

Mean total and total inorganic arsenic concentrations in foods from Schoof et al. (1999)

| Food   | Mean Total Arsenic <sup>a</sup> | Mean Total Inorganic Arsenic <sup>b</sup> | % Inorganic arsenic |
|--|---------------------------------|---|---------------------|
| <b>Meat and poultry</b>  |                                 |   |                     |
| Beef   | 51.5                            | 0.39 <i>J</i>                             | 0.8%                |
| Chicken  | 86.4                            | 0.89 <i>J</i>                             | 1.0%                |
| Pork   | 13.5                            | 0.67 <i>J</i>                             | 5.0%                |
| <b>Fish and shellfish</b>  |                                 |   |                     |
| Freshwater finfish   | 160                             | 1.0 <i>J</i>                              | 0.6%                |
| Saltwater finfish  | 2,356                           | 0.55 <i>J</i>                             | 0.0%                |
| Shrimp   | 1,890                           | 1.9 <i>J</i>                              | 0.1%                |
| Tuna   | 512                             | 1.0 <i>U</i>                              | 0.2%                |
| <b>Dairy products</b>  |                                 |   |                     |
| Milk (both whole and skim milk were analyzed; results combined and applied to all milk products) | 2.2                             | 1.0 <i>U</i>                              | 45.5%               |
| <b>Eggs</b>  | 20                              | 0.98 <i>J</i>                             | 4.9%                |
| <b>Legumes, nuts, and seeds</b>  |                                 |   |                     |
| Peanut butter (applied to legumes, nuts and seeds)   | 43.7                            | 4.7                                       | 10.8%               |
| <b>Grain and grain products (excluding rice)</b>   |                                 |   |                     |
| Corn (meal)  | 38.6                            | 4.4                                       | 11.4%               |
| Flour  | 39.2                            | 10.9                                      | 27.8%               |
| <b>Rice and rice products</b>  | 303                             | 73.7                                      | 24.3%               |
| <b>Fruits and fruit juices</b>   |                                 |   |                     |
| Orange   | 1.6                             | 2.5                                       | 156.3%              |
| Orange juice   | 4.8                             | 1.0 <i>U</i>                              | 20.8%               |
| Apple, raw   | 4.8                             | 1.8 <i>J</i>                              | 37.5%               |
| Apple, juice   | 7.6                             | 2.8                                       | 36.8%               |
| Grape juice <sup>c</sup>   | 14.1                            | 9.3                                       | 66.0%               |
| Banana   | 2.3                             | 0.65 <i>J</i>                             | 28.3%               |
| Grape  | 10.2                            | 3.7                                       | 36.3%               |
| Peach  | 3.4                             | 2.3                                       | 67.6%               |
| Watermelon <sup>c</sup>  | 6.7                             | 2.1                                       | 31.3%               |
| <b>Potatoes</b>  | 2.8                             | 0.82 <i>J</i>                             | 29.3%               |
| <b>Vegetables and vegetable products (excluding potatoes)</b>                                    |                                 |   |                     |
| Tomato   | 9.9                             | 0.92 <i>J</i>                             | 9.3%                |
| Green bean   | 2.1                             | 1.2 <i>J</i>                              | 57.1%               |
| Lettuce  | 1.4                             | 1.5 <i>J</i>                              | 107.1%              |
| Pea  | 4.3                             | 4.5                                       | 104.7%              |
| Spinach  | 5.1                             | 6.1                                       | 119.6%              |
| Carrot   | 7.3                             | 3.91                                      | 53.6%               |

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|-----------------------------------|---------------------------------|---|---------------------|
| Corn (kernel)                     | 1.6                             | 1.1 <i>J</i>                              | 68.8%               |
| Cucumber                          | 9.6                             | 4.12                                      | 42.9%               |
| Onion                             | 9.6                             | 3.3                                       | 34.4%               |
| <b>Condiments, fats, and oils</b> |                                 |   |                     |
| Butter                            | 1.8                             | 1.17 <i>J</i>                             | 65.0%               |
| Soybean oil                       | 1.5                             | 0.81 <i>J</i>                             | 54.0%               |
| Salt                              | 4.8                             | 0.84 <i>J</i>                             | 17.5%               |
| <b>Sugars and adjuncts</b>        |                                 |   |                     |
| Beet sugar                        | 12.2                            | 3.5                                       | 28.7%               |
| Cane sugar                        | 23.8                            | 4.44                                      | 18.7%               |
| Corn syrup                        | 6                               | 0.44 <i>J</i>                             | 7.3%                |

<sup>a</sup> Data analyzed by Battelle Marine Sciences Laboratory, 1529 W. Sequim Bay Rd., Sequim, WA 98382-9099. Concentrations in ng/g in wet weight. Each food type represents an average concentration of four samples, with one of the four samples in each food category analyzed in triplicate (Schoof et al. 1999).

<sup>b</sup> Where no arsenic was detected (after blank-correcting), one-half the value of the method detection limit was given with a “*U*” designation. When the concentration of arsenic in food (after blank-correcting) was detected above the blank concentration but below the method detection limit, the value was given a “*J*” designation. Undetected samples have been included at one-half of the detection limits. All averaged values were computed as follows:

- If one or more, but not all, values to be averaged were non-detected, 50% of the detection limit(s) was used in calculating the average concentration
- Mean values have a “*U*” or a “*J*” qualifier if all values used to calculate the mean were “*U*” or “*J*” qualified, respectively.

<sup>c</sup> Values corrected from original reported in Schoof et al. (1999). Corrections have negligible impact on findings of Schoof et al. (1999) estimate.

**Source:** Schoof RA, Yost LJ, Eickhoff J, et al. 1999. A market basket survey of inorganic arsenic in food. Food Chem Toxicol 37(8):839-46