

April 15, 2024

Honorable Eduardo Garcia, Chair  
Environmental Safety and Toxic Materials Committee  
California Assembly  
State Capitol, CA 95814

Re: Support for AB 2316 (Gabriel)

Dear Chair Garcia:

The Center for Science in the Public Interest (CSPI) is writing to urge your committee to support AB 2316, a bill that prohibits California public schools from serving food containing harmful food colors. In particular, this bill prohibits schools from serving food containing Red 40, Yellow 5, Yellow 6, Blue 1, Blue 2, or Green 3, which are synthetic dyes that the California Environmental Protection Agency (CalEPA) confirmed can cause neurobehavioral difficulties in some children.<sup>1</sup> The bill also prohibits schools from serving food containing titanium dioxide, which the European Union (EU) no longer allows in food due to its links to genotoxicity (DNA damage).<sup>2</sup> This bill is needed to protect California's school-aged children.

**Synthetic food dyes can cause neurobehavioral problems in some children according to CalEPA.** California's state experts at CalEPA performed a peer-reviewed systematic review of the evidence, including 27 human clinical trials, and concluded that consumption of synthetic food dyes, "can cause or exacerbate neurobehavioral problems in some children." In their report, published in 2021, CalEPA asserted, "For the child who is affected and their family, their teachers, and the school system, a short term increase in inattentiveness or restlessness and anxiety that can be repeated routinely when food dye is consumed could reduce social and academic success, and is thus adverse." Such substances should not be allowed in school foods. CalEPA's report concludes with the recommendation that, "At a minimum, in the short-term, the neurobehavioral effects of synthetic food dyes in children should be acknowledged and steps taken to reduce exposure to these dyes in children." The EU took action to protect children from synthetic dyes nearly 15 years ago. In 2010, the EU mandated that foods containing certain synthetic food dyes, including several targeted by this bill, bear a warning label stating: "may have an adverse effect on activity and attention in children."

Three years have elapsed since CalEPA published its report, yet neither the U.S. Food and Drug Administration (FDA) nor the California Department of Public Health (CDPH) have taken action to protect children from dyes. Red 40, Yellow 5, Yellow 6, Blue 1, Blue 2, and Green 3 all

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<sup>1</sup> Office of Environmental Health Hazard Assessment, California Environmental Protection Agency. *Health Effects Assessment: Potential Neurobehavioral Effects of Synthetic Food Dyes in Children*. April 16, 2021. Available: <https://oehha.ca.gov/media/downloads/risk-assessment/report/healtheffectsassess041621.pdf>.

<sup>2</sup> EFSA FAF Panel (EFSA Panel on Food Additives and Flavourings). Scientific Opinion on the safety assessment of titanium dioxide (E171) as a food additive. Scientific Opinion on the safety assessment of titanium dioxide (E171) as a food additive *EFSA Journal*. 2021;19(5):6585, 130 pp. <https://doi.org/10.2903/j.efsa.2021.6585>.

remain legal under federal and state law. CSPI petitioned CDPH in 2022 asking the department to promulgate regulations requiring warning labels on dyed foods sold in the state,<sup>3</sup> but we await the department's ruling. It is therefore essential that the California Legislature act to remove these dyes from school foods to ensure all students are able to achieve their fullest potential.

**Titanium dioxide could potentially accumulate in the body and damage DNA, according to the European Food Safety Authority.** In 2021, the European Food Safety Authority (EFSA) determined that titanium dioxide could not be considered safe when used as a food additive due to evidence that it can potentially accumulate in the human body and cause genotoxicity. Damaging DNA is one way that chemicals can cause cancer and other adverse health effects. EFSA also raised concerns about potential adverse effects on the immune and nervous systems. The state should not allow children to be exposed at school to food chemicals that could damage their DNA.

FDA has also failed to act to protect consumers from titanium dioxide. As a result of EFSA's 2021 evaluation, titanium dioxide was banned in foods in the EU.<sup>4</sup> Meanwhile, FDA maintains that titanium dioxide is safe, seemingly based on a more narrowly scoped review of the evidence, although the agency is currently considering a petition submitted last year by CSPI and other organizations asking FDA to ban it federally.<sup>5</sup>

**The chemicals targeted by this bill are unnecessary additives.** Each of the seven substances to be prohibited by this bill are color additives that offer no nutritional benefits and have no benefit on food safety. They function simply to make foods visually appealing as a marketing tool for the food industry. Therefore, eliminating these substances from school foods will not negatively impact the nutritional quality of school foods and will only improve their safety. Moreover, alternatives not known to have these adverse effects exist. Companies selling foods in the EU have already identified and implemented suitable alternatives to titanium dioxide, given that titanium dioxide has been banned since 2022. Similarly, some companies chose to reformulate away from the dyes subject to the warning label requirement in the EU to avoid having to add the warning label to their products. For example, Kellogg's® breakfast cereal Froot Loops® is sold without synthetic food dyes in the EU<sup>6</sup> and Canada<sup>7</sup> but with synthetic dyes in the US.<sup>8</sup>

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<sup>3</sup> Center for Science in the Public Interest et al. *Petition for Rulemaking To Implement Warning Labels on Food Products and Dietary Supplements That Include Certain Synthetic Food Dyes*. December 8, 2022. Available: <https://www.cdph.ca.gov/Programs/OLS/CDPH%20Document%20Library/P-22-01-Petition-2022-12-08-CSPISyntheticDyeWarning.pdf>.

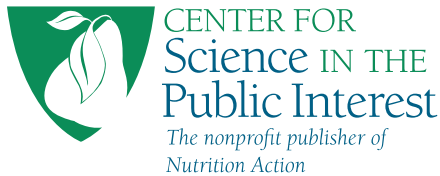
<sup>4</sup> Commission Regulation (EU) 2022/63 of 14 January 2022 amending Annexes II and III to Regulation (EC) No 1333/2008 of the European Parliament and of the Council as regards the food additive titanium dioxide (E 171). Available: <https://eur-lex.europa.eu/eli/reg/2022/63/oj>.

<sup>5</sup> U.S. Food and Drug Administration. *Titanium Dioxide as a Color Additive in Foods*. Updated: March 4, 2024. <https://www.fda.gov/industry/color-additives/titanium-dioxide-color-additive-foods>. Accessed: April 8, 2024.

<sup>6</sup> Kellogg's. *Froot Loops*. n.d. [https://www.kelloggs.fr/fr\\_FR/products/froot-loops.html](https://www.kelloggs.fr/fr_FR/products/froot-loops.html). Accessed: April 8, 2024.

<sup>7</sup> WK Kellogg Co. *Froot Loops*. n.d. <https://www.wkkellogg.ca/en-ca/products/froot-loops-cereal-product.html>. Accessed: April 8, 2024.

<sup>8</sup> Kellogg's. *Kellogg's® Froot Loops® Breakfast Cereal*. n.d. [https://www.frootloops.com/en\\_US/our-products/froot-loops-cereal.html](https://www.frootloops.com/en_US/our-products/froot-loops-cereal.html). Accessed: April 8, 2024.



**Many children rely on school foods for their daily nutrition.** Participation in school breakfast and lunch programs increased during the 2022-2023 school year—when California implemented free school meals for all—compared to pre-pandemic levels.<sup>9</sup> With more students eating school meals, it is critical to ensure these meals are safe. AB 2316 will make all school foods, whether provided in free school meals or purchased as snacks or a la carte items, safer for all students and could especially benefit those who, without school meals, would not have access to adequate nutrition.

**To protect children, the California Legislature should ban synthetic food dyes and titanium dioxide from school foods.** Where FDA has chosen not to act, California can. The chemicals listed in AB 2316 have documented health harms, especially for children. These chemicals are unnecessary in the food supply. We therefore ask that the Legislature support this bill and prevent schools from serving synthetic food dyes and titanium dioxide to children.

Thank you for your attention to our position and concerns.

Sincerely,

Thomas M. Galligan, PhD  
Principal Scientist for Food Additives and Supplements  
Center for Science in the Public Interest

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<sup>9</sup> Food Research and Action Center. *The State of Healthy School Meals for All California, Maine, Massachusetts, Nevada, and Vermont Lead the Way*. February 2024. <https://frac.org/wp-content/uploads/HSMFA-Report-2024.pdf>.