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Author Correction: Levelling foods for priority micronutrient value can provide more meaningful environmental footprint comparisons

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Correction to: Communications Earth & Environment https://doi.org/10.1038/s43247-023-00945-9, published online 12 August 2023.

The original version of this article contained errors in the nutrient content values used for tofu, which led to errors in the article text, article figures, and Supplementary Information and Supplementary Data files. These errors have been corrected and are described in detail below.

The original version of this article quoted six incorrect values for tofu in Supplementary Table 1, Supplementary Data 1 and Supplementary Data 2. The original versions Supplementary Table 1 and Supplementary Data 1 quoted the following values for tofu: "97 kcal, 64 Folate (mcg DFE), 31 Calcium (mcg), 1.7 Iron (mg), 1.2 Zinc (mg), 441 Phytate (mg)". In the corrected versions of Supplementary Table 1 and Supplementary Data 1 the given values for tofu are: "116 kcal, 22 Folate (mcg DFE), 209 Calcium (mg), 2.4 Iron (mg), 1.0 Zinc (mg), 250 Phytate (mg)".

The original version of Supplementary Data 2 quoted incorrect values for tofu. The original version stated the following values: "96.5 energy (kcal/100g), 1036 portion sizes (g) levelled for 1000 kcal, 17.3 protein (g/100g), 578 portion sizes (g) levelled for 100 g of protein, 498 portion sizes (g) levelled for priority micronutrient value, 498 ASRI_g, 481 ASRI_kcal, 373 Iron_g, 360 Iron_kcal, High Iron_dens, 403 Zinc_g, 389 Zinc_kcal, 1011 Calcium_g, 976 Calcium_kcal, Low Calcium_dens, 171 Folate_g, 165 Folate_kcal and Very High Folate_dens". The corrected version states the following values: "115.7 energy (kcal/100g), 865 portion sizes (g) levelled for 1000 kcal, 11.7 protein (g/100g), 857 portion sizes (g) levelled for 1000 g of protein, 414 portion sizes (g) levelled for priority micronutrient value, 414 ASRI_g, 479 ASRI_kcal, 263 Iron_g, 304 Iron_kcal, Very High Iron_dens, 492 Zinc_g, 569 Zinc_kcal, 152 Calcium_g, 176 Calcium_kcal, Very High Calcium_dens, 496 Folate_g, 574 Folate_kcal and Moderate Folate_dens".

Correcting these values changed some of the reported results for tofu. The original version of the article wrongly stated that the energyadjusted food portion for tofu was 927 g and that the priority micronutrient value food portion for tofu was 498 g. In the corrected version, the energy-adjusted food portion for tofu is 865 g and the priority micronutrient value food portion for tofu is 414 g. This required that the following statements and figures also be corrected:

Figure 1 of the original article incorrectly reported values for tofu as 498 g per priority micronutrient value (33.3%), 578 g per 100 g protein and 1036 g per 1000 kcal. The corrected version reports values for tofu as 414 g per priority micronutrient value (33.3%), 857 g per 100 g protein and 865 g per 1000 kcal. These values have also been corrected in Supplementary Data 3.

Figure 2 of the original article incorrectly ranked tofu 14th with a given Land Use value of $3.3 \text{ m}^2 \text{ yr } 1000 \text{ kcal}^{-1}$ in panel 'b' and incorrectly reported a Land Use value of $1.8 \text{ m}^2 \text{ yr } \text{PMV}^{-1}$ in panel 'c'. The corrected version ranks tofu 16th with a given Land Use value of $3.0 \text{ m}^2 \text{ yr } 1000 \text{ kcal}^{-1}$ in panel 'b' and reports a Land Use value of $1.5 \text{ m}^2 \text{ yr } \text{PMV}^{-1}$ in panel 'c'. These values have also been corrected in Supplementary Data 3.

Figure 3 of the original article incorrectly reported a Greenhouse Gas Emissions value for tofu of 2.9 kgCO₂eq 1000 kcal⁻¹ in panel 'b' and a mean Greenhouse Gas Emissions value of $1.6 \text{ kgCO}_2 \text{eq} \text{ PMV}^{-1}$ in panel 'c'. The corrected version reports a mean Greenhouse Gas Emissions value for tofu of $2.7 \text{ kgCO}_2 \text{eq} 1000 \text{ kcal}^{-1}$ in panel 'b' and a mean Greenhouse Gas Emissions value for tofu of $2.7 \text{ kgCO}_2 \text{eq} 1000 \text{ kcal}^{-1}$ in panel 'b' and a mean Greenhouse Gas Emissions value of $1.3 \text{ kgCO}_2 \text{eq} \text{ PMV}^{-1}$ in panel 'c'. These values have also been corrected in Supplementary Data 3.

Figure 4 of the original article incorrectly ranked tofu 24th in Freshwater footprint, 31st in Acidification footprint and 24th in Eutrophication footprint. The corrected version of the article ranks tofu 26th in Freshwater footprint, 33rd in Acidification footprint and 27th in Eutrophication footprint. This has also changed the ranking of some other foods in these categories but not their overall order. These values have also been corrected in Supplementary Data 3.



The second sentence in the fourth paragraph of the section titled "Developing a functional unit based on priority micronutrient value" of the original article read "For example, eggs have a carbon footprint 48% higher than tofu per unit mass, and 11% higher per unit energy, but when assessed based on PMV, eggs have a carbon footprint 42% lower than tofu." This has been corrected to read "For example, eggs have a carbon footprint 48% higher than tofu per unit mass, and 19% higher per unit energy, but when assessed based on PMV, eggs have a carbon footprint 31% lower than tofu."

The fourth sentence in the fourth paragraph of the section titled "Developing a functional unit based on priority micronutrient value" of the original article read "For example, the global mean carbon footprint of cheese is about eight times larger than that of tofu per kg of retail weight, but only about 1.5 times larger once recalculated per target PMV." This has been corrected to read "For example, the global mean carbon footprint of cheese is about eight times larger than that of tofu per kg of retail weight, but only about 1.8 times larger once recalculated per target PMV."

The fifth sentence in the fourth paragraph of the section titled "Developing a functional unit based on priority micronutrient value" of the original article read "Similarly, the global mean carbon footprint for beef (averaged across dairy herds and beef-specific herds) is 21 times larger than tofu when based on mass yields; whereas, when computed per target PMV, the carbon footprint for beef is just four times larger." This has been corrected to read "Similarly, the global mean carbon footprint for beef (averaged across dairy herds and beef-specific herds) is 21 times larger than tofu when based on mass yields; whereas, when computed per target PMV, the carbon footprint for beef is just five times larger."

These corrections do not affect the main conclusions of the article. This has been corrected in both the PDF and HTML versions of the Article.

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