A Section 508–conformant HTML version of this article is available at https://doi.org/10.1289/EHP12343.

Erratum: Dietary Habits Related to Food Packaging and Population Exposure to PFASs

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Several effect size and confidence interval estimates from the 24-hour dietary recall models were incorrectly reported due to an error in the equation used to derive the estimates. The estimates in the published manuscript were calculated by $(\exp(\beta)\text{-}1) \times a \times 100\%$ with a 95% confidence interval (CI) given by $(\exp(\beta \pm \text{critical value} \times \text{SE}) - 1) \times a \times 100\%$, where β is the coefficient from the linear regression model and a was a scaling factor used to transform the scale of the estimate (e.g., $a = 100$ was used to transform from percent increase in serum PFAS per additional 1 kcal/day to percent increase in serum PFAS per additional 100 kcal/day). This formula was incorrect, as the raw coefficient should have been scaled prior to exponentiation. There were also mistakes in the presentations of these formulae, leading to the equations present in the text appearing as "$(\exp(\beta) - 1) \times 100\%$" and "$(\exp(\beta \pm \text{critical value} \times \text{SE}) - 1) \times 100\%$." The estimates were updated to follow the correct formula, $(\exp(\beta \times a) - 1) \times 100\%$ with a 95% CI given by $(\exp((\beta \pm \text{critical value} \times \text{SE}) \times a) - 1) \times 100\%$. The *p*-values associated with these estimates were accurate as reported and were not affected by the error. This error affects text in the "Results" section of the manuscript, Figure 1, Figure 2, Table 2, Figure S1, Table S11, and Table S12.

In the fifth paragraph of the "Results" section, the second sentence "Based on 24-h recall data, serum concentrations for these PFASs changed 3.0% (95% CI: 0.53, 5.5) for PFNA to 5.0% (95% CI: 1.5, 8.6) for PFOS per 100 kcal of microwave popcorn consumed daily, and the largest increases were observed for PFOS and PFOA (Table 2)" has been changed to "Based on 24-h recall data, serum concentrations for these PFASs changed 3.1% (95% CI: 0.54, 5.7) for PFNA to 5.2% (95% CI: 1.5, 8.9) for PFOS per 100 kcal of microwave popcorn consumed daily, and the largest increases were observed for PFOS and PFOA (Table 2)."

In the sixth paragraph, the second sentence "According to the 24-h recall model, every 100 kcal of food per day eaten at home from nonrestaurant sources was associated with decreased concentrations of all five PFASs, from −0.32% (95% CI: −0.53, −0.11) for PFNA to −0.50% (95% CI: −0.81, −0.18) for PFHxS (Table 2)" has been changed to "According to the 24-h recall model, every 100 kcal of food per day eaten at home from nonrestaurant sources was associated with decreased concentrations of all five PFASs, from −0.32% (95% CI: −0.53, −0.11) for PFNA to −0.49% (95% CI: −0.81, −0.18) for PFHxS (Table 2)."

The caption for Figure 1 has received the additional sentence "Summary data for Figure 1 can be found in Table 2."

The caption for Figure 2 has received the additional sentence "Summary data for Figure 2 can be found in Table 2."

In addition, Figure 2 and Supplemental Table S12 displayed estimates for the shellfish and fish coefficients from 30-day recall models that were incorrectly scaled by a factor of 0.23, which has been corrected.

Note that the supplemental R code has also been corrected to reflect the edits made to the code with regard to these errors. Uncorrected versions of the Supplemental Materials are available in the Supplemental Material attached to this erratum.

Table 2 was originally presented as

Table 2. Percentage difference in serum PFASs (95% CI) in association with self-reported consumption of food from fast food or pizza restaurants, other restaurants, or other food outlets, and of microwave popcorn, fish, and shellfish among NHANES participants ≥12 years of age.

Recall period/food consumed	PFOA	PFNA	PFDA	PFHxS	PFOS	ΣPFAS
24-hour recall[a]						
Fast food or pizza restaurant	0.35 (0.087, 0.62) $p=0.018$	0.25 (−0.014, 0.52) $p=0.099$	0.087 (−0.21, 0.38) $p=0.65$	−0.12 (−0.52, 0.28) $p=0.65$	0.078 (−0.20, 0.35) $p=0.65$	0.066 (−0.17, 0.30) $p=0.65$
Other restaurant	0.29 (−0.081, 0.65) $p=0.17$	0.25 (−0.16, 0.66) $p=0.3$	0.19 (−0.24, 0.61) $p=0.48$	0.17 (−0.33, 0.66) $p=0.6$	0.15 (−0.23, 0.53) $p=0.52$	0.11 (−0.25, 0.47) $p=0.64$
Other food outlet, eaten at home	−0.33 (−0.52, −0.14) $p=0.002$	−0.32 (−0.53, −0.11) $p=0.0062$	−0.36 (−0.57, −0.14) $p=0.0043$	−0.50 (−0.81, −0.18) $p=0.0053$	−0.46 (−0.67, −0.26) $p=6.7e-05$	−0.48 (−0.67, −0.28) $p=2e-05$
Other food outlet, not eaten at home	−0.025 (−0.30, 0.25) $p=0.88$	−0.033 (−0.30, 0.23) $p=0.84$	−0.0011 (−0.31, 0.31) $p=0.99$	−0.29 (−0.63, 0.040) $p=0.13$	−0.27 (−0.59, 0.051) $p=0.15$	−0.26 (−0.54, 0.012) $p=0.096$
Microwave popcorn	4.7 (2.2, 7.2) $p=0.00079$	3.0 (0.53, 5.5) $p=0.031$	3.4 (0.25, 6.6) $p=0.058$	2.2 (−1.3, 5.6) $p=0.29$	5.0 (1.5, 8.6) $p=0.011$	4.8 (1.8, 7.9) $p=0.005$
Fish	−0.066 (−1.4, 1.3) $p=0.94$	1.3 (−0.28, 2.8) $p=0.16$	2.2 (0.65, 3.7) $p=0.011$	−0.062 (−2.3, 2.2) $p=0.97$	0.44 (−1.0, 1.9) $p=0.65$	0.31 (−1.1, 1.7) $p=0.72$
Shellfish	0.70 (−2.0, 3.4) $p=0.68$	5.2 (2.1, 8.3) $p=0.0027$	5.8 (2.9, 8.7) $p=0.00044$	0.71 (−3.8, 5.2) $p=0.8$	2.7 (−0.66, 6.1) $p=0.16$	2.4 (−0.63, 5.4) $p=0.17$
7-d and 30-d recall						
Fast food or pizza restaurant[b]	0.91 (0.047, 1.8) $p=0.058$	0.63 (−0.27, 1.5) $p=0.21$	0.69 (−0.35, 1.7) $p=0.23$	0.042 (−1.0, 1.1) $p=0.94$	0.56 (−0.28, 1.4) $p=0.23$	0.49 (−0.30, 1.3) $p=0.27$
Other restaurant or food outlet[b]	0.67 (0.071, 1.3) $p=0.046$	0.35 (−0.27, 0.97) $p=0.31$	0.94 (0.27, 1.6) $p=0.012$	1.1 (−0.019, 2.3) $p=0.077$	0.59 (−0.16, 1.3) $p=0.16$	0.51 (−0.15, 1.2) $p=0.17$
Fish[c]	−0.30 (−0.88, 0.29) $p=0.36$	0.21 (−0.54, 0.97) $p=0.63$	1.0 (0.37, 1.7) $p=0.0056$	−0.40 (−1.3, 0.54) $p=0.45$	−0.14 (−1.0, 0.76) $p=0.78$	−0.16 (−0.90, 0.60) $p=0.73$
Shellfish[c]	1.1 (0.071, 2.2) $p=0.057$	2.9 (1.6, 4.1) $p=0.00011$	3.3 (2.0, 4.6) $p=1.3e-05$	0.66 (−0.19, 1.5) $p=0.16$	2.0 (0.81, 3.3) $p=0.0032$	1.7 (0.69, 2.8) $p=0.0032$
12-month FFQ[d]						
Popcorn	43 (21, 71) $p=0.0014$	39 (13, 73) $p=0.011$	63 (34, 99) $p=0.00036$	36 (−0.11, 84) $p=0.089$	44 (19, 75) $p=0.0033$	45 (26, 67) $p=0.00013$
Seafood	15 (−1.5, 34) $p=0.12$	37 (12, 67) $p=0.0098$	48 (24, 76) $p=0.00084$	16 (−2.7, 39) $p=0.14$	19 (4.5, 36) $p=0.026$	19 (5.1, 36) $p=0.02$

Note: All estimates are from linear regression models that account for NHANES survey and sample weights and are adjusted for age, gender, race/ethnicity (non-Hispanic white, non-Hispanic black, Hispanic), NHANES cycle year, BMI (continuous), and PIR and are mutually adjusted for dietary intake variables. Models are limited to participants with complete data for PFAS, dietary variables, and model covariates. BMI, body mass index; CI, confidence interval; FFQ, food frequency questionnaire; NHANES, National Health and Nutrition Examination Survey; PFAS, per- and polyfluoroalkyl substances; PFDA, perfluorodecanoic acid; PFHxS, perfluorohexanesulfonic acid; PFNA, perfluorononanoic acid; PFOA, perfluorooctanoic acid; PFOS, perfluorooctanesulfonic acid; PIR, poverty–income ratio; ΣPFAS, total concentration of PFASs.

[a]Percentage difference in serum PFAS (95% CI) with each 100 kcal/day of food consumed at fast food or pizza restaurants, other types of restaurants, or other food outlets (e.g., grocery stores, convenience stores, and cafeterias), excluding servings of microwave popcorn or seafood, or for each 100 kcal/day of microwave popcorn, fish, or shellfish (from any source), based on a 24-hour dietary recall for the day before the NHANES study visit, NHANES 2003–2014, total $n=10,106$.

[b]Percentage difference in serum PFAS (95% CI) associated with one meal/week from a fast food or pizza restaurant, or one meal/week of food from other types of restaurants or food outlets, based on a 7-day dietary recall for the week before the NHANES study visit, NHANES 2007–2014, total $n=5,261$. Estimates are also adjusted for the 30-d dietary variables.

[c]Percentage difference in serum PFAS (95% CI) associated with one serving of fish or shellfish per 30 days (from any source) based on a 30-day dietary recall for the month before the NHANES study visit, NHANES 2007–2014, total $n=5,261$. Estimates are also adjusted for the 7-d dietary variables.

[d]Percentage difference in serum PFAS (95% CI) associated with a one-unit increase in the average daily frequency of popcorn (of any type) or seafood consumption (from any source) during the previous year based on a food frequency questionnaire, where a value of 1 indicates one serving/day, 2 indicates 2 servings/day, 0.14 indicates one serving/week, etc. (see Table S5 for a complete table of values), NHANES 2003–2006, total $n=2,788$.

Table 2 has been corrected to

Table 2. Percentage difference in serum PFASs (95% CI) in association with self-reported consumption of food from fast food or pizza restaurants, other restaurants, or other food outlets, and of microwave popcorn, fish, and shellfish among NHANES participants ≥12 years of age.

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Other restaurant	0.29 (−0.081, 0.66) $p=0.17$	0.25 (−0.16, 0.66) $p=0.3$	0.19 (−0.24, 0.62) $p=0.48$	0.17 (−0.33, 0.67) $p=0.6$	0.15 (−0.23, 0.54) $p=0.52$	0.11 (−0.25, 0.47) $p=0.64$
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