

OEHHA COMMENT FROM TURNING GREEN & CONSCIOUS KITCHEN Re: Notice of Proposed Rulemaking, Warnings for Exposures to Glyphosate from Consumer Products New Sections 25607.48 and 25607.49

We would like to thank the California Office of Environmental Health Hazard Assessment for allowing us to have the opportunity to provide comment on the proposed Warnings for Exposures to Glyphosate from Consumer Products. We appreciate your continuous commitment to improving policy that secures the right of Californians to defend our health.

We are Turning Green, a non-profit organization representing an international network of environmental leaders and passionate students with a mission to promote environmental sustainability, education, and empowerment. We have connected with 3.5 million students and have worked across the globe in 118 different countries, all while striving to create a greener planet and more equitable future for all.

Through our Conscious Kitchen program over the last year during Covid, we have channeled over \$17 million into local economies to purchase 10.7 million pounds of organic food for 18.7 million meals to nourish students and families. We are also collaborating with governmental agencies including CDFA and USDA that support furthering our goals and values.

What we are asking for:

Approval of the warning label for glyphosate on consumer products that contain more than 160 ppb, as recommended by the Environmental Working Group, to provide transparency from companies and to protect the health of the public (Formuzis, 2018). Because of the sufficient amount of evidence associating exposure to glyphosate with negative impacts to physical and mental health, clear labeling must be made available to the public on consumer goods that contain this chemical.

Glyphosate traces are in many common consumer products:

Glyphosate has been listed on the Proposition 65 chemical list since 2017 and has been shown to have effects that are harmful to humans. With the daily ingestion of residual pesticides on food products, drinking water, from wind drift, and dust in homes, we cannot be certain of the extent that this substance is disrupting integral processes of the human body. The prevalence and use of this chemical has completely saturated our grocery store shelves, yet consumers are left unaware of its presence in their daily lives as a result of the shortcomings of Proposition 65. In the United States alone, big agriculture applies about **250 million pounds of glyphosate** annually in the form of Roundup, a dangerous and toxic glyphosate-based pesticide (Peper, 2015). This is the most used pesticide in the country, which is highlighted by the fact that most crops have been genetically altered to accommodate its widespread use. Since 2015, **more than 95% of crops** such as grain, corn, and soy have been made to be "Roundup-ready," or



genetically modified to work specifically with Roundup (Peper, 2015). The monopolization of toxic pesticides on staple crops with little to no consideration for the adverse health effects of glyphosate is reckless and puts current and future generations at risk. For example, in 2018 the Federal Food and Drug Administration released results of testing that "found glyphosate on about two-thirds of corn and soybean samples" (Formuzis, 2018). This study did not even include oats or wheat, which are more heavily subjected to glyphosate treatments as a drying agent. When we uncover how fields are drenched in glyphosate during agricultural production, we cannot avoid the truth that the food we consume on a daily basis has been tainted with this probable carcinogen.

Glyphosate has been tied to serious health impacts:

In recent years, population rates of allergens, Celiac and autoimmune diseases have significantly increased, and may be attributed to the rise in toxic pesticides and chemicals used in conventional farming practices. It is unacceptable to allow the ingestion of these pesticides by the public, much less without requiring a warning statement on products that contain glyphosate and similar chemicals. The state of California has a responsibility to inform and protect consumers through Proposition 65, and has failed to do so without an adequate glyphosate warning label. The addition of a glyphosate warning on consumer products will fulfill Proposition 65's obligation as a right-to-know law, empower citizens to make informed decisions about what they choose to permit in their bodies, and protect Californians from a dangerous chemical.

The use of glyphosate is still widespread in conventional farming and is a common ingredient in popular pesticides. This chemical has been classified as a known animal carcinogen and probable human carcinogen by the International Agency for Research on Cancer (IARC), as it has shown to be linked to instances of cancer and tumors. Glyphosate was only added to the Proposition 65 toxic chemicals list in 2017, but studies since then have shown that exposure to this carcinogen can lead to "a significant disruption in the intestinal microbiome leading to a cascade of pathologic changes in the body" (Hamilton, 2018). Disturbance in the diversity and richness of gut microbes has been strongly related to depression and anxiety, as well as Alzheimer's and Parkinson's disease, autism, and ADHD (Rueda-Ruzafa, 2019; Van Bruggen et. al, 2017; Gill et. al, 2017). Overall, anyone consuming products contaminated with glyphosate should be informed, as they are potentially putting themselves at risk for cancer and dysbiosis which is associated with emotional disorders and neurological diseases (Rueda-Ruzafa, 2019). Consumers cannot be expected to make informed decisions about their nutritional purchases when they are not being provided with clear statements about the impacts that glyphosate inflicts on the human body. Without proper research, the public is unaware that glyphosate is a prominent endocrine and hormone disruptor, can cause breaks in DNA, and induces oxidative stress in the body, all while harming the body's beneficial probiotic bacteria (Zhang et. al, 2019; Gill et. al, 2017; Hamilton, 2018). If companies were transparent with how ingestion of glyphosate truly attacks the body, then even a typical box of cereal would be revealed as a major health threat, as shown in **Figure A**. Glyphosate has the ability to affect



our bodies at the cellular level, with devastating long term effects, that **can be passed to children during pregnancy** (OEHHA, 2018). We cannot allow glyphosate-laced products to be sold to consumers unknowingly when this chemical and its degradation products "can disturb normal neurotransmission and upset the delicate balance between cell proliferation and cell death" (Van Bruggen et. al, 2017).

Californians deserve the right to know when our food supply is being infected with toxins and carcinogens, especially when these recommendations are outdated. For instance, the EPA set a legal glyphosate limit for oats in 2008, which was **before** research was conducted by IARC and other prominent scientific bodies declared the chemical as a probable human carcinogen (Formuzis, 2018). With the connection of low levels of glyphosate to potentially fatal diseases and health conditions, many prominent studies have come to this same conclusion: the allowable levels of glyphosate need to be updated urgently as new research emerges (Van Bruggen et. al, 2017). We cannot allow our health and the health of our families to be jeopardized by corporations that want to keep their harmful practices secret from the public.

In conclusion:

We request that you add a warning label on consumer products that contain glyphosate levels higher than 160ppb, as recommended by the Environmental Working Group. These warnings would be compliant with Proposition 65's right-to-know law and at least allow consumers the autonomy over their own health and well-being. There is substantial research about this widely-used toxin, and California should provide a glyphosate warning label to consumers, as countries such as Austria, Fiji, Mexico, the Netherlands, Russia, and Qatar have already banned products contaminated with glyphosate-based pesticides (Baum Hedlund Law, 2021; Peper, 2015). We are respectfully calling on the California Office of Environmental Health Hazard Assessment to **add a clear, reasonable, and truthful consumer warning to products containing glyphosate**. Once again, Turning Green would like to thank OEHHA for considering public comments for this important decision, and for your dedication to safeguarding the health of Californians.

Respectfully submitted,

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Appendix

Figure A (for a higher res version <u>click here</u>)



Disclaimer: This is a fictional representation of what a cereal box would look like with full transparency.



Works Cited

Baum Hedlund Law. (2021, August). *Where is Glyphosate Banned*? Baum Hedlund Aristei & Goldman. Retrieved September 24, 2021, from

https://www.baumhedlundlaw.com/toxic-tort-law/monsanto-roundup-lawsuit/where-is-glyphosate -banned-/.

Formuzis, A. (2018, October 24). *Roundup for Breakfast, Part 2: In New Tests, Weed Killer Found in All Kids' Cereals Sampled*. Environmental Working Group. Retrieved September 22, 2021, from

https://www.ewg.org/news-insights/news-release/roundup-breakfast-part-2-new-tests-weed-killer -found-all-kids-cereals.

Gill, J. P. K., Sethi, N., Mohan, A., Datta, S., & Girdhar, M. (2018). Glyphosate toxicity for animals. *Environmental Chemistry Letters*, *16*(2), 401-426.

Hamilton, D. (2018). *Are Problems Consuming Gluten Really Glyphosate Sensitivity?* Researched Nutritionals. Retrieved September 20, 2021, from https://www.researchednutritionals.com/wp-content/uploads/2019/01/RN-Issue-11-Are-Problems -Consuming-Gluten-Really-Glyphosate-Sensitivity.pdf.

Office of Environmental Health Hazard Assessment. (2018, March). *Glyphosate*. p65warnings.ca.gov. Retrieved September 24, 2021, from https://www.p65warnings.ca.gov/fact-sheets/glyphosate.

Van Bruggen, A. H., He, M. M., Shin, K., Mai, V., Jeong, K. C., Finckh, M. R., & Morris Jr, J. G. (2018). Environmental and health effects of the herbicide glyphosate. *Science of the Total Environment*, *616*, 255-268.

Rueda-Ruzafa, Lola, et al. "Gut Microbiota and Neurological Effects of Glyphosate." *NeuroToxicology*, Elsevier, 20 Aug. 2019, reader.elsevier.com/reader/sd/pii/S0161813X19300816?token=647166E81BF2422975CFA61F5

reader.elsevier.com/reader/sd/pii/S0161813X19300816?token=64/166E81BF2422975CFA61F5 13A4EDD67816061028800239DF2708903D0A2A583E8BEF85274D29B6B73CF13E1D09399 &originRegion=us-east-1&originCreation=20210923230117.

Zhang, L., Rana, I., Shaffer, R. M., Taioli, E., & Sheppard, L. (2019). Exposure to glyphosate-based herbicides and risk for non-Hodgkin lymphoma: a meta-analysis and supporting evidence. *Mutation Research/Reviews in Mutation Research*, *781*, 186-206.