

» Post-Harvest Water

Post-harvest water can spread contamination. Post-harvest water is used for rinsing, washing, moving commodities such as in flumes, cooling, ice making, post-harvest fungicide and wax application, hand washing, and cleaning/sanitizing tools and equipment.



Post-harvest water management

- Water
 - » Must know initial quality and intended use
- Anti-microbial products, including sanitizers
 - » Adding a sanitizer to water is **not** intended to “wash” the produce, but instead to prevent cross-contamination.
 - » Anti-microbial products must be labeled for intended use, such as “water for contact with fruits and vegetables.”
 - » Many sanitizers are available, including those approved for organic use.

Water quality criteria for harvest and post-harvest activities

- Water must have **no** detectable generic *E. coli* per 100 milliliters (mL) of water per sample if the water is used for:
 - » Direct contact with covered produce during or after harvest.
 - » Direct contact with food contact surfaces.
 - » Making ice.
 - » Hand washing.
- Untreated surface water may not be used for any post-harvest activity.

Water quality testing requirements

- **Public water supply:** Copy of test results or current certificates of compliance; contact your public water supply provider for these documents
- **Untreated ground water:**
 - » Initial year: Take four samples during the growing season.
 - » Subsequent years: Take one sample during the growing season.

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Key water quality variable

- **Quality at start of use:** No detectable generic *E. coli* in 100 mL of sample

Suggested water quality variables to consider

- **pH:** Acidity level can affect sanitizer effectiveness. For example, the recommended pH range for a chlorine sanitizer solution is 6.5 to 7.5.
- **Temperature:** If warm produce is submerged in cold water, bacterial infiltration of produce can occur.
- **Turbidity:** Look at the water. If it appears dirty or cloudy, it's time to change it.

When to change water

- Post-harvest water must be managed, including changing water when necessary.
- Water changing schedules should consider:
 - » Organic load including soil, leaves, or decaying or damaged product.
 - » Turbidity measurements.
 - » Volume of produce.
 - » Type of produce.
 - » Product flow and operating conditions.
 - » Type of antimicrobial product.
 - » Type of equipment.

Keep records

Required

Water quality test results for generic *E. coli*

Recommended

Sanitizer solution concentration

pH

Temperature

Turbidity

Water changes



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