

FDA Bans Red Dye No. 3 Known to Cause Cancer in Animals

Red No. 3 food dye was found to cause cancer in rats more than 30 years ago but is still used in thousands of edible and drinkable items.

January 22, 2025 By Laura Schmidt

The Food and Drug Administration (FDA) [announced a ban](#) of food dye [Red No. 3](#), a synthetic additive that turns food and drinks a bright cherry-red color and has been linked to [cancer](#) in animals.

Red No. 3, which is made from petroleum, was first approved for use in foods in 1907.

In 1990, [the FDA](#) banned the additive in cosmetics after research found increased cancer rates among rats that ate the dye. Despite that discovery, the dye is still used in more than 9,000 food and drink items, including popular cereals, candy, icings, strawberry milkshakes, tomato sauce, maraschino cherries, vegan “meats” and more.

More than 10 states have tried to ban the dye, which is already banned or restricted in the European Union, Australia, Japan and other countries, according to [NBC News](#).

In recent years, the [Center for Science in the Public Interest](#) (CSPI), a food safety advocacy group, has petitioned the FDA to eliminate the use of the dye, also known as erythrosine or FD&C Red No. 3.

“[The ban] removes an unnecessary hazard from the American food supply, and we welcome that action, even though it should have occurred more than three decades ago,” CSPI president Peter Lurie, MD, MPH, told NBC.

Although the ban will not go into effect until early 2027 for food and early 2028 for drugs, the FDA’s decision marks a victory for advocates and some lawmakers who have supported the dye’s

elimination.

“The FDA cannot authorize a food additive or color additive if it has been found to cause cancer in human or animals,” FDA deputy director for human foods, Jim Jones, told NBC. “Evidence shows cancer in laboratory male rats exposed to high levels of FD&C Red No. 3.”

Some studies have also shown that these synthetic dyes can harm [children’s](#) behavior and [mental health](#). In fact, a study published in the [Journal of Pediatric Neurology and Neuroscience](#) found that food-color additives, including Red No. 3, exacerbated inattention and hyperactivity in children.

Experts warn that as Red No. 3 is phased out, Red No. 40 might be used as a replacement.

Red No. 40 is also derived from petroleum but is considered less harmful because it has not been extensively associated with cancer in animals, [according to CNN](#).

Some studies, however, have [found a potential link](#) between Red No. 40 and accelerated immune system tumor growth in mice. What’s more, Red No. 40 contains small amounts of benzene, a known carcinogen.

Some states have already taken action to end the use of these dyes. In 2023, California became the first state to prohibit public schools from serving foods containing Red No. 3 and other food additives linked to health problems. Last year, the [state passed a second law](#) banning six additional synthetic food dyes, including Red No. 40.

CSPI urges the FDA to require warning labels on products containing other synthetic food dyes.

The [Environmental Working Group maintains a list](#) of products containing Red No. 3 and other synthetic additives.

To read more, click [#Ban](#). There, you’ll find headlines such as “[EPA Bans Two Common Chemicals That Cause Cancer](#),” “[FDA Ban on Formaldehyde in Hair Products Delayed ... Again](#)” and “[States Consider Menthol Cigarette Bans as Feds Delay Action](#).”