Table of Contents

Figure S1. Chromium k-edge XANES spectra of standards used for Linear Combination Fitting (LCF) of soil samples.

Figure S2. XANES spectra of soil samples (black curves) and corresponding Linear Combination Fitting results (red curves).

Figure S3. Mean metal concentrations (by water source type) measured in irrigation water at 92 urban agriculture sites, relative to US EPA drinking water guidelines.

Boxes represent the interquartile range (IQR = Q3 - Q1). Upper whiskers extend to the largest number less than Q3 + 1.5 * (IQR), and lower whiskers extend to the smallest number greater than Q1 - 1.5 * (IQR). Metals in irrigation water were measured using inductively coupled plasma-mass spectrometry. Measured values below the limit of detection were imputed as the limit of detection divided by the square root of two. Metals concentrations are presented as a percent of the public health guideline. Public health guideline values and citations are presented in Excel Table S2. Summary data are presented in Excel Table S6.

Figure S4. Fresh weight barium concentrations (ppb) measured in produce items, by production category.

Barium in produce was measured using inductively coupled plasma-atomic emission spectroscopy. Measured values below the dry weight limit of detection were imputed as the limit of detection divided by the square root of two. All dry weight concentrations were converted to fresh weight using sample-specific water content. Summary data are presented in Excel Table S8.
Figure S5. Fresh weight copper concentrations (ppb) measured in produce items, by production category.

Copper in produce was measured using inductively coupled plasma-atomic emission spectroscopy. Measured values below the dry weight limit of detection were imputed as the limit of detection divided by the square root of two. All dry weight concentrations were converted to fresh weight using sample-specific water content. Summary data are presented in Excel Table S8.

Figure S6. Fresh weight manganese concentrations (ppb) measured in produce items, by production category.

Manganese in produce was measured using inductively coupled plasma-atomic emission spectroscopy. Measured values below the dry weight limit of detection were imputed as the limit of detection divided by the square root of two. All dry weight concentrations were converted to fresh weight using sample-specific water content. Summary data are presented in Excel Table S8.

Figure S7. Fresh weight zinc concentrations (ppb) measured in produce items, by production category.

Zinc in produce was measured using inductively coupled plasma-atomic emission spectroscopy. Measured values below the dry weight limit of detection were imputed as the limit of detection divided by the square root of two. All dry weight concentrations were converted to fresh weight using sample-specific water content. Summary data are presented in Excel Table S8.

Figure S8. Fresh weight cadmium concentrations (ppb) measured in produce items, by production category.

Cadmium in produce was measured using inductively coupled plasma-atomic emission spectroscopy. Measured values below the dry weight limit of detection were imputed as the limit of detection divided by the square root of two. All dry weight concentrations were converted to fresh weight using sample-specific water content. Summary data are presented in Excel Table S8.

Figure S9. Fresh weight total chromium concentrations (ppb) measured in produce, items by production category.

Total chromium in produce was measured using inductively coupled plasma-atomic emission spectroscopy. Measured values below the dry weight limit of detection were imputed as the limit of detection divided by the square root of two. All dry weight concentrations were converted to fresh weight using sample-specific water content. Summary data are presented in Excel Table S8.
Figure S10. Fresh weight nickel concentrations (ppb) measured in produce items, by production category.

Nickel in produce was measured using inductively coupled plasma-atomic emission spectroscopy. Measured values below the dry weight limit of detection were imputed as the limit of detection divided by the square root of two. All dry weight concentrations were converted to fresh weight using sample-specific water content. Summary data are presented in Excel Table S8.

Figure S11. Linear relationships between metals concentrations in soil and urban-grown produce.

Results for cadmium are not shown because fewer than 10% of produce samples had levels above the limit of detection (dry weight limit of detection = 0.375 ppm; see Excel Table S1).

Additional File- Excel Document
Report S1.pdf
Report S2.pdf
Figure S1. Chromium k-edge XANES spectra of standards used for Linear Combination Fitting (LCF) of soil samples.
Figure S2. XANES spectra of soil samples (black curves) and corresponding Linear Combination Fitting results (red curves).
Figure S3. Mean metal concentrations (by water source type) measured in irrigation water at 92 urban agriculture sites, relative to US EPA drinking water guidelines.

Boxes represent the interquartile range (IQR = Q3 - Q1). Upper whiskers extend to the largest number less than Q3 + 1.5 * (IQR), and lower whiskers extend to the smallest number greater than Q1 - 1.5 * (IQR). Metals in irrigation water were measured using inductively coupled plasma-mass spectrometry. Measured values below the limit of detection were imputed as the limit of detection divided by the square root of two. Metals concentrations are presented as a percent of the public health guideline. Public health guideline values and citations are presented in Excel Table S2. Summary data are presented in Excel Table S6.
Figure S4. Fresh weight barium concentrations (ppb) measured in produce items, by production category.

Barium in produce was measured using inductively coupled plasma-atomic emission spectroscopy. Measured values below the dry weight limit of detection were imputed as the limit of detection divided by the square root of two. All dry weight concentrations were converted to fresh weight using sample-specific water content. Summary data are presented in Excel Table S8.
**Figure S5.** Fresh weight copper concentrations (ppb) measured in produce items, by production category.

Copper in produce was measured using inductively coupled plasma-atomic emission spectroscopy. Measured values below the dry weight limit of detection were imputed as the limit of detection divided by the square root of two. All dry weight concentrations were converted to fresh weight using sample-specific water content. Summary data are presented in Excel Table S8.
Figure S6. Fresh weight manganese concentrations (ppb) measured in produce items, by production category.

Manganese in produce was measured using inductively coupled plasma-atomic emission spectroscopy. Measured values below the dry weight limit of detection were imputed as the limit of detection divided by the square root of two. All dry weight concentrations were converted to fresh weight using sample-specific water content. Summary data are presented in Excel Table S8.
Figure S7. Fresh weight zinc concentrations (ppb) measured in produce items, by production category.

Zinc in produce was measured using inductively coupled plasma-atomic emission spectroscopy. Measured values below the dry weight limit of detection were imputed as the limit of detection divided by the square root of two. All dry weight concentrations were converted to fresh weight using sample-specific water content. Summary data are presented in Excel Table S8.
**Figure S8.** Fresh weight cadmium concentrations (ppb) measured in produce items, by production category.

Cadmium in produce was measured using inductively coupled plasma-atomic emission spectroscopy. Measured values below the dry weight limit of detection were imputed as the limit of detection divided by the square root of two. All dry weight concentrations were converted to fresh weight using sample-specific water content. Summary data are presented in Excel Table S8.
Figure S9. Fresh weight total chromium concentrations (ppb) measured in produce, items by production category.

Total chromium in produce was measured using inductively coupled plasma-atomic emission spectroscopy. Measured values below the dry weight limit of detection were imputed as the limit of detection divided by the square root of two. All dry weight concentrations were converted to fresh weight using sample-specific water content. Summary data are presented in Excel Table S8.
Figure S10. Fresh weight nickel concentrations (ppb) measured in produce items, by production category.

Nickel in produce was measured using inductively coupled plasma-atomic emission spectroscopy. Measured values below the dry weight limit of detection were imputed as the limit of detection divided by the square root of two. All dry weight concentrations were converted to fresh weight using sample-specific water content. Summary data are presented in Excel Table S8.
Figure S11. Linear relationships between metals concentrations in soil and urban-grown produce.

Results for cadmium are not shown because fewer than 10% of produce samples had levels above the limit of detection (dry weight limit of detection = 0.375 ppm; see Excel Table S1).