



Wheat is Safe to Eat

Krista Zuzak

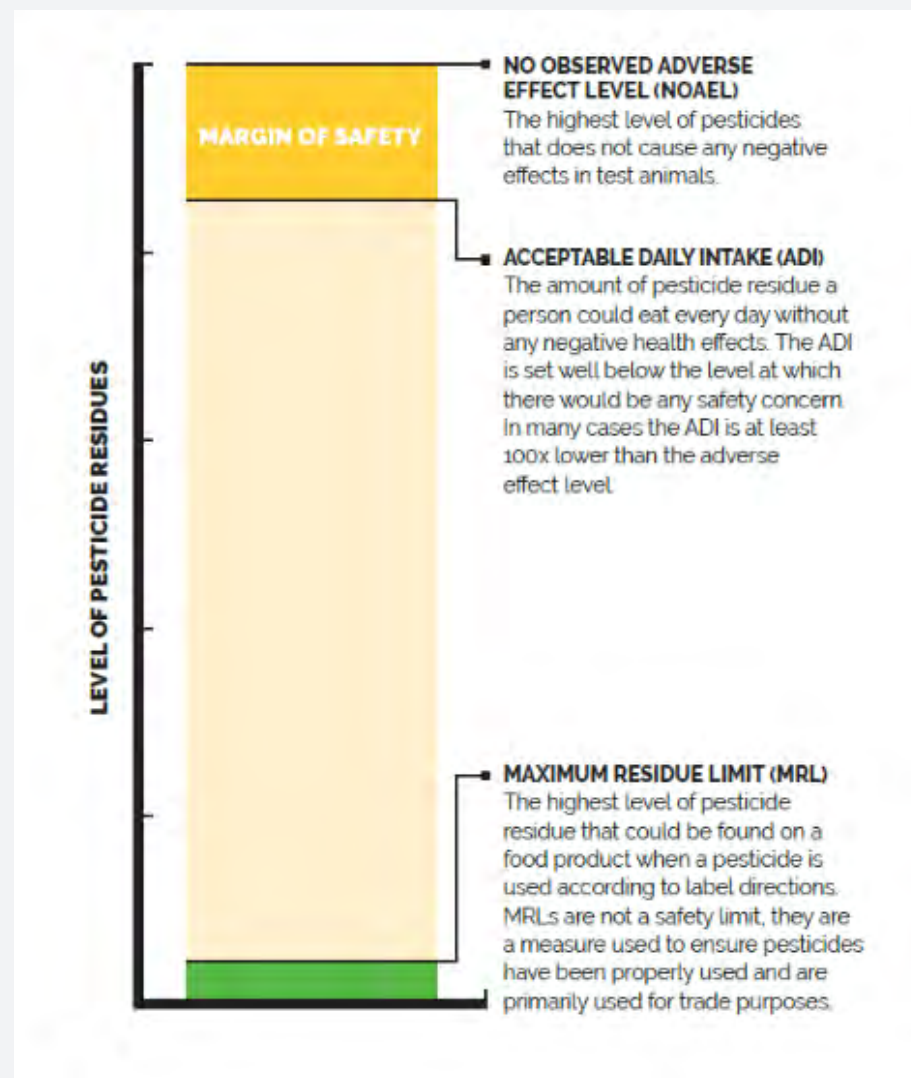
Director, Crop Protection and Production



What is an MRL?

MRL = Maximum Residue Limit

An MRL represents the maximum amount of pesticide residues that are expected to remain on a food product when the pesticide is used according to label directions.



Source: CropLife Canada

MRLs in Canada

- In Canada, MRLs are set by Health Canada.
- MRLs are often set 100 times or more below levels that would have any impact on human health.
- MRLs ensure that pesticides are being used as they are supposed to be by farmers.
- Not a measure of food safety.
- Used primarily for trade purposes.
- Canadian Crops must meet the MRLs set by the destination country in order to avoid trade disruptions.

How are MRLs set?



Protecting health and environment

Before setting an MRL for a given pesticide on a food, Health Canada scientists evaluate the pesticide to ensure that it can be used in a way that protects human health and the environment, while effectively managing pests.



Examining exposure

Next, they examine the amount of a given pesticide residue you might be exposed to on or in your food. This potential exposure looks at all food you might eat in a typical day and the variety of food you may eat over your lifetime.



Following international guidelines

Then our scientists can set the MRL in line with international guidelines. Countries cooperate on setting MRLs so you can have a variety of food from all over the world.

MRLs can change over time based on changes in how pesticides are used. However, they must always meet our health and environmental protection requirements.

Source: PMRA

Can you still eat Girl Scout cookies? Here's what to know about risks to consumers

A lawsuit cites a report from two non-profits – a science group and holistic parenting group – that found traces of lead and a herbicide in Girl Scout cookies. Does that mean we can't eat Thin Mints?



Mike Snider
USA TODAY

Published 7:18 p.m. ET March 13, 2025 | Updated 2:26 p.m. ET March 14, 2025

Why Are Parents Concerned About Girl Scout Cookies in 2025?

Laboratory testing revealed that 100% of tested [Girl Scout cookies contain glyphosate and toxic metals](#), with levels exceeding EPA safety limits. Tests commissioned by GMO Science and consumer groups examined 25 cookie samples from California, Iowa, and Louisiana in December 2024. Thin Mints contained glyphosate levels of 111.07 ppb, while Peanut Butter Patties showed lead contamination of 42.5 ppb. The Girl Scouts of USA, an \$800 million cookie enterprise, declined requests to discuss these findings.

- All 25 tested cookie samples contained glyphosate, the active ingredient in Roundup weedkiller
- 96% of samples tested positive for lead contamination, which has no safe exposure level
- 76% exceeded EPA limits for cadmium content
- 88% of samples contained five toxic metals: aluminum, arsenic, cadmium, lead, and mercury
- Thin Mints showed the highest glyphosate levels at 111.07 ppb, 334 times above safety thresholds

111.07ppb = 0.11107ppm



[Home](#) / [Ground Water and Drinking Water](#)

National Primary Drinking Water Regulations

The National Primary Drinking Water Regulations ([NPDWR](#)) are legally enforceable primary standards and treatment techniques that apply to public water systems. Primary standards and treatment techniques protect public health by limiting the levels of contaminants in drinking water.

- [Microorganisms](#)
- [Disinfectants](#)
- [Disinfection Byproducts](#)
- [Inorganic Chemicals](#)

Related Info

- Find out [how EPA develops drinking water regulations](#)
- Learn about [existing EPA drinking water regulations](#)

Glyphosate	0.7	0.7	Kidney problems; reproductive difficulties	Runoff from herbicide use
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Health
Canada Santé
Canada

Your health and
safety... our priority.


Votre santé et votre
sécurité... notre priorité.

Guidelines for Canadian Drinking Water Quality

Guideline Technical Document

Glyphosate



Canada 

Guideline

The maximum acceptable concentration (MAC) for glyphosate in drinking water is 0.28 mg/L (280 µg/L).

0.11107ppm < 0.28ppm

Analysis of Glyphosate Residues in Foods from the Canadian Retail Markets between 2015 and 2017

Beata M. Kolakowski,* Leigh Miller, Angela Murray, Andrea Leclair, Henri Bietlot, and Jeffrey M. van de Riet

Cite This: *J. Agric. Food Chem.* 2020, 68, 5201–5211

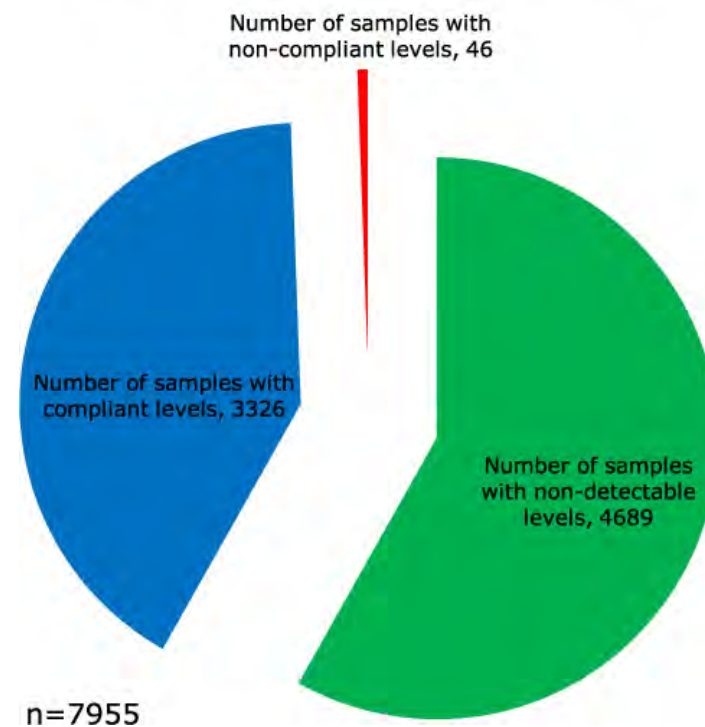
Read Online

Table 1. Prevalence and Levels of Glyphosate as a Function of Food Category

food type	MRL	foods	number of samples	number of samples with residues detected		
				compliant ^a	noncompliant	range (ppm) ^a
Foods with a Single Ingredient or Class of Ingredient						
dairy and/or meat	0.08	plain yogurt, plain custard, milk-based infant formula, meat purees	22	0	0	n/a
fresh or processed fruits and vegetables (other than pulses, soybeans, and corn)	0.1	fresh/frozen/canned/pickled/dried fruits and/or vegetables, jams, juices/smoothies/nectars, fruit drinks, wine	1473	170	6	0.0002–0.15
other grains	0.1	whole grains and flour/starch of amaranth, arrowroot, buckwheat, rice, rye, triticale	626	156	35	0.005–5.9
corn and corn products	3	fresh/frozen corn, gluten-free baking mixes/cookies/crackers/pasta, popcorn, corn flour, cornmeal, corn chips, corn bran, corn starch, tacos/tortillas	501	115	0	0.0006–0.45
beans and/or chickpeas and/or lentils and/or peas	4 or 5	fresh/frozen/canned/dried/baked/refried/beans/chickpeas/lentils/peas, chickpea/lentil/pea chips, flours	770	327	5	0.003–13
wheat and wheat products	5 or 15	wheat bran, baking mixes, couscous, wheat flour, wheat germ, bulgur, wheatlets, pasta (except for gluten-free), plain cookies and crackers	807	616	0	0.005–8.5
barley and barley products	10	pot/pearl barley, barley flakes, barley flour	103	51	0	0.0058–2.1
oats and Oat Products	15 or 35	baking mixes, oats, oat bran, oat flour, oatmeal	310	231	0	0.006–3.1
soy and soy products	20	fresh/dried/frozen soybeans/edamame, soy beverages, soy flour, meat alternatives, soy nuts, tofu, soy desserts, miso	204	20	0	0.0051–6.0
Foods with Multiple Ingredients or Classes of Ingredients						
infant foods	0.1–35 ppm	infant cereals, toddler snacks, granola bars/cereal bars, infant/toddler meals, purees, infant formula, teething biscuits, fruit-flavored yogurt/fresh cheese	927	290	0	0.006–2.5
manufactured foods intended for general population	0.1–35 ppm	cookies, crackers, frozen meals, canned pasta, frozen pizza, soup, gluten-free pasta	2212	1344	0	0.0001–1.9

^aCompliant refers to detectable levels of glyphosate that are at or below the applicable MRL (i.e., compliant with Canadian regulations).

Analysis of Foods for Glyphosate



Wheat, grain / Glyphosate



<div>Australia</div> <div>5</div> <div>MORE INFO</div> <div></div>	<div>Bangladesh</div> <div>30</div> <div>MORE INFO</div> <div></div>	<div>Canada</div> <div>5</div> <div>MORE INFO</div> <div></div>	<div>Chile</div> <div>30</div> <div>MORE INFO</div> <div></div>
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<div>European Union</div> <div>10</div> <div>MORE INFO</div> <div></div>	<div>Ghana</div> <div>30</div> <div>Codex</div> <div>MORE INFO</div> <div></div>	<div>Great Britain</div> <div>10</div> <div>MORE INFO</div> <div></div>	<div>Indonesia</div> <div>—</div> <div></div> <div></div>
<div>Japan</div> <div>30</div> <div>MORE INFO</div> <div></div>	<div>Korea</div> <div>5</div> <div>Import Tolerance</div> <div>MORE INFO</div> <div></div>	<div>Mexico</div> <div>5</div> <div>MORE INFO</div> <div></div>	<div>Nigeria</div> <div>30</div> <div>Codex</div> <div>MORE INFO</div> <div></div>
<div>Peru</div> <div>30</div> <div>Codex</div> <div></div>	<div>Turkey</div> <div>10</div> <div></div> <div></div>	<div>United Arab Emirates</div> <div>30</div> <div>Codex</div> <div></div>	<div>United States</div> <div>30</div> <div></div> <div></div>










0.11107ppm

“A health assessment by Health Canada has also confirmed there are no risks of concern to human health when glyphosate-containing products are used properly according to product label instructions.”

“In 2022, the European Chemicals Agency (ECHA) carried out a hazard assessment of glyphosate and concluded that it did not meet the scientific criteria to be classified as a carcinogenic, mutagenic or reprotoxic substance. EFSA used ECHA’s hazard classification for the purposes of the EU risk assessment on glyphosate.”

“EPA scientists performed an independent evaluation of available data for glyphosate and found no risks of concern to human health from current uses of glyphosate. Glyphosate products used according to label directions do not result in risks to children or adults.”

The Dose makes the Poison

Substance	Toxic Category	Lethal Dose* LD50 (mg/kg)**
 Botulin	Super Toxic	0.00001
 Vitamin D	Extremely Toxic	10
 Caffeine	Very Toxic	192
 Copper Sulphate pesticide used in organic production	Very Toxic	481
 Acetaminophen pain killer	Moderately Toxic	1,944
 Sodium Chloride table salt	Moderately Toxic	3,000
 Glyphosate weed killer	Slightly Toxic	5,600
 Ethanol alcohol	Slightly Toxic	7,000
 Sucrose sugar	Practically Non-Toxic	30,000

* Acute toxicity/one time dose. Smaller numbers = greater toxicity

DITCH GIRL SCOUT COOKIES

1/3

@IAMJASYRA



100% POSITIVE FOR GLYPHOSATE
100% POSITIVE FOR TOXIC METALS
88% POSITIVE FOR ALL 5 TOXIC METALS
76% POSITIVE FOR LEVELS OF CADMIUM THAT EXCEED EPA LIMITS IN WATER
96% POSITIVE FOR LEAD



9,462



360



19.6K



TOXIC GIRL SCOUT COOKIES?



HANDS OFF OUR THIN MINTS

THE
UNBIASED
SCIENCE
PODCAST

DESPITE A SCARY-SOUNDING REPORT BY MOMS ACROSS AMERICA, YOU DON'T NEED TO TOSS YOUR COOKIES.



5,852



224



2,842



unbiasedscipod

Follow

A viral report from Moms Across America claiming dangerous levels of pesticides and heavy metals i ...

A CHILD WOULD HAVE TO EAT OVER 9,000 COOKIES DAILY TO REACH A POTENTIALLY HARMFUL DOSE OF GLYPHOSPHATE.



9,000

@unbiasedscipod

5,853



224



2,842



unbiasedscipod

Following

A viral report from Moms Across America claiming dangerous levels of pesticides and heavy metals i ...

LIFESTYLE > HEALTH

Chemical That May Cause Infertility Found in Cheerios, Quaker Oats

80% of Americans tested were found to have been exposed to chlormequat, which has been linked to issues with puberty and reproduction, a study claims

By [Cara Lynn Shultz](#) | Updated on February 19, 2024 07:01 PM EST



Box of Cheerios. PHOTO: GABBY JONES/BLOOMBERG/GETTY

Canadian farmers blamed for ag chemical in U.S. oat foods



By Robert Arnason

Published: February 20, 2024
Crops, News

Reading Time: 3 minutes



The amount of chlormequat found in urine and oat foods may be very low, but public perception is reality when it comes to pesticides. | File photo



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EWG finds little-known toxic chemical in four out of five people tested



By **Anthony Lacey** (EWG),
Alexis Temkin, Ph.D. (EWG)

FEBRUARY 15, 2024



Canada ⓘ

Oats

40

DETAILS

China ⓘ

Oat

10

DETAILS

Codex ⓘ

Oats (GC 0647)

4

DETAILS

European Union ⓘ

Oat

15

DETAILS

Japan ⓘ

Other cereal grains

6

DETAILS

United States ⓘ

Oat, grain

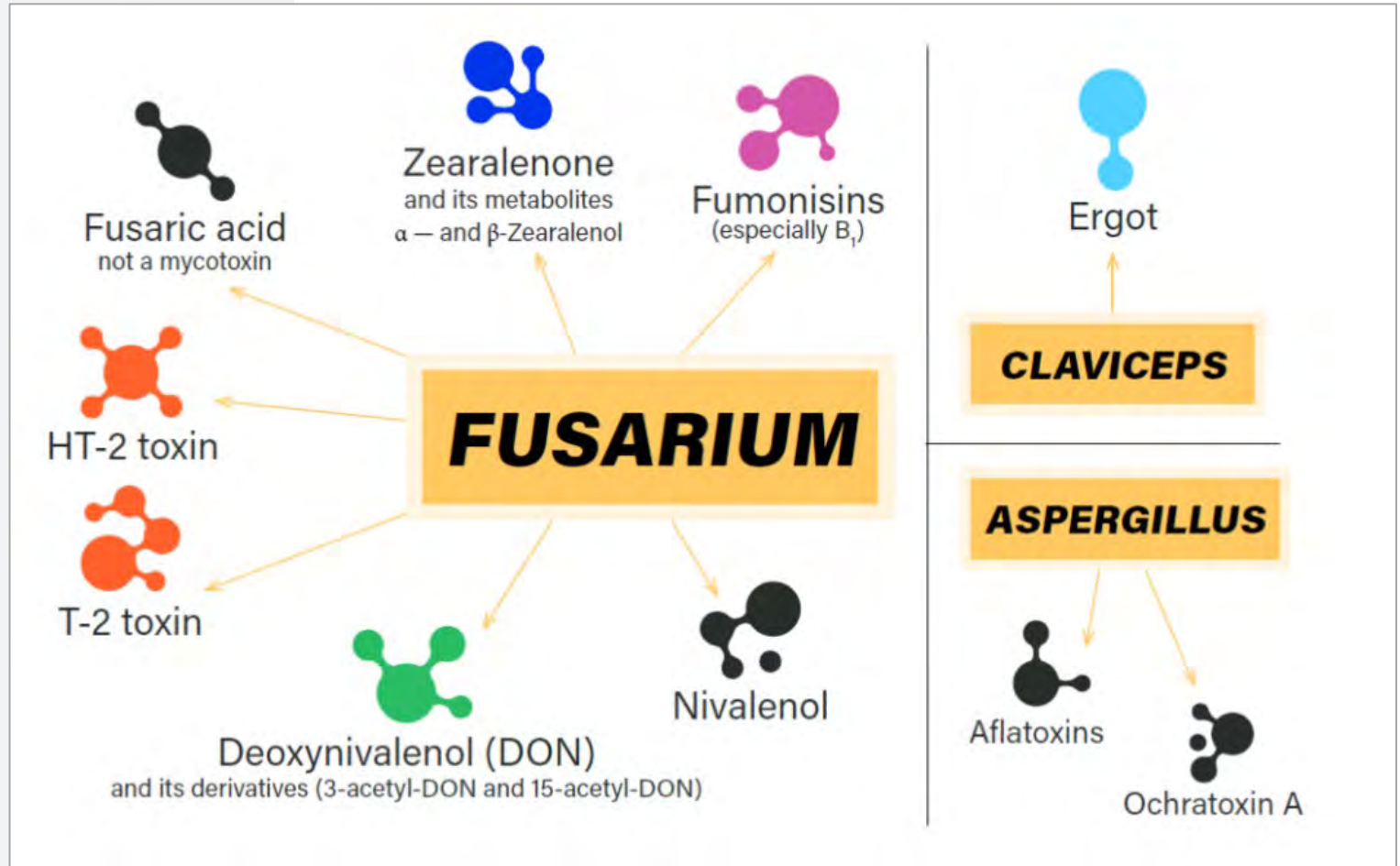
- Import Tolerance

40

DETAILS

What about MLs?

- Apply to food contaminants
- Include contaminants like deoxynivalenol (DON) and other mycotoxins and heavy metals






Ergot









Cereals and cereal products, derived from cereal grains, from roots and tubers, pulses, legumes and pith or soft core of palm tree, including bakery wares

COLLAPSE SECTION 

European Union Ergot

Published Commodity	Limit	Status		
1.8.1.1 Unprocessed cereal grains except products listed in 1.8.1.2	200 ppm	Current		MORE INFO
1.8.1.2 Unprocessed rye grains	500 ppm	Current		MORE INFO
1.8.1.2 Unprocessed rye grains	200 ppm	Pending		MORE INFO

European Union Ergot alkaloids

Published Commodity	Limit	Status		
1.8.2.1 Milling products of barley, spelt and oats (with an ash content lower than 900 mg/100 g dry matter)	0.05 ppm	Current		MORE INFO
1.8.2.1a Milling products of wheat (with an ash content lower than 900 mg/100 g dry matter)	0.1 ppm	Current		MORE INFO
1.8.2.1a Milling products of wheat (with an ash content lower than 900 mg/100 g dry matter)	0.05 ppm	Pending		MORE INFO
1.8.2.2 Barley, wheat, spelt and oats grains placed on the market for the final consumer	0.15 ppm	Current		MORE INFO
1.8.2.2 Milling products of barley, wheat, spelt and oats	0.15 ppm	Current		MORE INFO
1.8.2.3 Rye milling products: Rye placed on the market for the final consumer	0.25 ppm	Pending		MORE INFO
1.8.2.3 Rye placed on the market for the final consumer	0.5 ppm	Current		MORE INFO
1.8.2.4 Wheat gluten	0.4 ppm	Current		MORE INFO

Keep It Clean Program

Keep it Clean is a joint initiative that provides growers and crop advisers with resources for growing market-ready crops.

This includes providing timely updates on potential market risks and resources for on-farm practices to ensure crops meet the standards of domestic and export customers.





CEREALS
CANADA

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