

Risky business? Conducting a risk assessment of postharvest operations using washing machines for leafy greens

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The Problem

- Post-Harvest: Washing machines for spinning greens is a very common practice
- No established research to inform growers on the development of specific best practices



Figure. Image of a field site of a postharvest processing that dries leafy greens. Image sourced from <u>https://tinyfarmblog.com/spin-cycle/</u>.

NECAFS NETWORK





The Northeast Center to Advance Food Safety

- 2019 NECAFS Steering Committee
 - Regulators
 - Extension agents
 - Producers and buyers
- Discussion
 - Challenges with sanitation design and management.
 - DIY converted washing machines

Project Objectives

- Objective 1: Identify, source and build converted washing machines for drying leafy greens using the "DIY" resources provided from industry that are applicable for small scale leafy green operations.
- Objective 2: Conduct a science-based risk hazard identification assessment that will investigate the harborage and sanitation risks of using DIY converted washing machines for drying leafy greens.
- Objective 3: Develop and design a mixed-media portfolio of extensionbased tools, which will focus on the principles of cleaning and sanitation, sanitation design and sanitation management.

Objective 1: Identify, source and build "DIY" washing machines

- Activity: Investigate available resources for DIY converted washing machines
- Activity: Source and build DIY washing machines converted greens spinners.

Objective 2: Conduct a science-based risk hazard identification assessment

- What is the overall contamination risk of using DIY converted washing machines for drying leafy greens?
- Can DIY converted washing machines for drying leafy greens be cleaned and sanitized to effectively manage microbial risk?



Objective 3: Develop and deploy extension-based tools

University of Massachusetts Amherst

Activity: Extension programming may include-

- Brief video tutorials
- Downloadable pdf Fact Sheets
- Face-to-face workshops/speaking events
- Real-time (and recorded) webinars

Current Status

- Objective 1: COMPLETE
 - UVM Extension Washing
 Machines Greens Spinner
 Workshop November 2019
 - Assembled 4 Units at UMASS
 - Purchase Industry leafy green dryer
- Objective 2: In-Process



Building Washing Machines Greens Spinner







Building Washing Machines Greens Spinner





Acknowledgments:

- MA Department of Agriculture, USDA Specialty Crop Block Grant
- University of Vermont Extension
- University of Massachusetts Agricultural Experiment Station
- Department of Food Science

