

Table 2.9-36 Parameters Used to Estimate Wet-weight Vegetable Concentrations from Dry-weight Soil Concentrations.

| Parameter | Parameter Description | Plant Type | Radionuclide | Value | Concentration Factor ⁴ (C _{svhi}) | Average Vegetable Concentration - Seven Gardens ⁵ | | |
|-----------------|--|------------------|---------------------------|----------------------|---|---|-------|--------------|
| ML _v | Mass Loading factor | Root Vegetables | Not Radionuclide Specific | 0.1 ¹ | | | | |
| | | Leafy Vegetables | | | | | | |
| | | Fruits | | | | | | |
| B _{jv} | Concentration Factor for Root Uptake | Root Vegetables | Natural Uranium | 0.014 ² | 22.8 | 13.35 | | |
| | | | Thorium-230 | 0.00012 ² | 20.24 | 6.01 | | |
| | | | Radium-226 | 0.0032 ² | 20.64 | 13.85 | | |
| | | Leafy Vegetables | Lead-210 | 0.0032 ² | 20.64 | 26.24 | | |
| | | | Polonium-210 | 0.009 ² | 21.8 | Not detected | | |
| | | | Natural Uranium | 0.017 ² | 29.5 | 17.13 | | |
| | | Fruits | | | Thorium-230 | 0.0025 ² | 25.63 | 7.69 |
| | | | | | Radium-226 | 0.075 ² | 43.75 | 22.06 |
| | | | | | Lead-210 | 0.0058 ² | 26.54 | 38.74 |
| | | | | | Polonium-210 | 0.0025 ² | 25.63 | Not detected |
| | | | | | Natural Uranium | 0.004 ² | 18.72 | 11.87 |
| | | | | | Thorium-230 | 0.00085 ² | 18.02 | 5.4 |
| W _v | Dry weight to Wet Weight Conversion Factor | Root Vegetables | Radium-226 | 0.0061 ² | 19.1 | 12.82 | | |
| | | | Lead-210 | 0.009 ² | 19.62 | 24.95 | | |
| | | | Polonium-210 | 0.0004 ² | 18.07 | Not detected | | |
| | | Leafy Vegetables | Not Radionuclide Specific | 0.2 ³ | | | | |
| | | | | 0.25 ³ | | | | |
| | | | | 0.18 ³ | | | | |

¹ pCi/kg dry-weight plant per pCi/g dry-weight soil

² pCi/kg dry-weight plant per pCi/g dry-weight soil

³ Dry weight to wet-weight conversion factor, unitless

⁴ pCi/kg wet-weight plant per pCi/g dry-weight soil

⁵ pCi/kg wet-weight plant

ML_v = plant soil mass-loading factor for re-suspension of soil to plant v (pCi/kg dry-weight plant per pCi/g dry-weight soil)

B_{jv} = concentration factor for uptake of radionuclide j from the soil in plant v (pCi/kg dry-weight plant per pCi/g dry-weight soil)

W_v = dry to wet-weight conversion factor (unitless)