

Measured Concentrations in parts per trillion (ppt=ng/kg)

All Food Groups Sample Method Detection Limits (MDL)	PFBA MDL=345*	PFPeA MDL=207*	PFHxA MDL=48	PFHpA MDL=43	PFDA MDL=24	PFNA MDL=29	PFDA MDL=22	PFUdA MDL=30	PFDoA MDL=16	PFTrDA MDL=68	PFTeDA MDL=30	PFBS MDL=21	PFPeS MDL=28	PFHxS MDL=35	PFHpS MDL=36	PFOS MDL=28	PFNS MDL=10	PFDS MDL=26	PFUnDS MDL=28	PFDoS MDL=33	PFTrDS MDL=35	PFOSA MDL=31	HFPO-DA MDL=34	NaDONA MDL=25	9Cl-PF3ONs MDL=20	11Cl-PF3OUds MDL=17	4:2FTS MDL=35	6:2FTS MDL=31	8:2FTS MDL=38	10:2 FTS MDL=45	
Cake, white with white icing	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Cinnamon roll, iced	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Rice, brown, cooked	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Biscuits, fast-food	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Rice, white, enriched, cooked	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Bread, whole wheat, pre-sliced	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Potatoes, French fries, fast-food	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Potato, peeled, boiled	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Potato, with peel, baked	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Sweet potato, baked, peel removed	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL

*All PFBA and PFPeA detects must be confirmed using High-Resolution Mass Spectrometry (HR-MS).

Measured Concentrations in parts per trillion (ppt=ng/L)

Bottled Water Lowest Concentration Minimum Reporting Levels (LCMRL)**	PFBA LCMRL=13	PFPeA LCMRL=3.9	PFHxA LCMRL=5.3	PFHpA LCMRL=2.6	PFOA LCMRL=3.4	PFNA LCMRL=4.8	PFDA LCMRL=2.3	PFUdA LCMRL =2.7	PFDoA LCMRL=2.2	PFTrDA LCMRL Not Determined***	PFTeDA LCMRL Not Determined***	PFBS LCMRL=3.5	PFPeS LCMRL=6.3	PFHsS LCMRL=3.7	PFHpS LCMRL=5.1	PFOS LCMRL=4.4	PFNS LCMRL Not Determined***	PFDS Not Determined***	PFUnDS Not Determined***	PFDoS Not Determined***	PFTrDS Not Determined***	PFOSA Not Determined***	HFPO-DA LCMRL=3.7	NaDONA LCMRL=3.4	SCI-PF3ONs LCMRL=1.4	11CI-PF3OUdS LCMRL=1.6	4:2FTS LCMRL=4.7	6:2FTS LCMRL=14	8:2FTS LCMRL=9.1	10:2 FTS LCMRL Not Determined
Water, bottled, mineral/spring	<LCMRL	<LCMRL	<LCMRL	<LCMRL	<LCMRL	<LCMRL	<LCMRL	<LCMRL	<LCMRL	Not Determined***	Not Determined***	<LCMRL	<LCMRL	<LCMRL	<LCMRL	<LCMRL	<LCMRL	Not Determined***	Not Determined***	Not Determined***	Not Determined***	Not Determined***	<LCMRL	<LCMRL	<LCMRL	<LCMRL	<LCMRL	<LCMRL	<LCMRL	Not Determined***

**LCMRL: Lowest Concentration Minimum Reporting Levels (LCMRL). Bottled water samples were analyzed using Method 533: Determination of Per- and Poly-fluoroalkyl Substances in Drinking Water by Isotope Dilution Anion Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS).

***Not Determined: FDA modified EPA 533 to include PFTrDA, PFTeDA, PFNS, PFDS, PFUnDS, PFDoS, PFTrDS, 10:2 FTS that are not incorporated into the EPA method. FDA did not independently determine MDL values or LCMRL values for these analytes.

Legend

Acronym	Name	CAS	Formula	Nominal Mass
PFBA	Perfluorobutanoic acid	375-22-4	C ₄ HF ₇ O ₂	214
PFPeA	Perfluoropentanoic acid	2706-90-3	C ₅ HF ₉ O ₂	264
PFHxA	Perfluorohexanoic acid	307-24-4	C ₆ HF ₁₁ O ₂	314
PFHpA	Perfluoroheptanoic acid	375-85-9	C ₇ HF ₁₃ O ₂	364
PFOA	Perfluorooctanoic acid	335-67-1	C ₈ HF ₁₅ O ₂	414
PFNA	Perfluorononanoic acid	375-95-1	C ₉ HF ₁₇ O ₂	464
PFDA	Perfluorodecanoic acid	335-76-2	C ₁₀ HF ₁₉ O ₂	514
PFUdA	Perfluoroundecanoic acid	2058-94-8	C ₁₁ HF ₂₁ O ₂	564
PFDoA	Perfluorododecanoic acid	206-203-2	C ₁₂ HF ₂₃ O ₂	614
PFTTrDA	Perfluorotridecanoic acid	276-745-2	C ₁₃ HF ₂₅ O ₂	664
PFTeDA	Perfluorotetradecanoic acid	376-06-7	C ₁₄ HF ₂₇ O ₂	714
PFBS	Perfluorobutanesulfonic acid	375-73-5	C ₄ HF ₉ O ₃ S	300
PFPeS	Perfluoropentanesulfonic acid	2706-91-4	C ₅ HF ₁₁ O ₃ S	350
PFHxS	Perfluorohexanesulfonic acid	355-46-4	C ₆ HF ₁₃ O ₃ S	400
PFHpS	Perfluoroheptanesulfonic acid	375-92-8	C ₇ HF ₁₅ O ₃ S	450
PFOS	Perfluorooctanesulfonic acid	1763-23-1	C ₈ HF ₁₇ O ₃ S	500
PFNS	Perfluorononanesulfonic acid	68259-12-1	C ₉ HF ₁₉ O ₃ S	550
PFDS	Perfluorodecanesulfonic acid	335-77-3	C ₁₀ HF ₂₁ O ₃ S	600
PFUnDS	Perfluoroundecanesulfonic acid	749786-16-1	C ₁₁ HF ₂₃ O ₃ S	650
PFDoS	Perfluorododecanesulfonic acid	79780-39-5	C ₁₂ HF ₂₅ O ₃ S	700
PFTTrDS	Perfluorotridecanesulfonic acid	791563-89-8	C ₁₃ HF ₂₇ O ₃ S	750
PFOSA	Perfluorooctanesulfonamide	754-91-6	C ₈ H ₂ F ₁₇ O ₂ S	499
HFPO-DA	Hexafluoropropylene oxide dimer acid	13252-13-6	C ₆ HF ₁₁ O ₃	330
DONA	4,8-Dioxa-3H-perfluorononanoic acid	919005-14-4	C ₇ H ₂ F ₁₂ O ₄	378
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	756426-58-1	C ₈ ClF ₁₆ O ₄ S	532
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	763051-92-9	C ₁₀ HClF ₂₀ O ₄ S	632
4:2FTS	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	757124-72-4	C ₆ H ₅ F ₉ O ₃ S	328
6:2FTS	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	27619-97-2	C ₈ H ₅ F ₁₃ O ₃ S	428
8:2FTS	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	39108-34-4	C ₁₀ H ₅ F ₁₇ O ₃ S	528
10:2 FTS	1H,1H, 2H, 2H-Perfluorododecane sulfonic acid	120226-60-0	C ₁₂ H ₅ F ₂₁ O ₃ S	628

CAS = Chemical Abstract Service Number

MDL = Method Detection Limit. Method Detection Limit is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero.

Method: Genualdi, S., Young, W., Peprah, E. et al. Analyte and matrix method extension of per- and polyfluoroalkyl substances in food and feed. Anal Bioanal Chem (2023).

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