

GLP podcast & video: Harmful chemicals in fish? How your genes affect the drugs you take; 3 pesticide myths debunked

Are you getting a potentially toxic dose of chemicals every time you eat fish? A new study has raised this concern, but its authors made several unjustified assumptions in order to reach their alarming conclusion. Your genes might influence how well you respond to certain medicines. How can doctors use that information to better treat their patients? Pesticide scaremongering runs rampant on social media; let's debunk three common myths about the chemicals that help produce our bountiful food supply.

Podcast:

<https://geneticliteracyproject.org/wp-content/uploads/2023/05/Cam-218-1.wav>

Video

Join guest host Dr. Liza Dunn and GLP contributor Cameron English on episode 218 of Science Facts and Fallacies as they break down these latest news stories:

- [Viewpoint: Here's the wacky formula used by Environmental Working Group to stoke unwarranted fears about safe chemicals](#)

Do so-called “forever chemicals,” more accurately called per- and polyfluoroalkyl substances (PFAS), pose a serious health risk? The Environmental Working Group (EWG) claimed in a recent study that Americans are exposed to potentially harmful levels of at least one of these chemicals, Perfluorooctane sulfonic acid (PFOS), by eating freshwater fish. The problem? EWG's study was fundamentally flawed. There is no evidence that eating any species of fish could jeopardize your health.

- [Precision medicine and pharmacogenetics: Here's why certain drugs work better for some people than others](#)

Your genes may exert a significant influence on how well your body responds to many pharmaceutical drugs. A new testing program at the University of California, San Francisco (UCSF) could help identify individuals at risk for these “gene-drug interactions” before they occur, helping physicians adjust the dose or even the drug they prescribe to a patient. If successful, the UCSF project could potentially cut health care costs and improve outcomes by minimizing adverse drug reactions.

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- **[Viewpoint: Social media amplifies misinformation — No, modern pesticides are not the driver of insect declines and no, they are not poisoning us](#)**

Courtesy of social media, the public is consistently subject to outright falsehoods about the risks and benefits of pesticides. These chemicals certainly can be dangerous if misused. But when applied by farmers in accordance with EPA regulations, pesticides don't threaten beneficial insects, nor do they poison our food.

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