

Produce Safety After a Chemical Fire

*Summarized from "Produce Safety After A Fire" & "Guide To Washing Fresh Produce"
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Short Summary

After a chemical fire, produce grown outdoors may be exposed to contaminants from smoke and ash. The main risks are heavy metals, hydrocarbons, and other chemicals that settle on soil and plants. Washing produce thoroughly under running water, peeling or trimming when possible, and removing outer leaves can lower risks. Home and community gardens may need soil testing to check for contamination. Protect yourself while gardening by wearing masks, washing hands and clothes, and keeping dust out of the home. No method guarantees complete removal of contaminants, but careful handling, washing, and soil management can reduce exposure.

Key Tips

- Wash hands & tools: Always wash your hands, surfaces, and utensils before handling produce.
- Rinse produce: Use cool running water; scrub firm produce with a clean brush.
- No soaps or bleach: Do not use detergents or chemical washes, as produce can absorb them.
- Extra cleaning: For leafy greens, remove outer leaves and soak in water (a 10% vinegar solution can help).
- Trim & peel: Peel root crops and discard damaged or outer parts of vegetables like lettuce or cabbage.
- Garden soil testing: After fires, food-growing gardens should test soil for heavy metals or other contaminants to know long-term safety.
- Safer gardening practices: Use raised beds, mulch, drip irrigation, and compost to reduce soil splash and dilute contaminants.
- Storage: Store washed produce safely in the refrigerator, not at room temperature for more than 2 hours.

FAQ

Q: Is it safe to eat produce after a fire?

A: It depends. Produce may have harmful chemicals on the surface. Washing, peeling, and trimming can reduce—but not eliminate—risks.

Q: How should I wash fruits and vegetables?

A: Rinse under running water, scrub firm produce, and soak leafy greens in clean water. A vinegar solution (10%) can help remove particles from leafy or fuzzy produce.

Q: Can I use soap or bleach to clean produce?

A: No. Produce is porous and can absorb these chemicals, making it unsafe.

Q: Should I test soil after a nearby fire?

A: Yes—gardens where food is grown should be tested for heavy metals and other contaminants, especially if fires were close to industrial or residential areas.

Q: What if I can't test my garden soil right away?

A: Use raised beds with clean soil, add compost to dilute contaminants, and always peel or wash produce thoroughly.

Q: Is eating more produce still safe?

A: Eating a variety of washed produce remains important for nutrition and resilience, but take precautions after fire exposure.

Sources

Zander, A. & Bunning, M. Guide to Washing Fresh Produce. Colorado State University Extension (2010).

UC ANR. Produce Safety after a Fire (2025).