

Lead Prevention THE UNIVERSITY of TENNESSEE Extension and Healthy Housing Newsletter

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... How Does *Your* Garden Grow?

Do you remember this nursery rhyme?

"Mary, Mary, quite contrary,

How does your garden grow?

With silver bells and cockle shells

And pretty maids all in a row."



FUN FACT:

Silver bells are actually flowers on the Snowdrop tree (scientific name: *Halesia Carolina*).



The fact is that how and where you plant your garden is particularly significant if the plants from that soil will be consumed. Fruits and vegetables grown in lead-contaminated soil can produce unsafe edibles, so raised gardens are always recommended when the soil may be suspect.

Many gardeners are still haunted by lead residue on their property. Lead particulate may settle in the soil in any number of ways. Older homes (pre 1978) that featured lead-based exterior paint may be responsible for lead in the soil; properties, both rural and urban, located along frequently traveled roads are likely to suffer from contamination, and orchard pesticides, once a mixture of lead and arsenic, poisoned soil through the mid twentieth century. In the process of plowing and tilling and bad luck, any one or combination of those causes can spell trouble for consumables.



Per the USDA
Economic
Research
Service . . .

The top five
most commonly
consumed fruits
and vegetables
in the USA:

VEGETABLES:

- *Tomatoes
- *Potatoes
- Sweet Corn
- Onions
- Head Lettuce

FRUITS:

- Bananas
- Apples
- Watermelon
- Grapes
- Strawberries

*Yes, tomato
sauce and french
fries are part
of the reason
for their popularity.



Within a given plant, the root will harbor the highest concentrations of lead, followed by the leaves and stems, with seeds and fruits exhibiting the lowest concentrations. Roots often retain lead, which limits its travel to other parts of a plant. So it is that fruits pose the lowest risk of contamination, while root vegetables, such as potatoes, carrots, and turnips carry the greatest risk.

The *New York Post*, in its May 4, 2014 issue, covered a story about lead contaminated soil in Brooklyn community gardens. Fully 70 percent of the gardens tested showed evidence of toxins in the soil. The most disconcerting numbers were from a garden that has been growing—and giving away—greens and cabbage for more than a decade.



Whether the garden setting is urban or rural, two cautionary guidelines apply:

- 1) Any garden that is within **20 feet** of a building that may have been painted with lead-based paint is likely to have contaminated soil.
- 2) If the garden is within **100 feet** of a roadway or parking lot, lead contamination should be suspected.

Excerpted from:
In Summer
by Paul
Laurence Dunbar

And now for the kiss of
the wind,
And the touch of
the air's soft hands,
With the rest from
strife and the heat of life,
With the freedom of
lakes and lands.

I envy the farmer's boy
Who sings as he follows
the plow;
While the shining green
of the young blades lean
To the breezes that
cool his brow.

He sings of the dewy
morn,
No thought of another's
ear;
But the song he sings is
a chant for kings
And the whole wide world
to hear.



**HAPPY
Summer 2014!**

Most gardens produce well in raised beds, which also offer enhanced drainage capacity and longer growing seasons.

Are you familiar with the Household Products Database?



A healthy home is one that consciously avoids chemicals and volatile organic compounds (VOCs) to the extent possible. While American consumers have made huge progress in reading nutrition labels, the percentage of those who read labels on household cleaners and other products is significantly less. And, often, those multisyllabic names on the label really don't have much meaning to someone who is striving for clean ceramic tiles on his or her kitchen floor.

Thanks to the U.S. Department of Health and Human Services, ingredients and health effects on an enormous array of products is as close as a computer or smart phone.

The Household Products Database, located online at <http://householdproducts.nlm.nih.gov/>, features important information on more than 12,000 frequently-used products, all in a font that is big enough for even the Baby Boomers to read!

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