Recommended Practices for Safe Consumption of Homegrown Vegetables: Ways to Reduce Dietary Arsenic and Lead Ingestion

Wash your hands.

After gardening, and before vegetable washing.

Once inside your home, wash your vegetables again using a scrub brush to remove remaining soil particles.

Look at the shape of your vegetables - some can trap soil particles. For example, soil particles can get trapped in between the flower heads on broccoli, and leafy vegetables have large surface areas where soil can collect.

Mix it up!

Eat vegetables from your garden, the grocery store and farmer's market. Eating a mixture of homegrown and store bought can help reduce your potential exposure. Wash your vegetables before you bring them into the house.

This act can reduce the amount of arsenic and lead on your vegetables, and what is transported into your home.



Pare and/or peel root and tuber crops like carrots, radishes, and potatoes. Make sure you throw the parings and peelings away.

Do not compost unused plant parts, peelings or parings for use in the garden.

This act will reduce the recycling of arsenic and lead in your compost.

Arsenic and lead occur naturally in soils. Concentrations of arsenic and lead in soils may be 10 to 100 times greater than concentrations in the vegetables you grown in that soil. Because of this, it is crucial to remove soil particles that stick to your garden crops.

Above are important recommended practices.

References

Ramírez-Andreotta, M.D., Artiola, J.F. *Gardenroots* Instructional Manual. 2011. Available at: http://garden-roots.org/how

The University of Arizona, Cooperative Extension. 2008. Extension Bulletin 1435: Ten Steps to a Successful Vegetable Garden. Available at: http://cals.arizona.edu/maricopa/garden/pubs.htm#Vegetable

The University of Arizona, Cooperative Extension. 2009. Extension Bulletin 1020: Fertilizing Home Gardens in Arizona. Available at: http://cals.arizona.edu/maricopa/garden/pubs.htm#soil

The University of Arizona, Cooperative Extension. 2007. Yavapai Extension Bulletin #1: A Guide for Making Recommendations for Garden Soils. Available at: http://extension.arizona.edu/yavapai/yavapai-county-horticulture-bulletins

The University of Arizona, Cooperative Extension. 2006. Extension Bulletin 1415: Recognizing and Treating Iron Deficiency in the Home Yard. Available at: http://cals.arizona.edu/maricopa/garden/pubs.htm#soil

U.S. Environmental Protection Agency, Region 9. February 2010. Fact Sheet: Safe Gardening, Safe Play, and a Safe Home. Available at: http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/ViewByEPAID/az0000309013?OpenDocument

University of California - Davis, Cooperative Extension. 2004. Publication 8121: Safe Handling of Fruits and Vegetables. Available at: homeorchard.ucdavis.edu/8121.pdf

Washington State University, Cooperative Extension. 1999. Extension Bulletin 1884: Gardening on Lead- and Arsenic-Contaminated Soils. Available at: https://pubs.wsu.edu/ItemDetail.aspx?ProductID=13859&SeriesCode=&CategoryID=&Keyword= arsenic



All contents and materials were generated under the project Gardenroots by Monica Ramirez-Andreotta, Department of Soil, Water and Environmental Science © 2012 Arizona Board of Regents on behalf of the University of Arizona.