conspiracy and solicitation, after a major 1994 commercial plane crash. He later pleaded guilty to a lesser charge, probably saving his law license.⁹⁶

Despite O'Quinn's implant victories, many, including some of the expert witnesses in the cases, scoffed at the lack of scientific evidence for such hefty settlements or, indeed, for any kind of award. By law, O'Quinn should have had to show that the implants had caused the diseases and symptoms, such as chronic fatigue, headaches, muscle pain, and dizziness. But since so many women without implants have these same problems, he could not do so. So instead, he relied on juror sympathy (after all, the women *were* sick) and highly-paid expert

90. Weitz & Luxenberg, P.C., 40 Fulton Street, New York, NY 10038.

91. Neal Handel et al., "Comparative Experience with Smooth and Polyurethane Breast Implants Using the Kaplan-Meier Method of Survival Analysis," *Plastic and Reconstructive Surgery*, vol. 88, September 1991 pp. 475-81.

92. United States Food and Drug Administration. Press Release, January 6, 1992. FDA Web Site URL: <http://www.fda.gov/bbs/topics/NEWS/NEW00263.html>, April 2000.

93. *Pamela Jean Johnson v. Bristol Myers and Medical Engineering Corp.*, Case No. 91-12770, December 23, 1992.

94. Max Boot, "The Master of Disaster," *Wall Street Journal*, January. 4 1996.

95. "Lawyers from Hell," *Fortune*, October 16, 1995.

96. Henry Eichel, "Texas Lawyer Pleads Guilty to Soliciting Business in Wake of Airplane Crash," *Charlotte Observer*, December 15, 1997.

THE SILICONE DEBATE

witness who sounded authoritative but merely speculated.⁹⁷ O'Quinn fought a similar case against 3M in 1994, and the jury awarded the three plaintiffs \$27.9 million with 40 percent attorney's fees plus expenses on top, though 3M won a reversal by a higher court and the parties later settled for an undisclosed amount.⁹⁸

Lawyers were able to use their financial resources not only to pay people to testify as expert witnesses, but also to drum up clients. They would often have doctors on retainer whom they knew would more or less automatically certify any woman with silicone implants as having been sickened by them. One doctor estimated he had earned as much as \$1 million doing this.⁹⁹

Because there were so many attorneys like John O'Quinn who were able to win over juries regardless of scientific and medical evidence, and because the cost of litigation was so high even when they won, seven implant manufacturers agreed in 1994 to make a blanket settlement with any lawyer and his clients who wanted to take part. (Those who didn't could continue litigating.)¹⁰⁰ Of the \$4.2 billion settlement amount, \$1 billion went to the lawyers and another \$1 billion to the women who already claimed implant-related illnesses. The balance was put in reserve for women with implants who would develop certain diseases over the next 30 years.¹⁰¹ It would be presumptive that implants had caused the illnesses; no medical testing or verification would be necessary short of possibly providing medical records.

In Angell's Shattuck Lecture, she pointed out that the plaintiffs' attorneys sometimes referred them to clinicians whose practice consisted largely of such patients and whose fees were often paid by the attorneys. As a result, the number of women who wanted in on the settlement was not completely accurate: "Half of all the women with breast implants registered for the settlement, and half of those claimed to be currently suffering from implant-related illnesses,"¹⁰² according to

97. See note 74.

98. "Reversals; Settlements After Verdict," *The National Law Journal*, Supplement, February 6, 1995, p. C16.

99. Saundra Torry, "Breast Implant Settlement Fund Sparks a Scramble," *Washington Post*, April 4, 1994, p. F7.

100. Gina Kolata, "Fund Proposed for Settling Suits Over Breast Implants," *The New York Times*, September 10, 1993, p. A16.

101. See Note 74.

102. *ibid.*

THE SILICONE DEBATE

Angell. Most would probably qualify since the lawyers' doctors of choice shared the view that the implants had a causal relationship with connective tissue disease. At the time, it was estimated that at least one million women had silicone implants.¹⁰³ Naturally, the formerly large lump sum, when divided into five hundred thousand pieces and reduced by attorney fees, would result in each woman receiving a pittance.

While the courts tried to resolve the legal disputes (litigation continues to this day), *The New England Journal of Medicine* published an authoritative review of the connective tissue-silicone conundrum: A 1994 Mayo Clinic study found no relation between autoimmune disease and the silicone implants.¹⁰⁴

Additional studies, such as by John Goldman and others¹⁰⁵ and Jorge Sanchez-Guerrero and others, confirmed the Mayo Clinic's findings. Sanchez-Guerrero's, for example, looked for evidence of 41 types of connective tissue disease among 1,183 nurses with silicone implants. The findings could not have been less ambiguous. There was "no association between silicone breast implants and connective tissue diseases, defined according to a variety of standardized criteria."¹⁰⁶

Already anticipating the charge they knew would be forthcoming from plaintiffs' lawyers that silicone implants cause a "special kind" of autoimmune disease that doesn't show up with standardized criteria, the authors added, "or signs or symptoms of these diseases." In fact, they reported that women with silicone implants were significantly less likely to relate symptoms of these

103. Ralph R. Cook *et al.*, "The Prevalence of Women with Breast Implants in the United States – 1989," *Journal of Clinical Epidemiology*, Vol. 48, April 1995, pp. 519–25.

Roselie A. Bright, Lana L. Jeng, and Roscoe M. Moore Jr., "National Survey of Self-Reported Breast Implants: 1988 Estimates," *Journal of Long-Term Effects of Medical Implants*, vol. 3, First Quarter, 1993, pp. 81–89.

Personal telephone communication of Michael Fumento with Ralph R. Cook, June 28, 1995.

104. Sherine E. Gabriel *et al.* "Risk of Connective Diseases and other Disorders after Breast Implantation," *New England Journal of Medicine*, vol. 330, June 16, 1994, pp. 1697–1702; see also John Schwartz, "Judge Approves \$3.2 Billion Implant Accord," *Washington Post*, December 1, 1999.

105. John Goldman *et al.* "Breast Implants, Rheumatoid Arthritis and Connective Tissue Diseases in a Clinical Practice," *Journal of Clinical Epidemiology*, vol. 48, April 1995, pp. 571–582.

106. Jorge Sanchez-Guerrero *et al.* "Silicone Breast Implants and the Risk of Connective Tissue Disease and Symptoms," *New England Journal of Medicine*, vol. 332, June 22, 1995, pp. 1666–1669.

diseases or to complain of symptoms or signs of illness resembling connective tissue disease.¹⁰⁷

So why did the women with implants become ill? Because women become ill, period. Each year a certain number of American females fall sick with various diseases, including autoimmune ones. The vast majority don't have implants, but some do. The lawyers' tack has never been anything more than the old logical fallacy of "after this, therefore because of it." The woman wasn't sick before she got her implants but now, three or five or ten years later, she is. Therefore the implants made her sick. The media by and large accepted the fallacy, even putting it into headlines such as, "After Breast Implant, Horror Began."¹⁰⁸ True, it was "after," but the implication is "because".¹⁰⁹

Consumer Groups Press The Issue

The manufacturers were not the only group blamed. The FDA was virtually snowed under with complaints on the agency's performance. Many questioned the motives and actions and attributed a lot of the hasty decisions to external pressure from activist groups. For example, Jack Fisher, M.D., wrote in a medical journal essay, "The Silicone Controversy — When Will Science Prevail," that "The attitude of the FDA and its actions this past year have depended largely on the claims of consumer advocacy groups and on poorly documented assertions."¹¹⁰

Similarly, Angell stated that "Consumer advocacy groups were actively involved in spreading the alarm. Ralph Nader's organization, Public Citizen, through its Health Research Group, headed by Dr. Sidney Wolfe, helped to publicize the issue and press the case in courts."¹¹¹

Matthew Rees of the *Weekly Standard* examined the "severe" pressure that interest groups were putting on the FDA in 1991. "Liberal interest groups like Public Citizen and the National Women's Health Network insisted that the implants resulted in connective tissue disease," wrote Rees. "The media added to

107. *ibid.*

108. Joan Smith, "After Breast Implant, Horror Began," *San Francisco Examiner*, January 19, 1992.

109. See note 72.

110. See note 70.

111. See note 74.

the pressure with tales of implant disease and rupture so disturbing that at least one woman tried unsuccessfully to remove hers with a razor blade.”¹¹²

FDA Under Fire

That public advocacy groups affected the media blitz is of no surprise. In unraveling some specific details of the players, though, the controversy that some likened to “junk science” becomes quite interesting.¹¹³

Rees, for example, provided the answer to what special late-breaking documentation Kessler had when he announced the January 1992 moratorium against his own panel’s ruling.

“Dr. Norman Anderson, a professor at Johns Hopkins, was a true believer in the need for a moratorium, if not an outright ban,” wrote Rees. “He gave Kessler a mound of documents obtained through plaintiffs’ attorney and under court-ordered seal that alleged scientific fraud and manufacturing violations by Dow Corning. Anderson delivered a not-too-subtle threat to Kessler: Unless a moratorium was imposed he would make a scheduled appearance on *Nightline* and blast the FDA.”¹¹⁴

Anderson did appear on *Nightline*, but he had nothing derisive to say about the FDA. Three days later, Kessler announced the moratorium, explaining, “I have gotten documents literally handed to me on Friday that I reviewed for the first time.”¹¹⁵

Kessler has been likened to running the FDA “like a liberal activist’s dream.”¹¹⁶ Certainly, he had strong ties to groups that could be characterized as such.

Apparently, during the Bush–Clinton transition, Kessler had his own advocates lobbying to keep him on the payroll. Sidney Wolfe, M.D., of Nader’s Public Citizen “pressed Gore to keep Kessler on board,” and he managed to remain in position without being reconfirmed.¹¹⁷ During Kessler’s continued administration, he maintained a close relationship with Sidney Wolfe, and the

112. See note 89.

113. Linda Himelstein and John Carey, “A Breast Implant Deal Comes Down to the Wire,” *Business Week*, September 4, 1995.

114. See note 89.

115. *ibid.*

116. *ibid.*

117. *ibid.*

THE SILICONE DEBATE

Weekly Standard's Rees suggested that that visibly affected Kessler's policies. Another tie to Public Citizen included former Public Citizen member William Schultz, who was also Kessler's policy chief and one of his aides, and who was married to a Public Citizen member.¹¹⁸ Public Citizen also happens to share the same public relations firm as the notorious silicone-slaying lawyer, John O'Quinn: Fenton Communications.¹¹⁹

"As the results [debunking the link between breast implants and health problems] began rolling in — from prestigious institutions like Harvard, Johns Hopkins, and the Mayo Clinic — it quickly became clear that the plaintiff's bar was trading in what can only be described as 'junk science,'" wrote David Martin in the *Chicago Tribune*. "They signed on Fenton Communications, a public relations firm best known for promoting the Alar apple scare and Nicaragua's Marxist Sandinistas, to a multi-million dollar contract."¹²⁰

Thus, the formula for attaining policy goals might read something like this: Hire the lawyer who has retained the PR firm shared by the activist groups that are in the pocket of the FDA (or regulatory agency relative to the desired goals). Certainly, there is much money to be made from such a fecund *partnership*.

Command Trust Network

Fenton Communications client Public Citizen was not the only advocacy group attacking silicone implants. The Command Trust Network (CTN) calls itself a "support group" and "clearinghouse for information" for women with silicone implants. Working with Fenton Communications, CTN made sure the media and consumers were apprised of everything negative being said about implants. Indeed, Fenton Communications and CTN work so closely together that CTN press releases urge reporters not to call them but to call Fenton Communications.¹²¹ Few, if any, communications the group had with the public were Fenton-free.

118. *ibid.* (Schultz was not mentioned by name in the article.)

119. Fenton Communications home page. URL: <http://www.fenton.com>, April 2000.

120. David Martin, "Truth Prevails over Junk Science," *Chicago Tribune*, September 2, 1998.

121. Command Trust Network, "Response to Dow's Bankruptcy Proposal," *PR Newswire*, August 25, 1997.

THE SILICONE DEBATE

Ultimately one of CTN's co-founders, Kathleen Anneken, became so disgusted with the trial lawyer connection she quit the group. "I was appalled," says Anneken. "I think the lawyers are way out of line. I guess the proof you need in court is different from what I would call the real truth."

She now questions any causal connection between silicone implants and disease. Of Fenton Communications and CTN she says, "They work more for the lawyers than they do for us." She does grant, however, that they make a highly effective team.¹²² Such collusive teamwork led to criticism from many, even some of the judges involved in the trials. For example, In *McAleer v. Medical Engineering Corp.*, Judge Robert E. Jones called the hiring of Fenton Communications "sleazy" and "inappropriate."¹²³

Fenton Communications and CTN took the issue beyond the courts. On behalf of Command Trust Network, Fenton Communications contracted the Sheridan Group to lobby for bills to promote research to identify and evaluate the health effects of silicone implants.¹²⁴ In 1998, it invested over \$60,000 in lobbying efforts concerning House and Senate bills.¹²⁵

After years of squabbling, there is still no evidence linking breast implants with connective tissue disease. Nationally syndicated columnist and physician Charles Krauthammer has shown exactly what all of the hype, litigation, and media frenzy has accomplished to date. Of the sick women, he wrote:

Today, their cases remain incurable and their stories heart-rending. But, it turns out that their illnesses had nothing to do with the implants. After a year and a half of study, the IOM (Medical branch of the National Academy of Sciences) concluded that while breast implants can obviously cause local problems in the breast if they rupture or leak, they do not, contrary to the claim of hundreds of women — and their lawyers — cause systemic illness.¹²⁶

Quite recently we received another reminder of how out of hand the scare has grown: The government announced it wanted in on the settlement in order to recover funds spent treating women "allegedly injured by silicone implants."¹²⁷

122. John Meroney, "Silicone Breast Implant 'Victim' Now Says She Was Victimized by Plaintiffs' Lawyers," Knight Ridder/Tribune, August 24, 1998.

123. Jack O'Dwyer, "Judge Says Probe Was Sleazy," *O'Dwyers Newsletter*, February 1997.

124. Sheridan Group Web Site. URL:

<http://www.sheridangroupdc.com/OurClients/CaseStudies/Fenton.htm>, April 2000.

125. 1997, 1998 Federal Lobbying Registration Reports, Secretary of Senate, Clerk of the House of Representatives. (The bills were H.R. 4028 and S. 2154.)

126. Charles Krauthammer, "Class-Action Extortion," *Washington Post*, July 25, 1999, p. A29.

127. Michael Sniffen, "U.S. Sues Over Implant Recovery," *AP Online*, April 1, 2000.

THE SILICONE DEBATE

The groups above, along with their famous scare-inducing public relations firm, Fenton Communications, appear to be operating with more than one intent. Superficially, everything seems fairly benign. But when you peel back each layer of the scare, the tactics and deceitful practices appear to benefit paying clients and related parties instead of the general public. The victims are terrified consumers who are willing to take out their implants with a razor blade. The victims are the companies who spent millions in vain to provide results that would never suffice, regardless of their validity. Meanwhile, attorneys and advocacy groups, and of course their public relations firm, reaped the profits.

“The only real winners are a handful of plaintiffs’ lawyers who have stuffed their pockets with fistfuls of dollars,” wrote the *Chicago Tribune*’s Martin. “The biggest losers, unfortunately, are the women who have been gulled by the plaintiffs’ lawyers. Many went to great expense to have their implants removed—most often unnecessarily.”¹²⁸

Every verdict against manufacturers reinforced the causes and the budgets of the advocacy groups. The delegation of blame and subsequent identification of the disease-stricken victims was an effortless fundraiser. So, while thousands of lawyers were able to burrow into the lucrative field of breast-implant litigation, other industries suffered. Jobs were lost with the bankruptcy and ruin of the manufacturers. Science—our last bastion of hope and truth—was made a mockery of and held hostage to a simple logical fallacy. And, the many women who otherwise would have benefited (either by choice or necessity) from having a breast that was more like a breast, were left with sacs of saline that most women find inferior to silicone gel.

A further tragedy is that other silicone and even non-silicone medical devices have been jeopardized. The FDA’s actions and the legal profession’s high-tech ambulance chasing are “costing us not only what we [already] have but the chance for new and better products in the future,” says Emory’s Connell. “I think we’re in a worse mess in American medicine than we’ve ever been in. Instead of

128. See note 120.

THE SILICONE DEBATE

leading the world, we're now a third-rate country in terms of our ability to develop new drugs and devices."¹²⁹

The silicone scare exemplifies the conflict between science and personal injury law with the media caught in the middle. Both sides are equally exciting, but it hardly leaves consumers and decision-makers anything more than bewildered. It also shows how easy it is to manipulate the media to achieve policy goals and make a profit. Unfortunately, terrorized women and their families have been left in the wake. And again, we find that Fenton Communications has orchestrated another scare campaign for profit.

129. See note 72.

DEADLY DAIRY FARMS?

Mother's Milk Doesn't Do the Body Good?

DEADLY DAIRY FARMS?

There is no question that milk is an important part of the human diet. Lactation in the female, as a result of pregnancy, indicates the biological significance of milk in both our own and especially our children's diets. Unfortunately, milk has not been absent from the fear-inducing propaganda that plagues society today. For at least a decade, groups have been targeting this staple because of a genetically-engineered growth hormone sometimes used in the process of producing milk.

Bovine somatotropin (BST) is a growth hormone/protein that is *naturally* produced by the pituitary glands in cows.¹³⁰ Though structurally different, it is similar to the growth hormone found in humans. In both, the hormone is a "potent galactopoietic agent," which is to say that it is crucial to the maintenance of lactation.¹³¹

In the 1980s, the advent of recombinant deoxyribonucleic acid (rDNA) technology made possible the commercial manufacture of BST (rBST) in bacteria.¹³² The first use of this technology was to produce human insulin in 1982 and later in the production of human growth hormone, alpha interferon, and tissue plasminogen activator.¹³³ The *Journal of the American Dietetic Association* explains the scientific process of recombinant gene therapy in the following way:

rDNA, or genetic engineering, techniques use restriction enzymes to cleave DNA strands at specific sequences. In bacteria, this DNA fragment is then inserted into a host cell where it will either integrate into the DNA of that cell or replicate independently. . . . In classical breeding techniques, geneticists methodically increase the probability that the desired attribute will appear and, thus, reduce genetic variability.¹³⁴

The production of the bovine growth hormone in bacteria using rDNA technology was one of the many scientific feats from which consumers and dairy farmers have reaped enormous benefits: "When the recombinant BST is recovered and administered to dairy cows, milk production is increased 10–25 percent."¹³⁵ Increased milk production complements the consumer demand for

130. "NIH Technology Assessment Conference Statement on Bovine Somatotropin," *Journal of the American Medical Association*, vol. 265, no. 11, March 1991.

131. *ibid.*

132. William Dughaday, "Bovine Somatotropin Supplementation of Dairy Cows: Is the Milk Safe?" *Journal of the American Medical Association*, August 22/29, 1990.

133. Position of the American Dietetic Association, Biotechnology and the Future of Food," *Journal of the American Dietetic Association*, February 1993.

134. *ibid.*

135. *ibid.*

DEADLY DAIRY FARMS?

the salubrious commodity in addition to benefiting dairy farmers by making the milk production more plentiful per cow. Even though administering the hormone leads to increased feed consumption, efficiency is increased so that the amount of milk produced per unit of cattle feed also increases.”¹³⁶ So, the dairy farmer gets more bang for his buck, with maximized efficiency of production.

Reducing the numbers of cows in milk production is also environmentally beneficial, because the same amount of milk is produced but with fewer animals, which requires less land for grazing. According to Dr. W. Douglas Skelton of the American Medical Association:

The application of recombinant DNA technology, such as that used to produce recombinant bovine somatotropin, to agriculture is the natural extension of the sophisticated agricultural practices that have been refined over the millennia. This technology provides the means to reduce waste, control pollution, enhance the nutritional value of foods, and ensure that an adequate supply of food exists.¹³⁷

Despite the evidence that the manufactured hormone is no different than the one cows naturally produce, and that there is no recognizable difference in the milk from cows treated with the hormone and not treated, some consumer activist groups still are not happy.¹³⁸ Greenpeace, the Humane Society, Consumers Union, the Center for Food Safety, and the Institute for Agricultural and Trade Policy (IATP) have attacked companies who manufacture the hormone, dairy farmers who purchase and use it, and the United States Food and Drug Administration (FDA) who approved it.¹³⁹ Coincidentally, all of these groups are clients of Fenton Communications.

For over a decade, they have claimed that the use of such a hormone renders milk harmful—even cancerous—and that it has not been proven safe and should be removed, if not banned, from the market.¹⁴⁰ The product supposedly “induces malignant transformation of normal breast epithelial cells . . . [and] . . . is a growth factor for human breast cells, increasing their malignancy, progression

136. See note 132.

137. Food And Drug Administration, “Questions and Answers About BST,” FDA Veterinarian, May/June 1994.

138. “BST,” *Health & Human Service News*, November 5, 1993.

139. Danielle Knight, “Cow Hormone Could Cause Cancer,” Inter Press Service, December 17, 1998.

DEADLY DAIRY FARMS?

and invasiveness.”¹⁴¹ The growth factor referred to is insulin growth factor-I (IGF-I).

IGF-I is a protein-based hormone that is naturally found in cows milk, human saliva, blood, and breast milk. IGF-I is a protein that, like any other protein, is broken down into amino acids in digestion.¹⁴² Some believe that IGF-I is linked to breast and prostate cancer.¹⁴³ That IGF-I is naturally present in breast milk, blood, and saliva shows its obvious importance in human physiology. The following chart shows the comparisons of IGF-I concentrations in humans:

Insulin-like growth factor in milk and body fluids	
Medium	Concentration (ng/ml)
Milk (not in serum)	
Human	5-10
Colosirum	8-28
Bovine (bulk milk)	
Untreated	1-9
RBST-treated	1-13
Plasma (in serum)	
Child	17-250
Adolescent	180-780
Adult	120-460
Gastrointestinal secretions (human)	
Saliva	6.8
Gastric juice	26
Pancreatic juice	27
Bile	6.8
Jejunal chyme	160
Daily production of adult humans	10 ² ng/d

Source: Joint FAO/WHO Expert Committee on Food Additives (JECFA) World Health Organization, Geneva, 1998

In 1993, the Commission of the World Health Organization produced a series on food additives that included bovine somatotropin. A group of cows was injected with rBST for 20 consecutive weeks. According to the report, the levels of IFG-I were not significantly increased. The levels were “well within normal range and should not cause any appreciable concern.”¹⁴⁴

The Committee concluded that any increase in the concentration of IGF-I in milk from rBST-treated cows is orders of magnitude lower than the physiological amounts produced in the gastorintestinal tract and in other parts of the body. Thus the concentration of IGF-I would not increase either locally in the gut or

140. Robert Steyer, “U.S. Reaffirms Safety of Monsanto Milk Drug, Shalala Rejects Vermont Senators’ Appeals to Pull BST From the Market,” *St. Louis Post-Dispatch*, January 23, 1999.

141. “BST Authorisation Would be ‘Criminal recklessness,’” *Agra Europe*, May 18, 1990.

142. Report on the Food and Drug Administration’s Review of the Safety of Recombinant Bovine Somatotropin.

143. BST Authorisation Would be ‘Criminal recklessness,’” *Agra Europe*, May 18, 1990.

144. World Health Organization, “Toxicological Evaluation of Certain Veterinary Drug Residues in Food,” Geneva, 1998.

DEADLY DAIRY FARMS?

systematically, and the potential for IGF-I to promote tumor growth would not increase when milk from rBST treated cows was consumed; there is thus no appreciable risk for consumers.¹⁴⁵

The Food and Drug Administration reached the same conclusions, as indicated by an interview in Berkeley's *Newsletter of Wellness, Nutrition, Fitness, and Stress Management* when stating, "As with BST, insulin growth factor is present in milk naturally. . . . Increased levels are within normal range; the milk from treated and untreated cows can't be distinguished on this, or any, basis."¹⁴⁶

Last year, Vermont Senators Patrick Leahy and James Jeffords questioned the FDA's thoroughness on its review of the product when the agency initially approved it in 1993.¹⁴⁷ Earlier in 1999, the Center for Food Safety initiated legal action against the Food and Drug Administration in order to provoke the removal of rBST from the market.¹⁴⁸ In December, several environmental health and consumer groups, including Greenpeace, the IATP, The Humane Society and Consumers Union, petitioned the Food and Drug Administration to require labeling on food from genetically engineered crops because of the "potential for unexpected side effects." In both cases, the groups claimed that the Food and Drug Administration had "overlooked evidence" when approving the case.¹⁴⁹ Regarding the health hazards that rBST imposed, they claimed it could cause cancerous tumors, mainly due to the allegedly increased levels of insulin growth factor-I (IGF-I) in cows treated with rBST. They also believe that the use of the hormone reduces the nutritional content of milk from cows that have been treated with rBST.¹⁵⁰

Ben & Jerry's Homemade, Inc., a Fenton Communications/Environmental Media Services client, is one of the most well-known opponents of rBST. With no valid evidence, the company claims that the nutritional value of the milk is reduced because, "simple reason tells us that you can't treat a dairy cow with a

145. *ibid.*

146. "Udder Confusion," University of California at Berkeley *Wellness Newsletter*, May 1994.

147. Food and Drug Administration, Press Release, November 5, 1993.

148. Center for Food Safety Web Site:

http://www.actionalert/actiondetail.cfm?Action_ID=91&SID=5, April 2000.

149. "rBGH Story, More Bad News for Monsanto," *New York Times*, January 19, 1999.

Inter Press Service, "Cow Hormone Could Cause Cancer, Advocates Warn," Inter Press Service, December 18, 1998.

150. See note 132.

DEADLY DAIRY FARMS?

drug whose effects are possibly wide-ranging and still expect the cow, or the milk it produces, to be healthy.”¹⁵¹

Ben & Jerry's has been instrumental in the anti-bovine-growth-hormone campaign. It has used Fenton Communications to get the word out on their policy. Stacia Tipton, who appears on many Fenton Communications press releases as a Fenton contact and who also lists herself as an employee of EMS, has been the Fenton Communications point person for Ben and Jerry's campaign. Ben and Jerry's and Whole Foods, Inc., led the charge in this movement by filing and winning an unprecedented lawsuit in Illinois, which now permits natural food companies to label products that do not contain rBGH as such.¹⁵² Absent success from its direct attacks, Fenton Communications enlisted EMS to front the rBST cancer scare.

On December 15, 1998, EMS, with several Fenton Communications staffers, held a press conference with the Center for Food Safety's Andrew Kimbrell, Consumers Union's Michael Hansen, and others where, again, it claimed rBST-supplemented dairy cows produced cancer-causing milk. Nowhere did EMS or Fenton disclose their Ben & Jerry's client connection during this media event. In addition to the press conference, the Center for Food Safety, Consumers Union, and the IATP also scheduled an interview on *World News Tonight* with Peter Jennings. The interview clearly reflected that all were among the same school of thought regarding recombinant bovine growth hormone and that they shared the opinion that the FDA did a slack job in its original approval. When asked if he thought the public was at serious risk, Mark Ritchie, president of IATP, stated, "I think we don't know, and that's the most disturbing. There looks like there's evidence that we may be, but we don't know yet."¹⁵³ What we don't know may not hurt us, but it will create that anxiety Jonathan Eig discussed in his article, "Analyze This."¹⁵⁴

According to IATP's home page on the Internet, "The Institute for Agriculture and Trade Policy's mission is to create environmentally and economically sustainable rural communities and regions through sound

151. Ben & Jerry's Web site: <http://euphoria.benjerry.com/bgh/#010298>, April 26, 2000.

152. "Genetic Engineering Food, Firms, IL Agree to Labeling," *Greenwire*, August 15, 1997.

153. "A Closer Look," ABC News, December 15, 1998, transcript no. 98121505-j04.

DEADLY DAIRY FARMS?

agriculture and trade policy.”¹⁵⁵ In addition to his role with the IATP, Mark Ritchie is also listed on the Tides Center’s corporate record as the registered agent for the non-profit’s incorporation in 1996.¹⁵⁶ Ritchie has also partnered with Fenton Communications in hosting the “Health Care Without Harm” fear campaign detailed in the following chapter.

Since milk is such an important food item and contains many nutrients important to children’s health, regulatory agencies make sure that its healthfulness is valid. The FDA is responsible for ensuring that all related industries are in compliance with the Federal Food, Drug, and Cosmetic Act of 1938.¹⁵⁷ Regarding drug treatment in animals, the responsibility specifically falls under the responsibility of the FDA’s Center for Veterinary Medicine. In order for any drug to be approved for use in animals used for food, the manufacturer must fulfill two safety criteria:

- demonstrate that food products from treated animals are safe for human consumption;
- show that the drug is safe and effective for the animal.

In 1993, when the FDA approved the use of rBST, it was marketed as Posilac. Of the hormone’s safety, the agency said, “ This has been one of the most extensively studied animal products to be reviewed by the agency. . . . The public can be confident that milk and meat from BST-treated cows is safe to consume.”¹⁵⁸

The Food and Drug Administration expounded on rBST’s safety by saying that the human digestive process “renders it biologically inactive and incapable of having any effect on humans and animals.”¹⁵⁹ Furthermore, the agency commented that the hormone, if injected directly, would have no effect on

154. Jonathan Eig, “Analyze This,” *Wall Street Journal*, February 2000.

155. IATP home page: <http://www.iatp.org>, April 27, 2000.

156. Minnesota Secretary of State, Corporate Record, Tides Center, April 2000.

157. United States House Committee on Agriculture Web site.
http://agriculture.house.gov/glossary/federal_food-_drug-_and_cosmetic_act_-_ffdca-_of_1938.htm, April 27 2000.

158. FDA Backgrounder, Current and Useful Information from the Food & Drug Administration: New Animal Drug For Increasing Milk Production” 1993. See also Food and Drug Administration, “Questions and Answers About BST,” *FDA Veterinarian*, May/June 1994, pp. 7–9.

159. *ibid.*

DEADLY DAIRY FARMS?

humans.¹⁶⁰ In the 1950s, scientists thought that natural BST might have an effect on dwarfism, but the injections of the hormones had little effect.¹⁶¹ Therefore, the hormone, already present in nature, has no known detrimental effects even if it appears in high concentrations, as in the case of a direct injection.

The U.S. Department of Health and Human Services issued a press release the day rBST was approved: “Milk from treated cows has been found to have the same nutritional value and composition as milk from untreated cows,” it stated.¹⁶² The day of the approval, the American Dietetic Association released a similar declaration: “The evidence is clear that BST does not change the composition of milk, and consumers should have complete confidence in the milk supply.”¹⁶³ Former Surgeon General C. Everett Koop and the American Medical Association averred the notion that milk’s composition was unchanged and just as safe as regular milk:

Milk from cows given supplemental bovine somatotropin is the same as any other milk. So, there should be no doubt in the minds of consumers that the milk they drink is just as safe, nutritious, and wholesome as it always has been. Every issue and every question about BST has been thoroughly and carefully studied by the federal government and several independent scientific institutions. Consumers can continue to enjoy milk and dairy foods with complete confidence.¹⁶⁴

The American Medical Association supports the Food and Drug Administration’s approval of bovine somatotropin (BST), to safely enhance the milk production of dairy cattle. Agricultural biotechnology of this kind is the future of food production in the United States and should not be feared or impeded.¹⁶⁵

Koop pointed out the real problem with the issue in saying, “Unfortunately, a few fringe groups are using misleading statements and blatant falsehoods as part of a long-running campaign to scare consumers about a perfectly safe food. Their long range goal is to prevent the benefits of biotechnology from reaching the public.”¹⁶⁶

160. *ibid.*

161. *ibid.*

162. “BST,” *HHS News*, November 5, 1993.

163. The American Dietetic Association, “The American Dietetic Association Supports Food and Drug Administration’s Approval of BST,” Press Release, November 5, 1993.

164. “Statement of C. Everett Koop on the Introduction of Supplemental BST,” February 6, 1994.

165. American Medical Association, Press Release, November 5, 1993.

166. See note 164.

DEADLY DAIRY FARMS?

The alternative to buying milk from rBST-treated cows is buying milk labeled as from cows not treated with rBST, or opting to buy organic or raw milk. Proponents of raw milk claim that the milk is healthier, though, by law, they cannot label it as such. Without specifically saying raw milk is better for us, they call it wholesome.¹⁶⁷ There is much evidence to the contrary.

By definition, raw milk is milk that has not been treated by anything. The land on which milk-producing cows graze is pesticide-free, though some residues do actually exist due to particulates in the air. In addition, the milk has not been treated by pasteurization. Pasteurization is the process of heating milk to destroy disease-producing microorganisms.¹⁶⁸ The process has been around since at least the 1920s and has been a widely accepted form of sanitizing.¹⁶⁹ Consuming non-pasteurized milk is comparable to eating meat that hasn't been cooked. The looming threat of salmonella has convinced most that there is no other option but to cook their meat and be sure to wipe up all residues of the uncooked food because the bacteria it contains is indeed harmful. As the FDA stated in May 1998:

The Center for Disease Control and Prevention (CDC), which has classified salmonellosis as a reportable disease since 1943, has found it to be one of the most commonly reported bacterial infections of any kind in the United States. Human salmonellosis is the second most prevalent foodborne disease in the U.S. after illnesses from *Campylobacter* (a generally milder illness associated with raw and undercooked poultry, raw milk, and untreated water as well as improper handling and preparation of food). In 1996, 39,027 confirmed cases of human salmonellosis were reported to CDC by State and local departments of health. Although this number of cases is below the peak year of 1985, when 57,896 cases were reported, the number of cases is significant. From 1985 through 1996, there have been 508,673 reported cases of salmonellosis.¹⁷⁰

Perhaps this is the reason for the FDA's pasteurized milk ordinance that requires any milk shipped between states be pasteurized and unadulterated.¹⁷¹ In 1988, as a result of a 35-year campaign of "misleading and sometimes downright dangerous advertising," a California Supreme court ruled that one organic dairy,

167. Alta Dena Web site. URL: <http://Altadenadairy.com/anshead.htm>, April 28, 2000.

168. *Illustrated Encyclopedic Dictionary* (Montreal: Tormont, 1990, 1241).

169. Jeffrey Brosco, "The Early History of Infant Mortality Rate in America: "A Reflection Upon the Past and a Prophecy of the Future," *Pediatrics*, February 1999.

170. Department of Agriculture, Federal Register, vol. 63, no. 96, May 19, 1998; FDA Web site: <http://vm.cfsan.fda.gov/~acrobot/fr980519.pdf>.

171. FDA Web site. URL: <http://vm.cfsan.fda.gov/~acrobot/pmo99-1.pdf>.

DEADLY DAIRY FARMS?

Alta Dena, had to label its milk as possibly harmful disease-producing bacteria.¹⁷² The text of the label was not finalized until 1991, and it sounded more like the Surgeon General's warning on cigarettes: "Persons at highest risk of disease from these organisms include newborns and infants; the elderly; pregnant women; those taking corticosteroids, antibiotics, or antacids."¹⁷³ And still, the organics and the consumer advocate groups continue imposing the cancer argument on the public?

In addition to cries of cancer, opponents of the use of rBST expressed concern that the use of the hormone results in an increased tendency for cows to develop mastitis.¹⁷⁴ Mastitis is a disease common to dairy cows; it is an udder infection. The possibility of the growth hormone being responsible for increased incidences of mastitis is plausible only because the development of infection is more likely since the cow is producing more milk and thus being milked more frequently, but studies have shown that there is no increased incidence of mastitis caused by rBST: "Neither the duration nor the severity of the disease (mastitis) increases with the use of rBST."¹⁷⁵ However, mastitis is not an occurrence found only in cows treated with rBST. All cows, regardless of their "upbringing," are susceptible to the infection and undergo the same antibiotic treatment if the disease develops. When a cow develops mastitis, it is removed from production until the antibiotic has run its course and is no longer present in the animal's system. Farmers are required to ensure the animals are free of the antibiotic if they put them back into production; the label on the antibiotics even provides the necessary directions. In fact, recent studies show better dairy management practices associated with rBST-treated cows has resulted in fewer cases of mastitis.

State and federal agencies have imposed stringent rules on dairy farms and processing plants to ensure that standards consistent with public health are met. For example, FDA's pasteurized milk ordinance (PMO) is a mechanism to ensure

172. Philip Hager, "Courts Get Health Alert Authority," *Los Angeles Times*, March 20, 1992.

173. Daniel Puzo, "A First, Milk With a Warning Label," *Los Angeles Times*, May 2, 1991.

174. NIH Conference: Bovine Somatotropin, *Journal of the American Medical Association*, March 20, 1991.

175. Ian Cumming, "U.S. Surveys Show Greater Profit Potential From BST Use; A Long-term Study Done at Cornell University Shows Milk, Protein, and Fat Gains From BST Use," *Ontario Farmer*, April 12, 1999.

DEADLY DAIRY FARMS?

public health: “The PMO specifically requires that all bulk milk pickup tankers be tested for the presence of beta-lactam drug residues.”¹⁷⁶ In essence, “All milk is tested for the presence of antibiotics; if levels exceed tolerances measured in parts per billion, the milk is dumped.”¹⁷⁷ Like any rule, at least one incentive to adhere to it is that any violation results in a fine, not to mention a loss of milk.

To say that milk causes cancer or anything other than strong bones is a falsehood that has been echoed by consumer advocates for decades. There is probably no food more important to an infant’s health than milk, and this is the primary reason that such campaigns can be remotely successful (and detrimental) with no scientific evidence, or, at best, with contrived evidence. Engendering fear, the anti-rBST groups and their scare campaigns have created a profitable market for organic milk (and other dairy products), a demand that was previously nonexistent. And, to ensure profitability, the supply to compensate that demand is almost never the more cost-effective choice for consumers.

Must we submit to this and become victims? If we react to the claims of these groups, if we react based on our fears, we are practically bullied into paying higher prices and inadvertently creating more demand. Increased demand leads to higher prices. Whether it is due to additional labor needed to separate the “special” milk from milk already designated as safe, or due to the money needed for healthcare, we will pay the price, either way. Unfortunately, there are no checks in place to balance such egregious abuse of our trust.

176. U.S. Department of Health and Human Services, “Grade “A” Pasteurized Milk Ordinance,” FDA Web Site. URL: <http://vm.cfsan.fda.gov/~acrobat/pmo99-1.pdf>, June 2000.

177. “Milk Report: New Questions For An Old Staple,” *Consumer Reports*, January 2000.

**Endocrine Disruptors,
Plastics, Dioxin, and
Death — What's
That All About?**

Endocrine Disrupters

Our Stolen Future,¹⁷⁸ a book that many have called the sequel to Rachel Carson's *Silent Spring*, spawned new fears about industrial chemicals. The book's authors bestow the label "endocrine disrupters"¹⁷⁹ on chemicals that they blame for disrupting hormonal functions and causing adverse effects on fertility and intelligence, and many diseases, including, of course, cancer.

Individuals and organizations that believe or propagate the idea that exposures to trace amounts of industrial chemicals are major causes of human disease and death have eagerly embraced the endocrine disrupter hypothesis. "Endocrine disrupter" is a far more useful term to them than their usual favorite term, "carcinogen." Although it is a difficult, costly, and tedious undertaking to investigate charges that chemicals such as dioxin, dichlorodiphenyltrichloroethane (DDT), and polychlorinated biphenyls (PCBs) have caused cancer, it has been done.

Careful, analytical work by respected epidemiologists and other scientists have failed to link environmental exposures to industrial chemicals to any measurable level of cancer.¹⁸⁰ National Cancer Institute and other government scientists have provided the most telling information about the unimportance of environmental chemicals in causing cancer in recent papers detailing declines in

178. Theo Colborn, Diane Dumanoski, and John Peter Myers, *Our Stolen Future*. (New York: Dutton, 1996).

179. *ibid*, 81.

180. For the possibility that all chemical pollutants in the environment are associated with 2 to 4 percent or less of all cancers, see Richard Dolland, Richard Peto, 1981. The causes of cancer: Quantitative estimates of avoidable risks of cancer in the United States today. *J. Natl. Cancer Inst.* 66, 1191–1308. For the absence of convincing evidence that dioxin has caused human cancer, see Science Advisory Board, Environmental Protection Agency, 1995, *Re-Evaluating Dioxin*, Washington, DC: USEPA [EPA-SAB-EC-95-021]. Also, see IARC (International Agency for Research on Cancer), A Preview Description of Polychlorinated Dibenzopara-dioxins and Polychlorinated Dibenzofurans (Vol. 69) at <http://www.iarc.fr/publications/vol69.htm>. Although IARC has declared there is "sufficient evidence" to classify dioxin as a "human carcinogen," the agency is quite specific in saying that the evidence from human studies is "limited," falling short of being "sufficient," and that it bases its conclusions on animal studies. For the absence of any increase in cancer in men and women highly exposed to PCBs, see Renate D Kimbrough, Martha L. Doemland, and Maurice E. LeVois, 1999, Mortality in male and female capacitor workers exposed to polychlorinated biphenyls, *J. Occupational Environmental Medicine* 41, 161–171. P; Kazerouni N; Zahm SH. Also see "Cancer mortality and environmental exposure to DDE in the United States." *Environmental Health Perspectives*, January 2000, 108(1):1–4.

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

cancer rates.¹⁸¹ They draw no attention to such exposures, which make no contribution to cancer rates.

(It is always possible that immeasurably small numbers of cancers are caused by anything — even iced tea or mother's milk. Science cannot make any comments about effects that are immeasurably small. Fascination with immeasurably small causes, which may be zero, will not affect cancer rates.¹⁸²)

Blaming a chemical as an endocrine disrupter is a far more non-specific charge than calling it a carcinogen. Because of the apparently endless list of adverse effects that the authors of *Our Stolen Future* and other advocates of the endocrine disrupter hypothesis ascribe to those chemicals, it is a correspondingly endless task to investigate the posited effects. For instance, suppose that scientists investigate a chemical and find it does not affect the age of maturation. Advocates of the endocrine disrupter hypothesis can respond, "That may be, but you haven't investigated whether it contributes to endometriosis (or any other disease with any hormonal component)."

Theo Colborn, the scientist-author of *Our Stolen Future*, apparently ended up with the endocrine disrupter hypothesis because she found no evidence to link environmental chemicals and cancer in the Great Lakes region. Her reaction to finding that chemicals were not causing increased cancer was different from someone interested in the health and welfare of people. Instead of happiness and relief that the Great Lakes population was not suffering from excess cancer, she regarded her finding as a "major setback."¹⁸³ Evidently her pet ideas about the evil of chemicals are more important to her than the health of people. Her response to the setback was to scour the biological research literature to look for any adverse effect that she could blame on chemicals.

Unlike good scientists who present data both for and against their hypotheses, Colborn picked out and emphasized the reports that supported her conviction

181. Phyllis A. Wingo, "Annual Report to the Nation on the Status of Cancer, 1973–1996, with a Special Section on Lung Cancer and Tobacco Smoking," *Journal of the National Cancer Institute* 91 (1999): 675–690 and papers referenced there.

182. Bruce N. Ames and Lois Swirsky Gold. The Causes and Prevention of Cancer: The Role of Environment, in *The True State of the Planet*, ed. Ronald Bailey (New York: Free Press, 1995), 141-75.

Bruce N. Ames, Lois Swirsky Gold, and Walter C. Willett. The Causes and Prevention of Cancer, *Proceedings of the National Academy of Sciences*, 1995, vol. 92, pp. 5258–5265.

183. See note 178, 19.

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

that chemicals must be causing adverse health effects. Then she lumped all the adverse effects together and suggested that the myriad effects were the result of chemicals interfering with hormones that are responsible for the regulation of growth, maturation, and essentially every organ and biochemical system in animals and humans. Colborn and her co-authors describe the process:

At levels typically found in the environment, hormone-disrupting chemicals do not kill cells nor do they attack DNA. Their target is a hormone, the chemical messengers that move about constantly within the body's communication network. Hormonally active synthetic chemicals are thugs on the biological information highway that sabotage vital communications. They mug the messengers or impersonate them.¹⁸⁴

Hormones, and “imposter hormones,” are often compared to keys that fit into locks to control biochemical activity, “turning on and off vital biological processes,”¹⁸⁵ and estrogen, which controls many biological processes, is often singled out as the target of endocrine disrupters.¹⁸⁶

Interfering with estrogen interferes with the reproductive system, and anything about reproduction is emotionally poignant because it deals with the most personal parts of our anatomies and our desire for healthy children. The authors of *Our Stolen Future* suggest that endocrine disrupters might interfere with potential parents' sexual capability, fertility, the development of the embryo, growth, intelligence, and even behavior.

John Peterson Myers, a co-author of *Our Stolen Future*, elaborated on the ubiquitous nature of the risk in a speech at *the Rio+5 Forum* in 1997 (five years after the Earth Summit). He reminded the audience of two things that are echoed on almost every page of his book:

First, every one of you sitting here today is carrying at least 500 measurable chemicals in your body that were not a part of human chemistry before the 1920s. We are walking experiments, differing from all previous generations in human ancestry in this regard.

And second, there is now incontrovertible scientific proof that a mother shares some of these man-made chemicals with her baby while it is in her womb. No baby has been born on the planet for at least two decades without some exposure

184. *ibid*, 203.

185. Betsy Carpenter, “Investigating the Next Silent Spring,” *US News & World Report*, March 11, 1996.

186. Ronald Bailey, “Hormones and Humbug; A New Expose is One Part Pseudo Science, Two Parts Hype, Three Part Hysteria,” *The Washington Post*, March 31, 1996.

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH — WHAT'S THAT ALL ABOUT?

to novel chemicals in the womb. Some with little. Some with a lot. But none with none.¹⁸⁷

The presence of the chemicals and the transfer of some of those chemicals from the mother to the fetus is not denied. What Myers, his co-authors, and others have failed to demonstrate is that the chemicals have caused any harm.¹⁸⁸ Neither can they explain how constantly increasing life expectancies and decreasing cancer rates are compatible with their assertions that chemicals are causing disease and death.

Scientists, especially toxicologists, have investigated possible endocrine disruption activity of chemicals for many years without finding those effects at doses below those that cause other, frankly visible, toxic effects. Doses of chemicals that are frankly toxic are relatively easily identified and avoided. In contrast, the fear engendered by endocrine disrupters (and carcinogens) is that they may cause damage that is not expressed as frank toxicity, but as subtle or long-delayed effects.

The authors of *Our Stolen Future* associate a large number of subtle effects with exposures to chemicals that have no obvious effects. For instance, they blamed endocrine disrupters for causing decreases in sperm counts, relying upon a 1992 study about sperm counts that was done in Denmark.¹⁸⁹

Since then, sperm counts have been investigated around the world. There is enormous geographical variation: The average sperm count in New York City is twice that in California.¹⁹⁰ If there is an association between chemical pollution and sperm counts, it might be supposed that men in New York City, which has all the chemical pollutants of urban, industrial settings, would have low counts. The New York City–California comparison provides no support for the endocrine disrupter hypothesis.

187. John P Myers. The Rio + 5 Forum, March 14, 1997; *Our Stolen Future* Web site. URL: <http://www.osf-facts.org/events/rio5.html>, April 2000.

188. National Research Council, *Hormonally Active Agents in the Environment* (Washington, DC: National Academy Press, 1999).

189. See note 178, 172–3.

190. H Fisch, ET Goluboff, JH Olson, J Feldshuh, SJ Broder, and DH Barad. Semen analyses in 1,283 men from the United States over a 25-year period: No decline in quality. *Fertil Steril*, 1996, vol. 65, 1009–1014.

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

Concerning temporal variations, a leading American fertility specialist, Harry Fisch, reported: “[T]here was no decline in sperm counts. There was a lot of variation from year to year, but overall, there was no decline in sperm counts.”¹⁹¹

In 2000, Stephen Safe, one of the most respected biochemists working on endocrine disrupters, summed up the information about sperm counts:

Some reports showed that over the last 15–25 years, there were significant decreases in sperm quantity, whereas other studies showed either no declines or slight increases . . . data suggest that we do not know if sperm counts are actually up or down. Our knowledge of sperm counts and their temporal variability in normal populations is minimal, and the contributions of the environment (i.e., lifestyle, diet, contaminants, etc.) are also unknown.¹⁹²

Other experts echo Safe’s uncertainty about the possible contribution of environmental factors:

Experts say that many factors, including smoking, alcohol and drug use, and venereal disease can affect sperm production. Even tight underwear and the long hours many men spend sitting at office desks have been blamed: they overheat the testicles, which can cause the sperm to die.¹⁹³

Sperm counts may be worthy of more research. The evidence about them, however, does not lead to any conclusion that there is a risk to human survival and reproduction.

Much of the hype about alleged endocrine disrupters was based on observations of wild animals involving such things as birds with twisted beaks or gulls that exhibited abnormal sexual behavior. Such abnormalities were reported in the distant past before industrial chemicals appeared in the environment. They must have causes other than industrial chemicals, if, indeed, chemicals are a cause.

Careful investigation has associated some reproductive problems in wildlife with chemicals, but those problems were much more prevalent in the past, and may have disappeared. For example, reducing chemical pollution has been associated with “dramatic improvements in reproductive success and significant

191. Harry Fisch, Linda Birnbaum, Louis Guillette and Theo Colborn. Interview by Michael Chandler, “Fooling with Nature” show no. 1619, transcript, Public Broadcasting System, June 2, 1998. URL: <http://www.pbs.org/wgbh/pages/frontline/shows/nature/etc/script.html>, March 2000.

192. Stephen H. Safe. 2000. “Endocrine Disrupters and Health: Is There a Problem?” *Environmental Health Perspectives* vol. 108, June 2000, pp. 487–493.

193. Mark Nichols, “The Sperm Scare: Pollution and Chemicals May be Threatening Human Fertility,” *Macleans*, April 1, 1996.

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

increases in populations of cormorants, gulls, terns, herons, and other predatory birds in the Great Lakes basin.”¹⁹⁴

The authors of *Our Stolen Future* were mystified by reports of fish with bisexual organs. They, of course, leaped to the conclusion that some mysterious chemicals with endocrine disruptive powers were to blame.¹⁹⁵ The cause was more prosaic:

The recent identification of etiologic agents from sewage treatment effluents that received mainly domestic wastes was somewhat surprising. The major estrogenic components were the natural hormones 17 β -estradiol (E2) and estrone, with minor amounts of the birth control pill ingredient 17-ethinylestradiol. [reference numbers deleted].¹⁹⁶

Certainly, birth control chemicals in sewage are an environmental contaminant, but those chemicals are expected to cause hormonal changes. In any case, the chemicals are soon diluted in rivers and other water supplies and are not expected to cause any human effects, or any wildlife effects, at greater distances from the sewage outfalls.

Colborn and her co-authors highlighted studies by zoologist Louis Guillette as proof of the endocrine disrupter theory. Guillette studied a group of alligators in the heavily polluted Lake Apopka in Florida, and the authors of *Our Stolen Future* said, “Because of hormonal disruption during sexual development, the animals that would have become males end up stranded in the gender-bending state called intersex.”¹⁹⁷ The “intersex” state is characterized by small penises.

Guillette himself, perhaps inadvertently, discussed a limitation of his study in shedding light on possible risks to animals other than alligators living in a highly polluted lake. “The alligator makes a beautiful model. It doesn’t get up and fly away. It doesn’t move to another country for part of its life cycle. They are going to stay their whole lives within a mile and a half of where they were born.”¹⁹⁸

Guillette’s statement leads to questions about how realistic it is to base risks on

194. NW Tremblay and AP Gilman. 1995. Human Health, the Great Lakes, and Environmental Pollution: A 1994 Perspective. *Environ Health Perspectives* 103 (supplement 9):3–5.

195. See note 178. 131–135.

196. See note 192.

197. See note 178, 152.

198. Michael Fumento, “Hormonally Challenged,” *The American Spectator*, October 1999.

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

assumptions that humans will live their lives and consume all of their food and drink within a mile and a half of their birthplace.¹⁹⁹

The conditions in Lake Apopka are far different from those, probably, anywhere else on earth. The concentration of DDT far exceeds any that any human or animal is likely to encounter elsewhere.

A more basic problem with Guillette's and other researchers' findings based on observations of wildlife or from laboratory tests is how to relate them to human risks. Such questions generally arise with results from tests made on laboratory rats and mice. Those animals are, at least, mammals. Alligators are reptiles, and the sex of alligators is partially determined by ambient temperatures after the eggs are laid. There is nothing comparable in human biology.

A National Research Council report pinpointed the problem of reliance on animal results:

The specific mechanisms of action are not well-understood for most reported associations between HAAs (hormonally active agents) and various biological effects. Furthermore, the majority of the evidence is based on studies done on wildlife and laboratory animals; very little is known about how the compounds affect humans.²⁰⁰

Our Stolen Future was greeted with scientific skepticism or rejection, but many in the press and public eagerly accepted its suggestions and conclusions. Most importantly for that acceptance, the book offered explanations for all kinds of maladies and misfortunes, and the explanations laid the blame on chemicals, which were pictured as the product of rapacious industry. And why not trust the authors? They were generally successful in having themselves seen as objective researchers, following up on leads that had been overlooked by other scientists. Moreover, the organizations that funded the authors are main-line environmental organizations with no apparent ax to grind.

The book was well marketed. It spawned additional costs for industry, and, as an unintended consequence, it may have increased cancer risks for the poorest consumers.

199. *ibid.*

200. National Research Council, "Research Needed to Reduce Scientific Uncertainty About Effects of Hormonally Active Agents in the Environment," Press Release, August 3, 1999. See also "Hormonally Active Agents in the Environment." National Academy Press: Washington, D.C. (1999).

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

The book suffers, however, from fatal flaws when examined as scientific research and analysis. *Our Stolen Future* falls far short of objectivity, and its authors can make few claims to objectivity.

Our Stolen Future Authors

The authors of *Our Stolen Future*, Theo Colborn, John Peterson Myers, and Diane Dumanoski, make bold statements about cause and effect. Their boldness in reaching conclusions that scientists had failed to report can be seen as the courage to face unpleasant truths. Or, it can be seen as part of a crusade to persuade the public that industry and chemicals are bad and that people such as Colborn, Myers, and Dumanoski are better able to tell people what to produce, buy, and consume than producers and consumers acting in a free market and society. And it follows that, if Colborn, Myers, and Dumanoski are able to guide society, the organizations that employ them are worthy of the public's financial support.

John Peterson Myers was trained as a biologist, and now directs the W. Alton Jones Foundation. Theo Colborn is the director of the Wildlife and Contaminants Program at the World Wildlife Fund (WWF). Diane Dumanoski, a *Boston Globe* reporter, is an environmentalist reporter who, according to *The Pittsburgh Post-Gazette*, has boasted of becoming “even more crafty about finding the voices to say the things I think are true.”²⁰¹ The article quotes Dumanoski as saying she secured a front-page article on an ozone hole after she contacted a source and “negotiated something that really wasn't accurate . . . something much balder than what was true.”²⁰² Objectivity evidently plays little role in her approach to journalism.

Although Myers' scientific credentials are sometimes mentioned, Colborn is the most likely of the three authors to be depicted as a scientist. Perhaps, in contrast to Myers, an avowed activist, and Dumanoski, who admits her compromise with the tenets of professional journalism, she is.

Colborn differs from scientists who rely on evidence, however. In the years that have passed since the publication of *Our Stolen Future*, literally no evidence

201. “Polluting the Debate,” *Richmond Times*, March 31, 1996.

202. *ibid.*

has been forthcoming to support the conclusions in the book. Confronted by the absence of facts to support her theory, Colborn declared that evidence isn't important. "Just because we don't have the evidence doesn't mean that there are no effects."²⁰³ That is, of course, literally true, but when repeated inquiries fail to find evidence, the tentative conclusion can be drawn that there is no effect.

The W. Alton Jones Foundation

The W. Alton Jones Foundation, directed by John Peterson Myers, played a pivotal role in the writing of and publicity for, *Our Stolen Future*. It, along with six other foundations, provided direct support for the writing of the book. In addition,

The Jones Foundation . . . invested in promoting "Our Stolen Future" and also in funding studies to provide further evidence in support of its thesis. Publication was accompanied by newspaper advertising, TV appearances for the authors, and considerable newsmagazine coverage. . . Within the book, and in the marketing and press coverage, Colborn and Myers were repeatedly depicted as detached, objective scientists, though neither lists an academic affiliation and both are full-time employees of advocacy organizations.²⁰⁴

The foundation appears to have surrendered any objectivity in its advocacy of the endocrine disrupter hypothesis. At some time, foundation officials must have realized that some analyses and conclusions in *Our Stolen Future* had been discredited and that many more were in doubt. The foundation has never, however, backed away from any part of the book. In parallel with Theo Colborn's attitude about evidence, the foundation appears not to need it.

By providing \$80,000 to Tulane University's Center for Bioenvironmental Research,²⁰⁵ the foundation was a primary funder of one of the most widely publicized studies about endocrine disrupters. Tulane researchers published a paper in the prestigious journal *Science*,²⁰⁶ which concluded that now-permitted concentrations of pesticides in the environment, when present in combinations—and they always are—are potent endocrine disrupters.

203. Gregg Easterbrook, "Science Fiction," *New Republic*, August 30, 1999, 18–22.

204. *ibid.*

205. Patrick Reilly, "Foundation Watch: Investing in Environmental Extremism: W. Alton Jones Foundation Bites the Hands that Feed," Capital Research Center, May 1998. URL: <http://www.capitalresearch.org/fw/fw-0598.html>, April 2000.

206. S.F. Arnold *et al.*, "Synergistic Activation of Estrogen Receptor with Combinations of Environmental Chemicals," *Science*, 272: 1489–1472.

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

Environmentalists heaped praise on the study and proclaimed it was the smoking gun that proved the endocrine disrupter hypothesis.

A problem soon arose. Other scientists were unable to repeat the experiment.²⁰⁷ About a year after publishing their alarming results, and after first rejecting criticisms of their study, the Tulane researchers threw in the towel. In a letter to *Science*, the head of Tulane's Center for Bioenvironmental Research admitted: "We have conducted experiments duplicating the conditions of our earlier work, but we have not been able to replicate our initial results."²⁰⁸

The close-knit ties between and among the funders and researchers of the endocrine disrupter hypothesis is neatly illuminated by the curriculum vitae of Louis Guillette, the zoologist who investigated the sex of alligators in polluted Lake Apopka. He lists one of his research positions as visiting professor of ecotoxicology at the Tulane Center for Bioenvironmental Research in 1995–96, where his position was funded by the W. Alton Jones Foundation.²⁰⁹

Funders of research cannot look over researchers' shoulders and check on the accuracy of their work or tell them what to publish. Nevertheless, there has been no outcry about the connection between the W. Alton Jones Foundation and *Our Stolen Future*, the Tulane research, and the interlocking nature of the researchers who have pushed the increasingly discredited endocrine disrupter hypothesis. That absence of public attention can be contrasted with the likely condemnation of an industry group that funds researchers who deny the importance of evidence (as Colborn did), publish results that cannot be repeated even in the same laboratory (as the Tulane researchers did), or base projections about human health on studies of animals as different from humans as alligators living in a particular environment (as Guillette did).

Publicity

Both the W. Alton Jones Foundation and WWF, Theo Colborn's employer, are clients of Fenton Communications, which had earlier gained fame for publicizing

207. Michael Gough and Steven Milloy, "The Case for Public Access to Federally Funded Research Data," *Policy Analysis No. 366* (Washington, D.C.: Cato Institute, 2000), 5–8.

208. J.A. McLachlan, "Synergistic Effect of Environmental Estrogens: Report Withdrawn," *Science*, vol. 277, 459–463.

209. Louis Guillette, curriculum vitae, University of Florida Zoology Department Web site. URL: <http://www.zoo.ufl.edu/ligcv.html>. April 2000.

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

the Natural Resources Defense Council's claims that Alar was causing cancer in children.

Some journalists made the connection between Fenton Communications, the agency's earlier campaigns, and the promotion of *Our Stolen Future*:

Our Stolen Future is being promoted by Fenton Communications, the PR firm that ruined apple growers with the bogus Alar scare of 1989.²¹⁰

and,

Predictably, the book has a set of brouhaha. Fenton Communications, which brought us the Alar scare, has taken responsibility for promoting *Our Stolen Future*.²¹¹

and,

Helping promote the book . . . [was] the same Washington public relations firm, Fenton Communications, the PR firm that ginned up the false Alar scare.²¹²

Notably, all the criticisms came from journalists associated with right-of-center perspectives or libertarian organizations. None of the quotes is from the mainstream press.

Fenton Communications' full-scale campaign to promote *Our Stolen Future* included a national book tour, a *Today Show* appearance for Theo Colborn, and a number of press conferences at the National Press Club in Washington, D.C. There is nothing wrong about promoting a book. There is nothing wrong about hiring an agency, even one which might have gone too far in an earlier campaign, to promote the book. Selling books is the right of anyone in a free society.

Again, however, there is the odd absence of criticism. It is to be expected that the mainstream press would come down with both feet on a book that was promoted by an agency that had been revealed as going too far to downplay a risk. Fenton Communications suffered no such fate.

The Endocrine Disrupter Legacy

So what? So what if the researchers and organizations who promoted the endocrine disrupter scare went overboard? The "so what" is that they may have

210 Michael Malkin, "Fighting Pseudoscience," *Journal of Commerce*, April 25, 1991.

211 Tony Snow, "From the Folks Who Brought You the Alar Scare," *Tampa Tribune*, April 7, 1996.

212. Edwin Feulner, "Fertility, Futility Don't Mix; Low-Sperm Scare Meets Big Boom," *Arizona Republic*, May 12, 1996.

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

increased health risks for the poorest and least healthy people in society, including children.

The publication of *Our Stolen Future* was followed about three months later by the publication of the subsequently retracted Tulane study. That combination of publications and some lobbying by Environmental Protection Agency officials were a major impetus for the inclusion of expensive new testing for possible endocrine disrupters in the Food Quality Protection Act of 1996 and the Safe Drinking Water Act of 1996.²¹³

Bruce Ames, a recipient of the 1999 National Science Medal, has written extensively about the importance of eating fresh fruits and vegetables in the prevention of cancer, and the importance of pesticides in maintaining a plentiful and affordable supply of fruits and vegetables.²¹⁴ The newly required tests will drive some pesticides from the market and increase the costs of others. Those changes will not depend on showing that pesticides are risky. In some cases, manufacturers may decide the costs of the newly required tests exceed any sales income from some pesticides and pull those pesticides from the market. Other manufacturers will pay for the tests and pass the cost onto farmers and other pesticide users.

Reduction in the supply of pesticides, and increases in the costs of those remaining on the market, will result in decreases in the availability of fresh fruits and vegetables and increases in cost. Middle-class consumers will be able to buy higher-priced produce, but poorer consumers, whose diets are already far from good, will forego fresh produce, increasing their cancer risks.²¹⁵

Middle- and upper-class organizations such as the W. Alton Jones Foundation and Fenton Communications, and people who work for them, have decided that chemicals are a threat to health. It is worse than ironic that those decisions are likely to increase cancer risks for the poorest members in society while producing no improvements in health for anyone.

213. Daniel Byrd, "Goodbye Pesticides?" *Regulation* 20 (no. 4, Fall 1997):57-62.

214. Bruce Ames *et al.*, "Nature's Chemicals and Synthetic Chemicals: Comparative Toxicology," *Proceedings of the National Academy of Sciences* 87 (1990): 7782-7786, and Bruce Ames *et al.*, "Cancer Prevention, Rodent High-Dose Cancer Tests and Risk Assessment," *Risk Analysis* (1996): 613-617.

215. See, in general, National Research Council, *Carcinogens and Anticarcinogens in the Human Diet* (Washington, DC: National Academy Press, 1996).

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

Plastics

Few man-made products do not contain plastic in one form or another, and most people consider plastics benign and useful, if they think about them at all. Environmentalists disagree. They have demonized plastics because those chemicals do not occur in nature, and “non-natural” chemicals are bad; most plastics are made from petroleum, which, we’re told, is becoming increasingly scarce; most plastics do not degrade, and they’re going to fill up landfills, which, we’re told, are nearly full.

The messages failed to stir up much anti-plastic sentiment in the public. Most people do not divide the world between “natural-good” and “synthetic-bad.” They know that proven petroleum resources increase because rising oil prices result in petroleum companies finding new fields (and prices then fall with increased supply). They know that the “landfill shortage,” if it ever existed, has been solved, and that waste management companies are competing to find more wastes, including plastics, to cart to their disposal sites. And they know that some plastics can be recycled, and more would be were there a demand for recycled plastics.

Environmentalists need another argument against plastics, and they have devised one: Plastics are a health risk. The authors of *Our Stolen Future* wrote that chemicals found in plastics are endocrine disrupters:

Recent studies have implicated widely used synthetic compounds such as phthalates, an ingredient in plastics, and alkylphenol polyethoxylates, which are found in plastics, detergents, and many other products, in hormone disruption, and a series of accidental discoveries has demonstrated that plastics are not inert as was commonly assumed and that some of the chemicals leaching from plastics are hormonally active²¹⁶

Of course, the ubiquitous use of plastics increases the risk:

Plastics have found their way into every corner of our lives, creating the potential for significant chronic exposure to hormone disrupters. They carry everything from soda to cooking oil, they line metal cans and they are the preferred material for children’s toys.²¹⁷

“Endocrine disrupters” is a scary term, but few people had ever heard the term before 1996, when *Our Stolen Future* appeared. Even after that, unless a

216. See note 178, 223–224.

217. *ibid*, 234.

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

person read the book or learned about it from the media, “endocrine disrupter” was a term that didn’t elicit much public response.

“Dioxin,” on the other hand, is a fearsome chemical that almost everyone “knows” causes cancer, and birth defects, and many other diseases. Greenpeace, in 1997, neatly tied plastics with dioxin, with its report, *PVC—The Poison Plastic: Dioxin from Cradle to Grave*. The report states that polyvinyl chloride (PVC) is the second most commonly used plastic and that “there are strong grounds for holding PVC responsible for a substantial and growing proportion of global dioxin production and release.”²¹⁸

Greenpeace and others have identified at least two health risks from plastics. Incineration of plastics contributes to the formation of dioxin, and some chemicals, including some “plasticizers,” are potent endocrine disrupters. So, how bad are dioxin and the endocrine disrupters in plastic?

Dioxin

Dioxin (formally, 2,3,7,8-tetrachlorodibenzo-*p*-dioxin, and sometimes called 2,3,7,8-TCDD, or, more simply, TCDD) was a contaminant in some formerly manufactured herbicides, and it is produced in chlorine-using industrial processes such as paper bleaching, and from combustion sources, including forest fires.²¹⁹ There are 75 different “dioxins,” but 2,3,7,8-TCDD is the most toxic, and most of what is known about this class of chemicals has been learned from studies of it.²²⁰ In addition, there are 135 “furans,” which are closely related chemically to the dioxins, but less toxic.

Dioxin burst onto the scene in 1970 when government researchers reported that the herbicide 2,4,5-T was a very most potent cause of birth defects (a “teratogen”) in mice.²²¹ Those researchers and others quickly determined that the teratogenic activity resided in dioxin, which was an unavoidable contaminant of the manufacture of 2,4,5-T. That discovery led to congressional hearings and, in

218. Greenpeace, “PVC, The Poison Plastic: Dioxin From Cradle to Grave,” April 1997.

Greenpeace Web site. URL:

<http://www.greenpeace.org/~usa/reports/toxics/PVC/cradle/dcgtoc.html>, April 2000.

219. See note 8, 98.

220. Dow Chemical Web site. URL: <http://www.dow.com/environment/debate/d4a.html>, April 2000.

221. K. Diane Courtney, *et al.*, “Teratogenic Evaluation of 2,4,5-T,” *Science* (1970) 168:864–866.

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

1970, the cessation of use of Agent Orange (a 50:50 mixture of 2,4,5-T and the related herbicide 2,4,-D, which does not contain dioxin) in the war in Vietnam.²²² The United States Department of Agriculture (USDA), which regulated the use of pesticides at that time, imposed some restrictions on 2,4,5-T, but the herbicide continued to be used in this country until 1979.

In 1977, a woman living in Alsea, Oregon, drew a connection between miscarriages (spontaneous abortions) and spraying of 2,4,5-T. One of several letters she sent to the federal government eventually reached the EPA, which commissioned two studies to examine the possible association. Both studies apparently confirmed the association, and in February 1979, the EPA suspended essentially all uses of 2,4,5-T, and the herbicide disappeared from the U.S. market.²²³

Subsequent examination of the methods used in the Alsea studies showed that they were seriously flawed and that the conclusions reached from them were almost certainly wrong. EPA's Web site admits that the Alsea studies have never been replicated, and the EPA's 1994 "Dioxin Reassessment" does not place any credence in those studies.²²⁴ The evidence that dioxin caused miscarriages is almost certainly wrong, but the suspension of 2,4,5-T was final.

There is no evidence that dioxin has caused birth defects in humans (although it is teratogenic in laboratory animals at doses much higher than any human exposure), and there is no confirmed report that it has caused miscarriages. Indeed, those possible associations are not at the center of current claims about dioxin. In recent years, environmentalists, some scientists, and the EPA have focused on other maladies, especially cancer, that they say may be associated with dioxin.

More than three decades ago, in 1969, a group of National Cancer Institute scientists reported that 2,4,5-T caused cancer in test animals (it is "carcinogenic").²²⁵ As was the case with teratogenicity, it was soon discovered

222. Michael Gough, *Dioxin, Agent Orange* (New York: Plenum Press, 1986), pp. 105–120.

223. *ibid.*, 137-148.

224. EPA (U.S. Environmental Protection Agency), *Health Assessment Document for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) and Related Compounds* (Washington, DC: U.S.E.P.A., 1994), volume 1, chapter 5.

225. J.R.M. Innes, "Bioassay of Pesticides and Industrial Chemicals for Tumorigenicity in Mice: A Preliminary Note," *Journal of the National Cancer Institute* (1969) 42:1101–1114.

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

that the carcinogenic activity of 2,4,5-T resided in the dioxin that always contaminated it. Subsequently, Dow Chemical Company scientists showed that dioxin was the most potent chemical carcinogen ever tested.²²⁶ Interestingly, the lowest tested dose of dioxin was associated with decreased cancer. The highest tested dose, and the only one that increased cancer in rats, was about 200,000 times higher than average human exposures, and 500 times higher than the highest known human exposure.²²⁷

Swedish researchers reported that exposure to dioxin for a few days increased the risk of some relatively rare tumors, soft tissue sarcomas (STS), by three to six times.²²⁸ Those results are highly suspect. There is no evidence that the men with STS had been exposed to any more dioxin than the average Swedish male,²²⁹ and it is likely that publicity in Sweden about a possible link between 2,4,5-T and STS caused men with STS to “remember” exposures. It is clear that there are only three STSs in a population of more than 5,000 U.S. chemical workers with known, much higher exposures.²³⁰ The high risks predicted from the Swedish studies are clearly incorrect.

The study of American chemical workers did reveal an excess in total cancer deaths among that population, but the excess largely results from higher-than-expected lung cancer deaths. Given that smoking information was collected for only two of the 12 chemical plants included in the study, it is possible that the

226. Richard J. Kociba *et al.*, “Results of a Two-year Chronic Toxicity and Oncogenicity Study of 2,3,7,8-tetrachlorodibenzo-p-dioxin in rats,” *Toxicology Applied Pharmacology* (1978) 46:279-303.

227. The life-time average daily dose (LADD) of dioxin for humans is about 0.0005 nanograms of dioxin per kilogram of body weight daily (ng/kg-day). The LADD for the most heavily exposed people is about 0.19 ng/kg-day. The LADD for rats that developed cancer was 100 ng/kg-day. $100\text{ng}/0.0005\text{ ng} = 200,000$ for the ratio of rats to average human exposure. $100\text{ng}/0.19\text{ ng} = 526$ for the ratio of rats to most highly exposed humans. From Mark Boroush and Michael Gough, “Can Cohort Studies Detect Any Human Cancer Excess That May Result from Exposure to Dioxin? Maybe,” *Regulatory Toxicology and Pharmacology* (1994) 20:198-210, table 2.

228. Linnart Hardell *et al.*, “On the Relation of Soft Tissue Sarcoma, Malignant Lymphoma, and Colon Cancer to Phenoxy Acids, Chlorophenols and Other Agents,” *Scandinavian Journal Work Environmental Health* (1981) 7: 119-130.

229. M. Nygren *et al.*, “Identification of 2,3,7,8-substituted Dioxins and Dibenzofurans in Environmental and Human Samples,” in C. Rappe, G. Choudhary, and L.H. Keith (eds.) *Chlorinated Dioxins and Dibenzofurans In Perspective* (Chelsea, MI: Lewis Publishers, 1986), pp. 17-34.

230. Kyle Steenland *et al.* “Cancer, Heart Disease, and Diabetes in Workers Exposed to 2,3,7,8-Tetrachlorodibenzo-p-dioxin,” *Journal National Cancer Institute* (1999) 91:779-786.

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

excess lung cancer is caused by smoking.²³¹ In any case, if there is any increase in cancer, it is manifest only at “exposures . . . 100–1000 times higher than those experienced by the general population.”²³²

In 1995, the EPA failed to convince its Science Advisory Board (SAB) that dioxin increased the risk of cancer.²³³ In May 2000, a new draft of the EPA’s “dioxin assessment” was leaked to the press. The new draft ignores the SAB’s criticisms and concludes that dioxin is a bigger cancer risk than previously supposed. John Doull, a highly respected toxicologist, characterized the new assessment. EPA’s “review of the critical dioxin literature is inadequate and their recommendations appear to me to be unsupported and arrogant,” Doull said. “This action appears to be ill-timed, political rather than scientific, and is an embarrassment to science and certainly to toxicology.”²³⁴ The fate of the new assessment is unknown.

Although scientists are far from being in agreement about the risks from dioxin, it is clear that no increased health effects have been detected near average exposure levels. Moreover, there is evidence to support, and theoretical reasons to expect, that levels of exposures to which humans might be exposed reduce the risks of cancer.²³⁵

Whatever others’ doubts, Greenpeace proclaims that any exposure to dioxin is unsafe, and that all uses of PVC, for instance, should be phased out to reduce dioxin exposures. Judging by Greenpeace’s actions, there are two kinds of dioxin. Dioxin made by Greenpeace’s enemies is dangerous; dioxin made by its friends is not.

Greenpeace is opposed to plastics that may generate dioxin when they are burned, but it’s not opposed to dioxin-laden ice cream, made by Ben & Jerry’s, one of America’s “greenest” companies. Every day, more than a million people consume Ben & Jerry’s ice cream, exposing themselves to about 200 times EPA’s

231. Marilyn Fingerhut *et al.*, “Cancer Mortality in Workers Exposed to 2,3,7,8-tetracholodibenzo-p-dioxin,” *New England Journal of Medicine* (1991) 324:212–218.

232. See note 230, 779.

233. Science Advisory Board (SAB), Environmental Protection Agency, *Re-Evaluating Dioxin* (Washington, DC: U.S.E.P.A., 1995).

234. John Doull quoted in Gina Kolata, “EPA’s Report on Dioxin’s Cancer Risk Draws Praise and Criticism,” *New York Times*, May 18, 2000, A8.

235. “Biologically-based Modeling of U-shaped Carcinogen Responses,” *BELLE Newsletter* 7 (2) (November 1998).

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH — WHAT'S THAT ALL ABOUT?

daily “safe” level of ice cream.²³⁶ Greenpeace does not recommend that anyone discontinue consumption of Ben & Jerry’s ice cream. Ben & Jerry’s, which endorses Greenpeace’s position on dioxin, has publicized its efforts to reduce dioxin in the paper packaging of its ice cream. It says nothing about the dioxin in its ice cream—which is, of course eaten, while the packaging is not – and when confronted with measurements of dioxin in its ice cream, Ben & Jerry’s responded that its ice cream is safe to eat.

It is scientifically impossible to square Greenpeace and Ben & Jerry’s statements that any amount of dioxin is dangerous with either’s attitude about Ben & Jerry’s ice cream. It is easy to do, though, on the basis that Greenpeace is in business to frighten people about industrial products, and reap contributions and political clout for doing so. Ben & Jerry’s has made many efforts to appear “green,” and reducing the amount of dioxin in packaging fits that pattern. The company, however, says the much higher concentrations of dioxin in its ice cream are safe. If it did not, sales would fall.

Whatever the risk from dioxin in plastics, and it’s likely to be zero, it’s less than the risk from the politically correct Ben & Jerry’s ice cream.²³⁷ Greenpeace warns about the lesser “risk,” and ignores the larger.

Endocrine Disrupters in Plastics

In 1997, soon after Greenpeace launched its anti-PVC campaign, another group, Health Care Without Harm (HCWH), relying on the Greenpeace report and its own “First Do No Harm” report, initiated its campaign. HCWH is a project of Mark Ritchie’s IATP and the Environmental Working Group, which is both a Fenton Communications client and a project of the Tides Center. Like Greenpeace, HCWH wanted hospitals to abandon PVC-containing devices because of the dioxin they can generate when burned, but HCWH ballyhooed another threat to human health.

236. David Mastio, “Food Rules Out of Sync, Study Says,” *Detroit News*, November 7, 1999, p. 1; and Michael Gough and Stephen J. Milloy, “Dioxin in Ben & Jerry’s Ice Cream,” <http://www.junkscience.com/dec99/benjerr2.htm>; this paper has been submitted to the “Dioxin 2000” conference to be held in summer 2000.

237. Dioxin is present in all foods that contain animal fat. Ben & Jerry’s ice cream has high levels of dioxin because it contains about twice the fat of ordinary ice creams.

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

HCWH claimed that PVC-containing materials such as IV and blood bags are directly dangerous because they are made with a phthalate plasticizer (DEHP) that leaches out of the products “directly into patients.”²³⁸ Despite failing to substantiate any case of a patient’s health being harmed by PVC-containing products, in 1999, HCWH prepared a laundry list for Food and Drug Administration (FDA) action: Require all PVC medical devices that leach plasticizers to include a warning label and additional information on potential health risks from DEHP-containing PVC products and from FDA-approved alternatives; warn pregnant women, infants, hemophiliacs, dialysis patients, and others receiving long-term intravenous or tube-feeding treatment that they are more likely to receive high doses of DEHP; and expedite the development of safer, PVC-free alternatives to all PVC medical devices that leach plasticizers.²³⁹

It would be bad enough if plasticizers endangered patients. Worse, vinyl plastic toys—essentially all soft plastic toys and many hard plastic toys as well—contain plasticizers. In a February 1999 press release, HCWH, citing Greenpeace, said, “The levels of DEHP in vinyl medical products were similar to, and in some cases exceeded, the levels of phthalates found in vinyl children’s toys.”²⁴⁰

Children’s health has been a major policy initiative of the Clinton administration, and it was no surprise that the U.S. Consumer Product Safety Commission (CPSC) acted on vinyl toys in November 1999. The CPSC admitted that the evidence for any risk from toys or products made for infants was far from convincing, but it requested that manufacturers stop using (DINP) phthalates in plastic teething rings, rattles, and nipples and other products.²⁴¹ Manufacturers complied with the “request.” What alternative did they have? To ignore it and be branded as child poisoners?

238. *ibid.*

HCWH Press Release, “More than 180 Hospitals, Public Health, and Environmental Groups Petition FDA to Protect Patients; “New University of Massachusetts Report Confirms Health Risks of Vinyl IV Bags and Other Vinyl Medical Products,” *PR Newswire*, June 15, 1999.

239. Health Care Without Harm, *ibid.*

240. Health Care Without Harm, *PR Newswire*, February 13, 1999; Health Care Without Harm Web site. URL: <http://www.noharm.org>. April 2000.

241. Noble Holcomb, “The Plastic Scare,” *National Post*, October 11, 1999.

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

The attacks on PVC-containing products did not go unopposed. In 1999, former Surgeon General C. Everett Koop announced that he, as a part of a 16-member panel, was unable to find evidence to suggest that PVC-containing medical devices was harming patients.²⁴² “The panel concludes that DEHP in medical devices is not harmful to even highly exposed people, [even] those who undergo certain medical procedures such as regular hemodialysis.”²⁴³

In a *Wall Street Journal* editorial, Koop specifically labeled the anti-DEHP/PVC campaign as a “phony health scare.”

Families were unnecessarily frightened last fall into believing their baby’s teething rings and vinyl toys were conduits of cancer-causing chemicals. . . . This ceaseless obsession with ousting the frequently nonexistent bogeyman from our chemical cornucopia does quite a lot to strengthen the ranks of consumer groups but very little to actually improve the health and quality of our lives.²⁴⁴

The industries that Greenpeace, HCWH, the National Environmental Trust, and others had implicated as makers of patient and child-poisoning products also responded. The Chlorine Chemistry Council’s Phthalate Esters Panel answered each HCWH accusation. Welcoming the FDA’s scrutiny, the panel accused Greenpeace and HCWH of creating unnecessary public alarm.

The panel underlined that the “risks” identified by HCWH were not new and that the FDA always examines them when considering approval of new medical devices. As an example, the panel stated that HCWH’s exploitation of the chemicals leaching from PVC is just that. FDA has known that some phthalates leach and considers that fact when considering medical devices for approval.²⁴⁵

The panel attacked HCWH’s claim that EPA had labeled DEHP a “probable carcinogen.” The labeling was based entirely on animal tests—no human data—and had no relevance to human health. To back up its argument, the panel referred to both a Health Canada study and an EPA statement. The Health Canada study labeled DEHP as “unlikely to be carcinogenic in humans.” A letter

242. “DEHP Unlikely to Pose Health Risk Even With High Exposure—ACSH Panel, *M-D-D-I Reports, The Gray Sheet*, June 28, 1999.

243. *Washington Times*, October 11, 1999.

244. Environmental Protection Agency Web site. URL: <http://www.epa.gov/natlibra/hqirc/enb/enb99/enb0622.htm>, April 2000. Editorial, *Wall Street Journal*, June 16, 1999.

245. Chemical Manufacturers Association Phthalate Esters Panel, “Response to Health Care Without Harm,” February 22, 1999; URL: <http://www.c3.org/newsroom/pressreleases/02-22-99mapep.html>, April 2000.

ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?

from Victor Kimm, deputy director of the EPA's Office of Prevention, Pesticides and Toxic Substances, said that DEHPs caused tumors in mice by processes not relevant to humans.²⁴⁶

Dynamics of Accusation

Of course, the industries' refutations come after their reputations have been damaged and their products blamed for causing disease and death. Many in the public have made up their minds before the industry can respond. Moreover, the anti-plastic advocacy groups can discredit the industry responses by asking, "How can you take these companies seriously? They are making lots of money poisoning the American public."

Indeed, industry does make money, and provide jobs, and earn profits for shareholders by developing and marketing useful, beneficial products. The process is called capitalism.

The anti-plastics campaigners are attempting to override the companies, independent laboratories, and government agencies that test, certify, permit, or license useful products that are judged to be safe. Would anyone's health be improved by removing these products from the market? Not measurably, and, most likely, not at all. Does the funding of the advocacy organizations benefit from publicity about their accusations? Probably. The organizations have modified the game of "crying wolf" to include reaping profits.

Eliminating plastic would have drastic effects on the world, not just the manufacturers of it. For example, the transportation and production of plastic parts, devices, packaging, and other products requires less energy than proposed, and in some cases, untested substitutes.²⁴⁷ Phasing out of plastic would lead to more extensive depletion of wood and other natural resources. "Plastic wrap," both in the home and in food processing and marketing, keeps food fresh and clean, reduces food waste, and preserves quality. Because plastic is corrosion resistant, "products last longer and need less (often polluting) maintenance."²⁴⁸

246. *ibid.*

247. Karel Mulder, "Sustainable Consumption and Production of Plastics," *Technological and Social Change*, May 1998.

248. *ibid.*

The Accusing Organizations

The organizations that attack plastics share the conviction that chemicals are bad and that the people who have researched, developed, and marketed plastic products are not fit to do their jobs. Instead, the accusing organizations, which did none of the research, development, or marketing, are better fit to tell everyone what to do.

The organizations' well-publicized attacks on industry, in combination with constant solicitation for funds among their members and drives to recruit new members, provide some of the organizations' revenues. Foundations are another major source of funding. A \$10 million Pew Foundation grant "to mobilize activists and shape public opinion"²⁴⁹ provided the foundation for the National Environmental Trust, which weighed in against PVC. According to Ken Cook of the Environmental Working Group, the group received most of its 1996 budget (\$1.4 million) from the Pew Charitable Trust, the W. Alton Jones Foundation, the Ford Foundation, and the Joyce Foundation.²⁵⁰

Many of the organizations, including Greenpeace, Health Care Without Harm, the National Environmental Trust, and the Environmental Working Group, are clients of Fenton Communications. Fenton Communications' promotion of the Alar scare in 1988, and the book *Our Stolen Future* in 1996, shows how effective the agency can be. Its job is made easier because exaggeration, according to some environmentalists, is okay. Stephen Schneider, an advocate of massive government interventions to avert global warming, said "Each of us has to decide . . . what is right and what is honest."

As illuminated by the dioxin and plastics campaigns, environmental organizations—scientists associated with them, their spokespersons, and their advertising agencies—sometimes sacrifice honesty for what they see as "right." The foundations that fund the organizations have, so far as anyone knows, done nothing to hold them accountable. Public accounting is rare because with few exceptions, the press does not print "There was no wolf, after all" stories when

249. Ron Arnold, *Foundation Watch*, Capital Research Center, Excerpt From "Undue Influence," Merrill Press: Bellevue, WA, 1999.

250. David Hendee, "Conservationist With Clout—Environmentalist Works to Reshape Ag Policy Ken Cook Environmental Working Group," *Omaha World Herald*, December 28, 1996.

**ENDOCRINE DISRUPTERS, PLASTICS, DIOXIN AND DEATH —
WHAT'S THAT ALL ABOUT?**

alarms are shown to be false or overblown. The press and public remember the “Wolf!” story.

The task that faces environmental organizations and Fenton Communications in selling fears to the public is far less daunting than that faced by companies trying to respond to the often over-hyped accusations. In the end, society loses. Useful products are lost for no gain in health.

**SIX DEGREES OF
FINANCIAL
SEPARATION**

Washed Up in the Tides of the Environmental Movement

WASHED UP IN THE TIDES OF THE ENVIRONMENTAL MOVEMENT

The number of people and organizations involved in the above and similar health warnings is truly daunting. Try playing six degrees of separation with the environmental game. Start with the Tides Foundation, Pew Charitable Trusts, or the Ford Foundation and follow the trail of money. Fenton Communications will make more than one appearance somewhere, either on a press release, or as a consultant to the non-profit groups. Environmental Media Services will be on the front as well. These days, they are key players in Fenton Communications' message delivery strategies. Then there are the non-profit groups and coalitions that are receiving profits from outside groups and large foundations. This seems legitimate. Everyone is entitled to donate to the cause of his or her choice, but that is generally a one-stop donation. It shouldn't have to travel through many hands and foundations to get to its goal.

Tides Foundation

The Tides Foundation is a "public charity," which is to say that it has both a 501(c)(3) and 501(9)(1) tax status. As a public charity, it can "seek contributions and distribute them where desired."²⁵¹ According to Martin Espinoza of the *San Francisco Bay Guardian*, Tides uses its charitable status to attract individual private donors as it advertises in its 1994-95 "Grantmaking Report": "The Tides Foundation is a public charity; you will receive the maximum tax deduction available and avoid excise taxes and other restrictions imposed on private foundations."²⁵²

Fenton Communications clients Pew Charitable Trusts and The W. Alton Jones Foundation are among the groups who contribute to the Tides Foundation. In 1992, The W. Alton Jones Foundation contributed to seven Tides projects in 1992, while Pew Charitable Trusts contributed over \$13 million in funds in 1995-1996, \$95,000 of which went to the non-profit Environmental Working Group. The Environmental Working Group is a Fenton Communications client. The W. Alton Jones Foundation founded the Environmental Working Group; both the W. Alton Jones Foundation and Pew Charitable Trusts are Fenton Communications'

251. Ron Arnold, *Foundation Watch*, Capital Research Center, excerpt From "Undue Influence, Merrill Press: Bellevue, WA, 1999.

252. Martin Espinoza, "Tax-Exempt Secrecy," *San Francisco Bay Guardian*, October 8, 1997.

WASHED UP IN THE TIDES OF THE ENVIRONMENTAL MOVEMENT

clients.²⁵³ The W. Alton Jones Foundation is also the founder of Mark Ritchie's Institute for Agricultural and Trade Policy.²⁵⁴ The IATP is responsible for Fenton client Health Care Without Harm, a project of Fenton Communications client Environmental Working group. The IATP is also a grassroots activist for Corporate Watch, "an anti-corporate, anti-capitalist online Web magazine" which is a project of both the Transactional Resource and Action Center and the Institute for Global Communications, both of which are Tides Center projects.²⁵⁵

The Tides Center is an offshoot of the Tides Foundation, spun off in 1996. It is the management arm of the Tides Foundation and is responsible for over 300 "projects." The IATP's Mark Ritchie is the registered agent for the Tides Center, incorporated in 1996. The Tides Center is also a non-profit organization. As such, it can pass its non-profit, tax-exempt status onto its projects, and it derives the benefit of tax-free status:

Tides becomes the "fiscal agent" (money funnel) of any group that donors wish to fund *or to create* to fit their agenda. Tides gives the recipient shelter under its tax exemption. Tides can train new leaders and equip their organizations to stand alone or simply run a temporary *ad hoc* operation to fill a short-term need. Thus, Tides has created a haven for donor-selected non-governmental organizations that, for various reasons, would rather not obtain their own tax-exempt status from the Internal Revenue Service. In this manner Tides has nurtured literally hundreds of new groups to plague the resource class and rural communities.²⁵⁶

The 990 form Tides fills out for the Internal Revenue Service does not have to list the names of projects that the Center is funding, but it does have to list the highest-paid employees. Included are China Brotsky, who is both chairman of TRAC's advisory board and on the board of directors of Fenton Communications client Greenpeace.²⁵⁷ The executive director of TRAC, Joshua Karliner, was the

253. *San Francisco Bay Guardian*, October 8, 1997.

254. *Tampa Tribune*, April 7, 1996.

Fenton Communications Web site. URL: <http://www.fenton.com/docs/clients.htm>, April 2000.

255. Ron Arnold, *Undue Influence*, (Free Enterprise Press: Bellevue, WA, 1999), 83.

256. *ibid.*, 76.

257. *ibid.*, 82.

Earth Summit coordinator for Greenpeace International.²⁵⁸ In 1994, Tides contributed 22,300 to Greenpeace.²⁵⁹ The list of highest-paid employees also includes Ed Fouhy, executive director of the Pew Center for Civic Journalism, and Pam Solo of the Social Venture Network.²⁶⁰ Joshua Mailman of the Social Venture Network sits on the advisory board of TRAC.²⁶¹ The Pew Center for Civic Journalism is a Fenton client; Fenton Communications is a member of the Social Business Network.²⁶² And finally, in 1998, *Foundation Watch* reported that Environmental Media Services is a Tides Project.²⁶³

Conquering the money trail might, by design, be an exercise in futility; but it still warrants further investigation. Greed and profit are the only plausible reasons that might lead groups to adopt such deceptive practices just to saturate consumers with the message of the day. Of course, in some cases, it is possible that the majority of the individuals in these groups is fully dedicated to the cause. They get into the politics when it seems relevant to the cause, everything else is just a *relationship*. In other words, not everyone is privy to the business side of operations.

258. *ibid.*, 82

259. Jonathan Adler, "Inside the Green Mafia: The Big Environmentalist Grantmakers," *Foundation Watch*, October 1996. Capital Research Center Web site. URL: <http://www.capitalresearch.org/fw/fw-1096.html>, June 2000.

260. See note 255. 81.

261. Corporate Watch Web site. <http://www.corpwatch.org/trac/japan/who>. June 2000.

262. Fenton Communications Web site. URL: <http://www.fenton.com/docs/html>, April 2000.

263. Patrick Reilly, "The Tides Foundation and Center: Unusual Philanthropies Funnel Money to Activist Groups," *Foundation Watch*, January 1988. Capital Research Center Web site. URL: <http://www.capitalresearch.org/fw/fw-0198.html>, April 2000.

FINAL COMMENTS

Few people can honestly argue that they are free of the threats posed by environmentalists and their following. Everything seems to cause cancer or something worse. If *Our Stolen Future* is an accurate description of the state of our nation, then the public was unknowingly affected long ago. Avoiding plastics and hospital visits, taking away our children's toys, and abstaining from the impulse to augment our breasts probably can't reverse that kind of congenital damage. At least now we know why. At least now we can explain why some people are androgynous and have lower sperm counts or IQs. Maybe this explains memory loss as well, and the makers of Ginkgo Biloba are in on the scam. Maybe such explanations are better off as security blankets.

The true "disrupters" are any public scares themselves because they are very difficult to reverse, and they are not victimless crimes. Science and truth are boring compared to fear and horror. The American public has always had a penchant for horror as can be seen with our affinity for shocking movies. For some reason, it is easier to cope with the horror than sort the details. It is easier to create distance from a horrific experience than it is to relate to it and see how relative it is to your life.

So, when you are on the plane and you hear two people discussing all the people they know who got brain cancer from their cellular phones, consider the rising prices of hands-free kits for a moment (let's just hope they aren't plastic). This hypothetical example shows the way rumors get started and how they too can affect our habits and the economy. Dr. Barry Glasner explains, "We live in just about the safest time in human history, and yet we are filled with a lot of overblown fears . . . We waste billions of dollars on fears that are blown way out of proportion." He exemplifies this by pointing to how the Columbine shootings resulted in schools spending a ton of money on security systems when the true reality is that children are more likely to be struck by lightning when playing outside than they are of being shot to death in a classroom. Installing metal detector systems only spreads the fear further.²⁶⁴

Environmental and health hazards are collective concerns. There is no untouchable person or group. That being said, we ought to be wary of

264. Jonathan Eig, "Analyze This," *Wall Street Journal*, February 8, 2000.

FINAL COMMENTS

information we are fed. In many cases, it truly is paid propaganda. History shows a correlation between such scare campaigns and the pace of science and technology. As we continue to produce and progress, so will the causes. For years, we have been told what to eat, and the latest assertions about our approved, healthy foods could cut our food supply by half were we to react without discretion. Inevitably, the various camps of nutritionists and dietitians will now splinter off again, and this time it will be about more than proteins and carbohydrates. An organic label might look good and sound “free” of everything, except a low price. But maybe all that means is that the food in question was made out of things grown without the help of anything capable of quelling nature’s evil pests. Maybe that means it is free of anything that might help preserve it.

On the other hand, the movement toward organic and pesticide- or preservative-free could open up a new job class. There can be people for hire who will go to the fields and get the produce before it hits the shelves. This would be the new “fresh AND organic” industry, where everything is *so natural, it just came off the land*. Who cares if it is covered in nature’s pesticides and costs two-to-three times as much? Nature, too, is a culprit in all of our health problems, but since we didn’t make it, we can’t control it and we certainly cannot fix it.

Developing a malaise about progress is not going to improve global warming. Continuing to emit pollutants into the air we breathe will not make the air any cleaner. But, environmental progress should not happen only with the sacrifice of technological progress. The trade-off simply would not make sense. One thing is certain. The current forum for public debate is operating more like a black market. You can find whatever you want, but there will be a high price for it. And, invariably, someone had to suffer for that gain.

Throughout the years, there have been numerous health scares that have ruined our faith in science, our government, and the integrity of our people. Few of these scares have had even a minutia of scientific merit. It is imperative that we take a moment to find the truths in what biased groups are telling us. They have the power to usurp our decision-making faculties and supplant them with fear. Listening without learning the truth, we allow them to steal our future.

ABOUT THE EDITORS

Dr. Bonner R. Cohen, Ph.D., joined the Lexington Institute as a senior fellow in 1999. Dr. Cohen has lectured and participated in panels dealing with environmental issues in the United States and abroad and is a frequent commentator on television and radio programs. He was the editor for *Environment & Climate News*.

Together with Steve Milloy, Cohen has served as editor of *American Values: an Environmental Vision*, an anthology published by the Environmental Policy Analysis Network in 1996. Articles by Dr. Cohen have appeared in *Forbes*, *The Weekly Standard*, *National Review*, *Investor's Business Daily*, *Journal of Commerce*, *Washington Times*, *Earth Times*, and other publications. He has been interviewed on CNN, America's Voice, and numerous radio programs. His previous positions include that of research associate at the Stiftung, Germany Wissenschaft und Politik (Foundation for Science and Policy) in Ebenhausen, Germany and as a German-language lecturer for the United States Information Agency (USIA), in Germany.

Dr. Cohen holds a Ph.D.—summa cum laude—from the University of Munich and a B.A. from the University of Georgia.

Michael Fumento is an author, journalist, and attorney specializing in science and health issues. A 1985 graduate of the University of Illinois College of Law, he is a Senior Fellow at the Hudson Institute in Washington, D.C.

He has been a legal writer for the *Washington Times*, editorial writer for the *Rocky Mountain News* in Denver, and was the first "National Issues" reporter for *Investors' Business Daily*.

Mr. Fumento was the 1994 Warren T. Brookes Fellow in Environmental Journalism at the Competitive Enterprise Institute in Washington, D.C., a fellow with Consumer Alert in Washington, D.C., and a science correspondent for *Reason* magazine.

ABOUT THE EDITORS

Mr. Fumento's articles have appeared in magazines around the world, including *Readers' Digest*, *The Atlantic Monthly*, *Forbes*, *The New Republic*, *USA Weekend*, *the AARP's Modern Maturity*, *The Washington Monthly*, *Reason*, *The Weekly Standard*, *National Review*, *Policy Review*, *The American Spectator*, *The Spectator* (Great Britain), *The Bulletin* (Australia's version of Newsweek), and *a3 Umwelt*.

His "investigative commentaries" have appeared in the *Wall Street Journal*, *The New York Times*, *the Washington Post*, *the Christian Science Monitor*, *The Sunday Times of London*, *The Sunday Telegraph of London*, *the Los Angeles Times*, *Investors' Business Daily*, *Washington Times*, *Chicago Tribune* and other papers.

Fumento has lectured on science and health issues throughout the nation and the world, including Great Britain, France, the Czech Republic, Greece, Austria, Hong Kong, China, and South America. He has authored four books:

- *The Myth of Heterosexual AIDS*
- *Science Under Siege*
- *Polluted Science*
- *The Fat of the Land*

Michael Gough, Ph.D., taught microbiology and did research in molecular biology for about 10 years, during which time, he was a Fulbright lecturer in Peru and India. In the last two decades, he has worked in environmental health risk assessment at the U.S. congressional Office of Technology Assessment, where he managed the Biological and Behavioral Sciences Program, and middle-of-the-road and libertarian think tanks. In his opinion, health risk assessment is a straw house erected on a sand foundation. Estimated health risks are (almost always, or, perhaps, always) too small to be detected (let alone measured), even if the risks are realized. Perversely, the impossibility of measurement is taken as sufficient reason to invoke the precautionary principle and to regulate, restrict, label, or boycott. Risk assessment is science turned on its head. The essence of science is measurement; the essence of risk assessment is estimation and policy-based assumption. Gough is a fellow of the Society for Risk Analysis, current

ABOUT THE EDITORS

vice-president of the International Society of Regulatory Toxicology and Pharmacology, the author of more than 40 papers and newspaper pieces about risk assessment, author of *Dioxin, Agent Orange* (Plenum Press, 1986), co-editor of *Readings in Risk* (Johns Hopkins, 1990), and co-author with Steve Milloy of *Silencing Science* (Cato, 1999).

Steven J. Milloy publishes Junkscience.com and is an adjunct scholar at the Cato Institute.

Milloy holds a B.A. in Natural Sciences from the Johns Hopkins University, a Master of Health Sciences in Biostatistics from the Johns Hopkins University School of Hygiene and Public Health, a Juris Doctorate from the University of Baltimore, and a Master of Laws from the Georgetown University Law Center.

Milloy appears frequently on radio and television; has testified on risk assessment and Superfund before the U.S. Congress; and has lectured before numerous organizations. Milloy's books include:

- u *Silencing Science* with co-author Michael Gough (Cato Institute, 1999)
- u *Science Without Sense: The Risky Business of Public Health Research* (Cato Institute, 1995)
- u *Science-Based Risk Assessment: A Piece of the Superfund Puzzle* (National Environmental Policy Institute, 1995)

Milloy has also authored several reports on topics ranging from and written articles that have appeared in *New York Post*, *USA Today*, *Washington Times*, *The Chicago Sun-Times*, and the *Investors' Business Daily*.

ABOUT THE EDITORS

Dr. Henry I. Miller is a prominent academic researcher, author and regulatory consultant. He graduated from the Massachusetts Institute of Technology with a Bachelor of Science degree in Life Sciences and attended the University of California, San Diego, receiving the M.S. and M.D. degrees. After completing training in internal medicine as a Clinical Fellow in Medicine at Harvard Medical School, Dr. Miller spent several years as a Research Associate at the National Institutes of Health, helping to refine and employing the recombinant DNA ("gene-splicing") techniques that were then emerging.

Dr. Miller joined the FDA in 1979 and served in a number of posts involved with the new biotechnology. He was the medical reviewer for the early recombinant DNA-derived drugs evaluated by the FDA and was instrumental in the rapid approvals of human insulin and human growth hormone (the marketing approval of the former in five months was an FDA record at the time). He served at both the Center for Drug Evaluation and Research (CDER) and the Center for Biologics Evaluation and Review (CBER). Dr. Miller later served as Special Assistant to the FDA Commissioner, with responsibility for biotechnology issues (1984-89); and from 1989-94, he was the founding director of the FDA's Office of Biotechnology. During his government service, Dr. Miller wrote and lectured frequently on the regulatory requirements for biotechnology products, and participated frequently on various expert and policy panels as a representative of the FDA or the US government. As the FDA's contact person for the Securities and Exchange Commission, he reviewed the accuracy of claims made by companies in their prospectuses about the likelihood and timing of drug approvals.

Dr. Miller is currently at Stanford University, where he is a Senior Research Fellow at the Hoover Institution. His research focuses on the relationship between science and regulation, the often- excessive costs of government regulation, models for regulatory reform, and federal and international oversight of genetically engineered products. As a consultant, he advises defendants' and

ABOUT THE EDITORS

plaintiffs' counsel and companies on a wide spectrum of regulatory strategies and problems.

Dr. Miller's primary contributions have been in four areas: as a federal official, crafting and implementing science-based regulation of the new biotechnology, and explaining these policies to regulated industry, the scientific community, and the public; as a member of international panels and experts' groups, moving consensus toward the scientific view of risk and its regulation; making science and technology and their regulation more widely understood, via articles in newspapers and magazines; and performing research on and analyses of various issues related to science and technology.

Dr. Miller is a respected authority in these areas and the author of more three hundred articles in scholarly and popular publications. He writes frequently for such publications as the Financial Times(London), Wall Street Journal, Los Angeles Times, Chicago Tribune, Washington Times, Biotechnology Law Report, Trends in Biotechnology, and Nature Biotechnology. He is the author of *Policy Controversy in Biotechnology: An Insider's View* (R.G. Landes Co. and Academic Press, 1997) and *To America's Health: A Proposal to Reform the Food and Drug Administration* (Hoover Institution Press, 2000). Dr. Miller is a director of Consumer Alert, a national consumer advocacy organization; a director of the American Council on Science and Health, which promotes scientific principles and knowledge as the basis for public policy; an Adjunct Scholar at the Competitive Enterprise Institute; and a scientific advisor to the George C. Marshall Institute.

Kenneth Smith, 43, has been deputy editor of the editorial page of *The Washington Times* since 1998 and an editorial writer at the paper prior to that. He covers a variety of political and regulatory issues related to the environment, health care, economics and taxes, labor, civil rights, trade, immigration, the military and more. A 1979 graduate of Washington and Lee University, he also covers Virginia politics. He has won numerous journalism awards, including the Society of Professional Journalists award in June 2000 for excellence in local

ABOUT THE EDITORS

journalism. His articles have appeared in *the Wall Street Journal*, *Reader's Digest*, *National Review* and *Reason* magazine among others. Prior to the *Washington Times*, he worked at the *Richmond Times-Dispatch*, *the Danville Register* and the *Lexington, Va., News-Gazette*.

Elizabeth M. Whelan, Sc.D., M.P.H.

Dr. Whelan is president and a founder of the American Council on Science and Health. She holds masters and doctoral degrees in public health from the Yale School of Medicine and the Harvard School of Public Health. She is the author or co-author of over two dozen books, including:

- u *Panic in the Pantry*
- u *Preventing Cancer*
- u *Toxic Terror*
- u *A Smoking Gun - How the Tobacco Industry Gets Away with Murder*