Teflon – The Devil We Know

Source: Mercola

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Story at-a-glance

- What was not in existence a century ago is now found in the blood samples of over 99 percent of Americans and is responsible for the rising rate of cancer in the Ohio Valley
- DuPont willfully dumped thousands of pounds of C8 into the waterways around their plant in West Virginia, effectively poisoning residents, employees and farm animals
- A Sundance Film Festival release chronicles the fight for justice against the manipulation and deception of DuPont, who chose financial gain over the health of their community
- Studies demonstrate your risk of obesity rises as you may absorb C8 from products in your home, such as nonstick cookware and stain-resistant products

While C8 was not in existence a century ago, it is now found in over 99 percent of American blood samples, according to analysis from the Centers for Disease Control and Prevention (CDC).[1] This chemical has been found in newborn babies, umbilical cord blood and breast milk. Many animals have suffered the consequences as the chemical is ubiquitous in the environment and does not degrade. In fact, scientists expect

it will remain on the planet well after humans are all gone.[2]

C8, also known as perfluorooctanoic acid (PFOA), is man-made and used in the process of producing Teflon, known for its nonstick qualities.[3] Following a barrage of lawsuits against DuPont for the release of C8 into the environment, production ended in 2015.

However, C8 continues to be released into the air and water through use of products that are already on the market. Additionally, DuPont and other companies have only substituted a shorter chain version of C8 in the production of stain resistant materials and Teflon coated pans.

DuPont has been a master of deceptive and manipulative public relations strategies that have helped ensure their financial success, while at the same time creating chemicals that are destroying the environment and your health. What's worse, the company has known of the effects on the environment and human health and has repeatedly lied to federal and local regulators, consumers and even their own employees about toxicity from exposure.

The film "The Devil We Know," released at the Sundance Film Festival in 2018, depicts the struggle employees and residents of the Ohio Valley went through to ensure DuPont chemical company takes responsibility for their actions, which will be experienced for centuries to come.

Better Living Through Chemistry

One of the largest experiments performed on humans began in the postwar era of 1935, when DuPont invented the slogan "Better Living Through Chemistry." It wasn't until 1982 that the tagline "Through Chemistry" was dropped. Ultimately, the intent of the slogan was to change public opinion and perception about the role of chemical industry in society. If you aren't afraid of the product, you're more likely to use it

on a daily basis.

However, most health experts and advocates believe nonstick pans should have been banned many years ago to mitigate risks, as both animal and human diseases have been linked to exposure.

Many Americans are exposed to Teflon coated pans either at home or in meals prepared at restaurants. The epic legal battles fought against DuPont have shed some light on the deceptive practices the company used in order to keep their product on the market. PFOA is not only an ingredient in nonstick cookware, but can also be found in stain-resistant products, microwave popcorn bags and fast food wrappers. Waterproof clothing and soil repellent carpet and furniture treatments also contain PFOA.

C8 is a fluorinated chemical. It is the fluorine atoms that provide the nonstick slipperiness that gives Teflon its unique qualities. During the legal process of suing DuPont, hundreds of internal documents were uncovered showing the company knew about the chemical's danger to the public and employees, likely as early as 1961.

Although this information is only recently reaching the courts, over a decade ago the U.S. Environmental Protection Agency (EPA) fined DuPont $16.5 million for withholding decade's worth of information about health hazards. Although it was the largest fine the EPA had ever assessed, it did not act as a deterrent to the company and DuPont continue to manufacture and release C8 into the environment.

With Full Understanding of the Risk, DuPont Did Not Curb Emissions

[vimeo 136529193 w=640 h=480]
Sensitive viewers beware; this video contains graphic imagery of sick and dead animals.

DuPont had evidence of harm to livestock ranging from liver toxicity and kidney damage to death. Company workers gave birth to children with birth defects, while DuPont merely tracked the health effects in their workers without informing regulators of their findings. As they continued to study the effect on their workers they were also tracking the spread of the chemical into nearby waterways, and emissions through their smokestacks. According to The Intercept:[4]

> *"… [F]rom that point on, DuPont increased its use and emissions of the chemical… the plant put an estimated 19,000 pounds of C8 into the air in 1984, the year of the meeting. By 1999, the peak of its air emissions, the West Virginia plant put some 87,000 pounds of C8 into local air and water. That same year, the company emitted more than 25,000 pounds of the chemical into the air and water around its New Jersey plant…*
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> *The executives, while conscious of probable future liability, did not act with great urgency about the potential legal predicament they faced. If they did decide to reduce emissions or stop using the chemical altogether, they still couldn't undo the years of damage already done. As the meeting summary noted, 'We are already liable for the past 32 years of operation.'"*

Switching From Long-Chain to Short-Chain Has No Demonstrable Benefit

Although DuPont would like you to believe that switching from the longer chain C8 to a shorter chain version of the chemical in the production of their nonstick pans is healthier for the environment, more than 200 scientists from 40 countries disagree.[5] In May 2015, these scientists signed the Madrid Statement that warned about the harms of all fluorochemicals and listed many of the health effects. At the heart of the

statement, the scientists point out:

- Although some of the long-chain PFASs are being regulated or phased out, the most common replacements are short-chain PFASs with similar structures, or compounds with fluorinated segments joined by ether linkages.
- While some shorter-chain fluorinated alternatives seem to be less bioaccumulative, they are still as environmentally persistent as long-chain substances or have persistent degradation products. Thus, a switch to short-chain and other fluorinated alternatives may not reduce the amounts of PFASs in the environment. In addition, because some of the shorter-chain PFASs are less effective, larger quantities may be needed to provide the same performance.
- While many fluorinated alternatives are being marketed, little information is publicly available on their chemical structures, properties, uses and toxicological profiles.
- Increasing use of fluorinated alternatives will lead to increasing levels of stable perfluorinated degradation products in the environment, and possibly also in biota and humans. This would increase the risks of adverse effects on human health and the environment.

However, while independent studies have linked PFOAs and C8 to appalling damage to human and animal health, including cancers, the American Cancer Society continues to sit on the fence:[6]

> *"Some of these studies have suggested an increased risk of testicular cancer with increased PFOA exposure. Studies have also suggested possible links to kidney cancer and thyroid cancer, but the increases in risk have been small and could have been due to chance. Other studies have suggested possible links to other cancers, including prostate, bladder*

and ovarian cancer. But not all studies have found such links, and more research is needed to clarify these findings."

Should the Canary Be Blamed for Dying in the Coal Mine?

Tracey Woodruff, director of the program on reproductive health and the environment at the University of California, San Francisco, explained that while PFOAs are being replaced with shorter chained chemicals, there aren't many studies that support the idea that these chemicals are nontoxic.[7] Unfortunately, Trump appointee to the EPA's Office of Water has rewritten a rule to make it more difficult to track health consequences of PFOAs and therefore to regulate use.[8]

The appointee, Nancy Beck, joined the EPA in May last year after spending the previous five years as an executive at the American Chemistry Council, the industry's main trade association.

These changes may result in underestimating the potential risk to health and the environment, but are part of a broader initiative by the Trump administration to align the EPA with industry and not protect consumers. In other words, if there was any hope that the federal government would step in to protect your health, it appears it has been erased.

Perfluorinated chemicals kill birds, both in the environment and at home. During a thunderstorm in 2010, lightning struck several oil tankers off the coast of the Caribbean islands. Huge fires resulted that were fought with foam sprays containing perfluorinated chemicals. Over the next four months, the population of flamingos on the island dropped from several thousand to zero. Woodruff commented on the effect breathing perfluorinated chemicals has on birds in your own home, saying:[9]

> *“When you use a [nonstick] pan, you shouldn’t heat it without putting anything in it. That will emit fumes. There have been reports of people heating those Teflon pans without adequate ventilation, and the birds in their house dying. When someone in the industry was asked about this, she said something like, ‘people should know better than to cook in an enclosed kitchen.’ Like, blaming the canary for being in the coal mine?”*

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