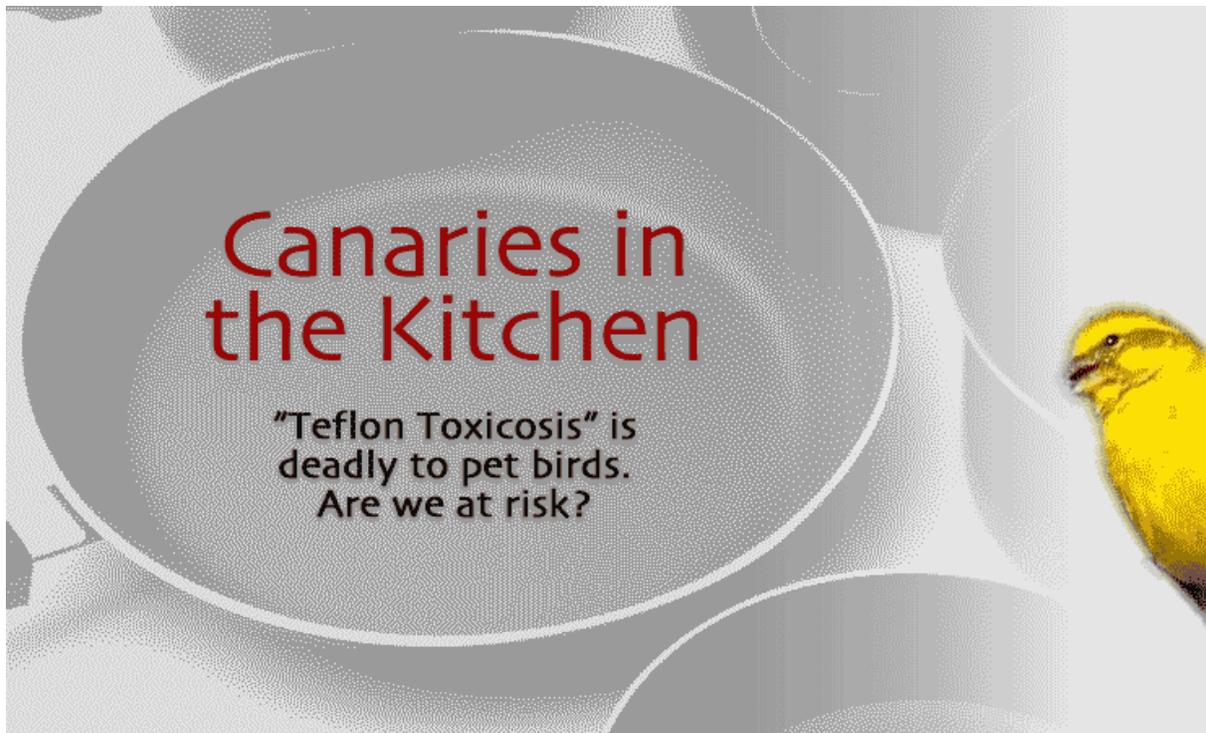


Harmful Teflon Chemical To Be Eliminated by 2015

By Juliet Eilperin Washington Post Staff Writer
Thursday, January 26, 2006; Page A01



US: DuPont fined more than \$10M over Teflon
by Randall Chase, Associated Press
December 14th, 2005

Canaries in the Kitchen

"Teflon Toxicosis" is
deadly to pet birds.
Are we at risk?



Teflon kills birds

Avian veterinarians have known for decades that Teflon-coated and other non-stick cookware can produce fumes that are highly toxic to birds. As early as 1986, a Chicago-area expert on “Teflon toxicosis” called the phenomenon a “leading cause of death among birds,” and estimated that hundreds of birds are killed by the fumes and particles emitted from Teflon-coated products each year [1][2]. Although an accurate national accounting of deaths is not available, in a single year this Chicago veterinarian documented 296 bird deaths in 105 cases involving non-stick cookware.

Under ordinary cooking scenarios, Teflon kills birds. A review of the literature and bird owners’ accounts of personal experience with Teflon toxicosis shows that Teflon can be lethal at normal cooking temperatures, with no human lapses in judgment or wakefulness.

Bird deaths have been documented during or immediately after the following normal cooking scenarios:

- New Teflon-lined Amana oven was used to bake biscuits at 325°F; all the owner’s baby parrots died [3] [4].
- Four stovetop burners, underlined with Teflon-coated drip pans, were preheated in preparation for Thanksgiving dinner; 14 birds died within 15 minutes [2] [5].
- Nonstick cookie sheet was placed under oven broiler to catch the drippings; 107 chicks died [2].
- Self-cleaning feature on the oven was used; a \$2,000 bird died [5].
- Set of Teflon pans, including egg poaching pan, were attributed to seven bird deaths over seven years [6].
- Water burned off a hot pan; more than 55 birds died [7].
- Electric skillet at 300°F and space heater were used simultaneously; pet bird died [8].
- Toaster oven with a non-stick coating was used to prepare food at a normal temperature; bird survived but suffered respiratory distress [9].
- Water being heated for hot cocoa boiled off completely; pet bird died [10].
- Grill plate on gas stove used to prepare food at normal temperatures; two birds died on two separate occasions [11].

DuPont claims that its coating remains intact indefinitely at 500°F [12]. Experiences of consumers whose birds have died from fumes generated at lower temperatures show that this is not the case. In one case researchers at the University of Missouri documented the death of about 1,000 broiler chicks exposed to offgas products from coated heat lamps at 396°F [13].

DuPont also claims that human illness will be produced only in cases involved gross overheating, or burning the food to an inedible state [12]. Yet DuPont's own scientists have concluded that polymer fume fever in humans is possible at 662°F, a temperature easily exceeded when a pan is preheated on a burner or placed beneath a broiler, or in a self-cleaning oven [14].

Heated pans get toxic in minutes

EWG Experiment 1:

Teflon® coated pan on a Whirlpool Gold Electric Range.

Test conducted on May 13, 2003 by Environmental Working Group. A 10" diameter aluminum Europa Basic Essential Everyday pan with a Non-stick Teflon® Classic interior was placed on the burner of a Whirlpool Gold electric range top. At time = 0 seconds, the pan temperature measured 73.5°F. The burner was turned up to the highest heat setting, and a timer was started. Using a Raytek Infrared Model Raynger ST Pro noncontact thermometer with an accuracy of +/- 2°F, the temperature was monitored every twenty seconds for 300 seconds (5 minutes). In this period of time, the temperature of the pan reached 721°F. At this point the pan was removed from the burner and the burner was turned off. The smell of burning plastic was noted.

What about the rest of us?

Even if you don't have pet birds, Teflon toxicosis is something to be aware of and, in our view, concerned about. There is absolutely no doubt that when heated to temperatures well within normal cooking range, for instance, Teflon and products with other non-stick PFC coatings emit toxic fumes that can be harmful to people. They can make you and your family sick. The long term effects of routine exposure to Teflon fumes, and "fume fever" itself, have not been adequately studied.

Tips on safer cookware

When heated, cookware coated with Teflon and other non-stick surfaces emits fumes that can kill birds and potentially sicken people. You can avoid exposures to the fumes from Teflon and other non-stick cookware by phasing out your home use of these products. If you can afford to replace your non-stick cookware now, do so.

Statistics reported by the Cookware Manufacturers Association indicate that 90 percent of all the aluminum cookware sold in the United States in 2001 was coated with non-stick chemicals like Teflon (Cooks Illustrated, September 2002). Chemicals and tiny, toxic Teflon particles released from heated Teflon kill household pet birds. At least four of these chemicals never break down in the environment, and some are widely found in human blood. Consumers concerned about the effects of Teflon on human health and the environment should consider these alternatives:

Stainless Steel

Stainless steel is a terrific alternative to a non-stick cooking surface. Most chefs agree that stainless steel browns foods better than non-stick surfaces. In their 2001 review of sauté pans, Cooks Illustrated, an independent publication, chose a stainless steel pan over otherwise identical non-stick models. They also recommended stainless steel pan roasters over non-stick.

Cast Iron

Cast iron remains a great alternative to non-stick cooking surfaces. Lodge, America's oldest family-owned cookware manufacturer, refers to their cookware as "natural non-stick." Cast iron can be pre-heated to temperatures that will brown meat and will withstand oven temperatures well above what is considered safe for non-stick pans. Cast iron is extremely durable and can now be purchased pre-seasoned, ready-to-use.

Other Cooking Surfaces

Because Teflon coated non-stick surfaces fail to brown foods there has been a push to find other "non-stick" cookware coating that will allow the use of higher temperatures and still clean up easily. Some examples include ceramic titanium and porcelain enameled cast iron. Both of these surfaces are very durable, better at browning foods than PTFE (Teflon) non-stick coatings, and are dishwasher safe. . Anodized aluminum is another alternative, but some people question its safety, citing evidence in some studies linking aluminum exposures to Alzheimers.