



HAWAI'I COMMERCIAL KITCHENS

Food Safety

A 1-day workshop on Food Safety, featuring Chef Jess Devendorf



funding by RFP 4573 County of Hawai'i State and Local Fiscal Recovery Funds Food Security and Agricultural Initiatives Program

Hawai'i Commercial Kitchens

- Funds for this program are from U.S. Department of the Treasury State and Local Fiscal Recovery Funds Program (**SLFRF**) authorized by the American Rescue Plan Act (**ARPA**).
- **The County of Hawai'i** is a recipient of SLFRF, and through RFP 4573 - Food Security & Agricultural Initiatives Program, Hawai'i County Dept of R&D offered \$5 million over 6 categories
- **GreenKine LLC** is subrecipient - Category 4: Certified Kitchens Cohort **Technical Assistance**
 - hawaiicommercialkitchens.com
 - Cat. 3 - Certified Kitchens Infrastructure



Hawai'i Commercial Kitchens

- **Commercial Kitchen Cohort**
 - Kohala Food Hub - HAWI
 - Hawai'i Ulu Cooperative - HILO
 - Touching the Earth Farm - HAWI
 - Liko Lehua - HILO & MT VIEW
 - Moho Kitchen - HAWAIIAN ACRES
 - Onomea Farm Hub - ONOMEA
 - KUA o Kanāueue - KONA



Hawai'i Commercial Kitchens

- Technical Assistance to **any food-related businesses in Hawai'i County that has been in operation since March of 2020.**
 - Additional Technical Assistance available to eligible participants!
 - **Business Coaching**, Anthony Florig
 - **Financial Planning**, Dr Brett Carey
 - **HACCP Plans**, John Nakashima
 - **Personnel Management**, Daeus Bencomo
 - **Marketing**, Katie Neil, Ho'ōla Farms
 - **Permitting**, Megan Brady, Uproot Origin
- **Future Monthly Workshops Open to the public!**



HCK – Food Safety

Anthony Florig, GreenKine LLC



HILO FOOD HUB
by HO'OLA FARMS



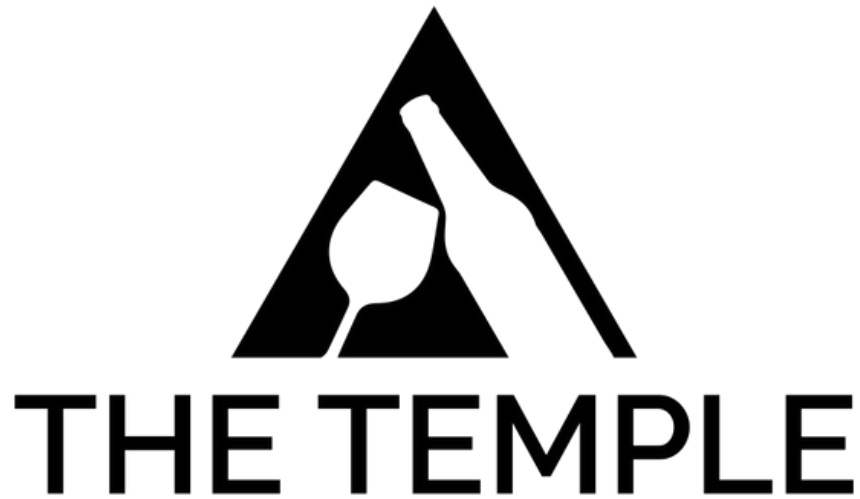
HCK – Food Safety

Ho'ōla Veteran Services



Chef Jess Devendorf

- Temple Bar & Restaurant
 - Hilo and now Kona locations



CRAFT BEER,
COCKTAIL
& WINE BAR

Est. 2019



Hilo, Hawaii



Agenda

- **Introductions**
- Food Safety Part 1
- F.A.T.T.O.M.
- Break
- Food Safety Part 2
- Critical Control Points
- Questions



Refreshments

- **ANYKINE WONTONS** - Hilo Food Hub
- **OK FARMS** - Coffee
- **ORIBE TEA** - Kona Mango Iced Tea
- **SWEET TREATS & GIFTS** - Mangosteen
- **PAP'A PALAOA BAKERY** - **Walnut** Chocolate Chip Cookies
- **TEMPLE BAR**

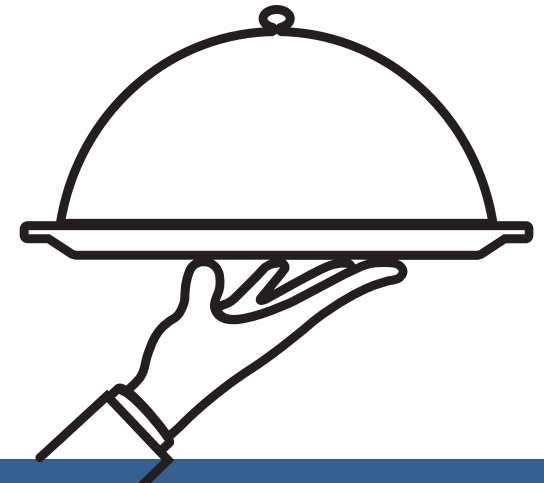


Introductions

- Name, Why are you here?
- Question or topic for the whiteboard?
- If you're eligible for Technical Assistance!
- **Hawaii Commercial Kitchens**
 - Commercial Kitchen Cohort
 - Eligible Food businesses - March 2020
- Ho`ōla Farms, Hilo Food Hub, Hawai'i Farm-to-Car?
 - Veteran, active duty or family?

What is Food Safety?

- Refers to the **handling, preparing, and storing** of food in a way that **prevents foodborne illnesses** and **ensures that food is safe** to consume.
 - Proper hygiene
 - Cooking temperatures
 - Cross-contamination prevention
 - Regulatory compliance



What is Food Safety?

- Food Safety is a general term, and there are various best practices and certifications that exist.
 - Food Handler's Certification
 - FSMA Food Safety (FDA)
 - GAP - Good Agriculture Practices



What is Food Safety?



Food Safety Basics

**Practical Tips and DIY Solutions
for Small Farms**



**Monday, March 31
5:30p - 7:00p via Zoom
FREE - Registration required
*Open to all, Statewide!**

In this webinar we'll share practical tips and some low-cost solutions that can help you improve food safety practices on your farm. Tips for organizing your equipment, testing your water and selecting proper materials in wash stations. Learn the best practices for sanitizing bins and tools, handling damaged produce, and managing animals on the farm.

Register at: www.gofarmhawaii.org



**FDA FOOD SAFETY
MODERNIZATION ACT**

- **Produce Safety Rule**
- **www.hifarmsafe.org**
- **exempt if your farm
sells less than \$25,000
in produce/yr**

What is Food Safety?

- The practice of handling food in ways to prevent food borne illness and avoid potentially severe health hazardous



- **Handling**
- **Preparation**
- **Storage**
- **Serving**

What is Food Safety?

4 STEPS TO FOOD SAFETY




CLEAN




SEPARATE



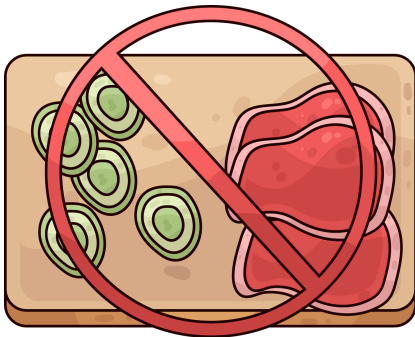

COOK




CHILL

Food Contamination

- **PHYSICAL**
- **CHEMICAL**
- **BIOLOGICAL**
- **CROSS-CONTAMINATION**



Physical Contamination

- **PHYSICAL**

- The presence of **foreign objects** in food
 - Glass
 - Metal
 - Plastic
 - Hair



Chemical Contamination

- **CHEMICAL**

- The presence of **harmful chemicals** in food
 - Cleaning products
 - Pesticides
 - Heavy Metals
 - Food additives used improperly

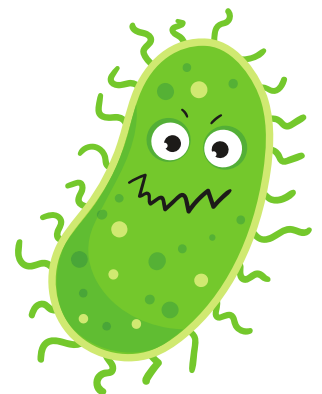
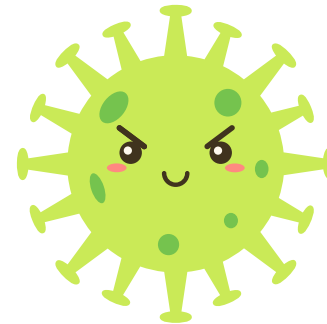
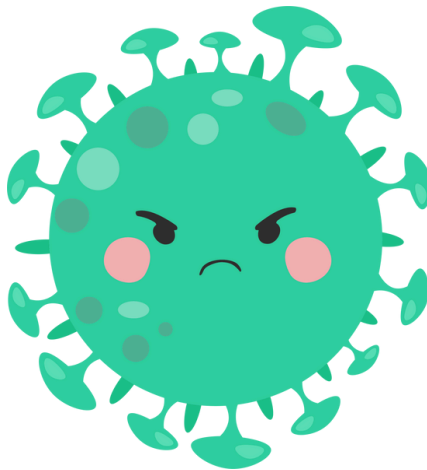


Biological Contamination

- **BIOLOGICAL**

- The presence of **microorganisms** in food

- Bacteria
 - Parasites
 - Virus
 - Fungi



Biological Contamination

- **BIOLOGICAL**

- Caused by human and animal contamination
 - Coughing and sneezing
 - Pests (roaches, flies)
 - Rodents (rats, mice)
 - Feclates



Cross – Contamination

- **CROSS-CONTAMINATION**

- Transfer of contaminants from one surface, food or person to another.
 - **Biological** (raw meat juices dripping onto ready-to-eat foods)
 - **Chemical** (cleaning agent spliled into soup)
 - **Allergenic** (peanuts, gluten, etc)

Foodborne Illnesses

- Name your favorite!



Foodborne Illnesses

- **NOROVIRUS**
- **SALMONELLA**
- **HEPATITUS A**
- **BOTULISM**
- **CIGUTUERA**
- **RATLUNG WORM**



Hawai'i Food Code

- **Hawai'i Food Code (HAR 11-50)**

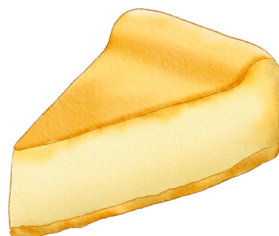
F.A.T.T.O.M.

- **F** - Food
- **A** - Acidity
- **T** - Time
- **T** - Temperature
- **O** - Oxygen
- **M** - Moisture



F.A.T.T.O.M.

- **F - Food**
- Bacteria need nutrients, especially proteins and carbohydrates, to grow. ***Foods like meat, dairy, and cooked grains are high-risk.***



F.A.T.T.O.M.

- **A - Acidity**
- Bacteria thrive in neutral to slightly acidic environments (**pH 4.6–7.5**).
- Highly acidic foods (***like vinegar and citrus***) inhibit bacterial growth.



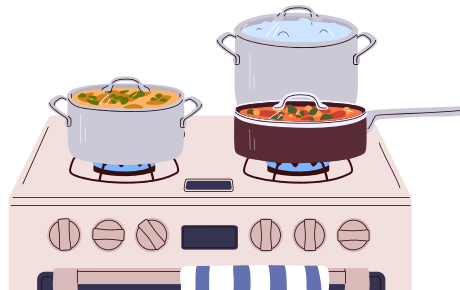
F.A.T.T.O.M.

- **T - Time**
 - Bacteria multiply rapidly when food is left in the **Temperature Danger Zone (TDZ) (41°F–135°F)** for *more than 4 hours*.



F.A.T.T.O.M.

- **T - Temperature**
- Bacteria grow best between 41°F–135°F. Keeping food cold (**below 41°F**) or hot (**above 135°F**) slows or stops bacterial growth.



F.A.T.T.O.M.

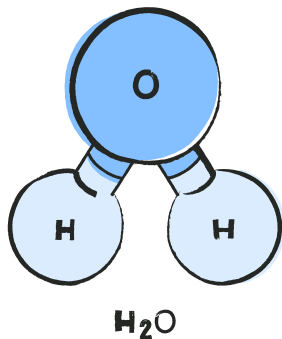
- **O - Oxygen**

- Some bacteria require oxygen to grow (aerobic), while others thrive in oxygen-free environments (anaerobic), such as in vacuum-sealed foods.



F.A.T.T.O.M.

- **M** - Moisture
- Bacteria need water to grow. Foods with high water activity (**Aw above 0.85**), like fresh meat and dairy, are more prone to spoilage.



- All methods of food preservation are intended to ***create food environments void of bacterial reproduction***



HCK – Food Safety

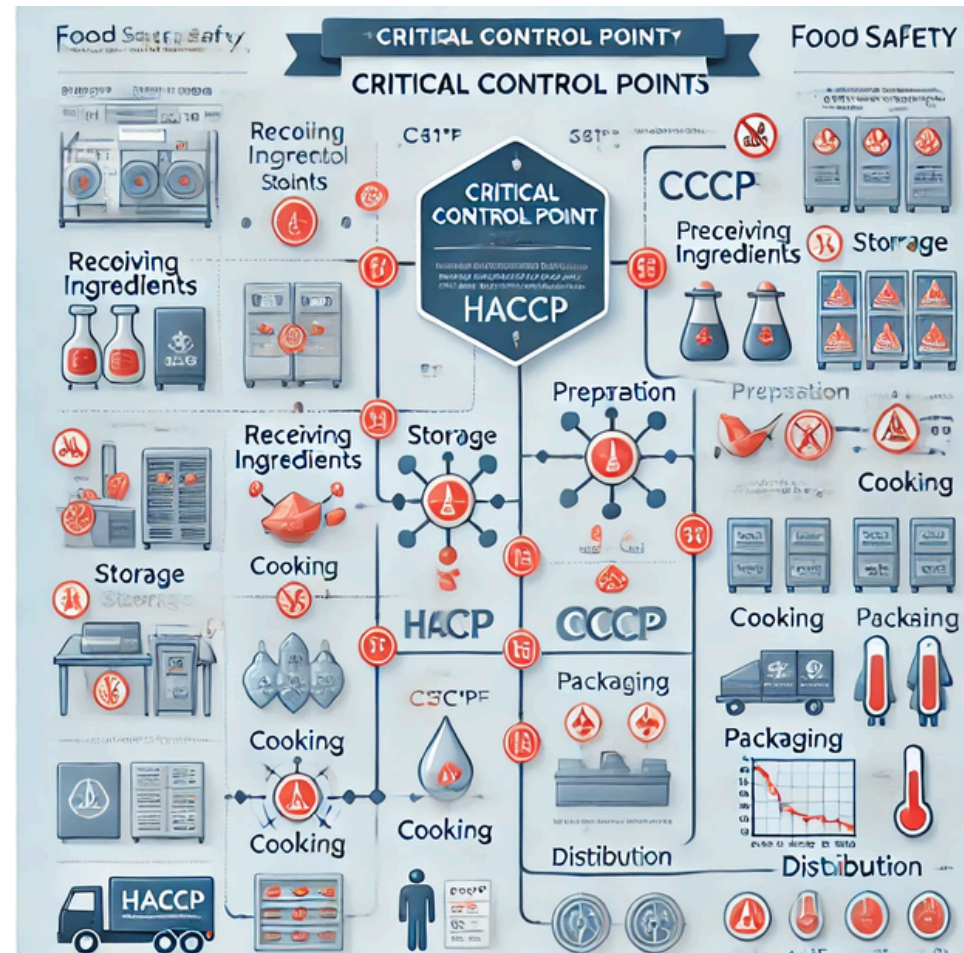
Questions?

Critical Control Points

- specific step in food production or handling where a ***control measure can be applied to prevent, eliminate, or reduce a food safety hazard to an acceptable level.***
- CCPs are essential in Hazard Analysis and Critical Control Points (HACCP) systems to ensure food safety.

Critical Control Points

- Purchasing
- Receiving
- Storing
- Cooking
- Serving/Holding
- Cooling
- Reheating



Critical Control Points

- **Purchasing**

- Evaluate suppliers
- Employees trained/certified
- Clean facilities
- Transportation/delivery
- Expiration & shelf-life



Critical Control Points

- **Receiving**

- Delivery inspection
- Mold/dirt/pests
- Swollen, damaged or rusty
- Temperature
- Time & Space to Receive
- Date and Time



Critical Control Points

- **Storing**
 - DRY STORAGE
 - not on the floor
 - ventilation
 - room temp/humidity (70-78F)
 - pest control
 - inventory mgmt (FIFO)



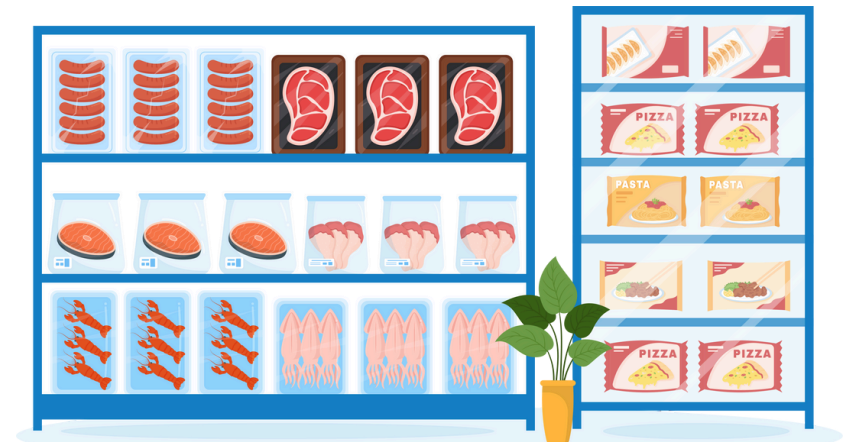
Critical Control Points

- **Storing**
 - COLD STORAGE
 - temp (35-41F)
 - air flow
 - dated items (7 days)
 - properly sealed
 - Storage Order (RTE vs Raw)



Critical Control Points

- **Storing**
 - FROZEN STORAGE
 - temp (0 - -6F)
 - air flow
 - moisture proof



Critical Control Points

- **Cooking**
 - Hand-washing
 - Equipment is clean & sanitized
 - Size/thickness of food
 - Monitoring equipment
 - Thawing & Marinating

Critical Control Points

- **Cooking**

- CROSS-CONTAMINATION

- Color-coded cutting boards
 - Hands, equipment & utensils
 - Illness, exposed wounds
 - Inspect food for any foreign objects!



Critical Control Points

- **Serving**
 - Proper training
 - Hygeine
 - Clean utensils & equipment
 - Cover cuts/burns
 - Gloves, sneeze guards & hairnets

Critical Control Points

- **Holding**

- Hot Hold at 140F or above
- Cold Hold at 40F or below
- Monitor regularly
- Dispose food that fall outside temp
- Never add fresh on top

Critical Control Points

- **Cooling**

- This is surprisingly a leading cause of food illness!
- Ensure RAPID Cooling
- Maximize surface area
- Shallow pans, ice, stirring



Critical Control Points

























- **Reheating**

- Proper heat in proper time
- Avoid TDZ!
- Bring temp to 140F within 2hr of removal from refrigeration
- Reheat only once
- Don't mix fresh w/ old
- Discard leftovers



Food Handler Certification

- Hawai'i Dept of Health

<div><div>Sold Out</div><div><div>HAWAII STATE DEPARTMENT OF HEALTH</div></div><div><div></div><div>(ONLINE) State of Hawaii, Dept. of Health Food Handler...</div><div>Today • 9:00 AM HST</div><div>Free</div></div></div>	<div><div>Sold Out</div><div><div>HAWAII STATE DEPARTMENT OF HEALTH</div></div><div><div></div><div>(ONLINE) State of Hawaii, Dept. of Health Food Handler...</div><div>Friday • 9:00 AM HST</div><div>Free</div></div></div>	<div><div>Sold Out</div><div><div>HAWAII STATE DEPARTMENT OF HEALTH</div></div><div><div></div><div>(ONLINE) State of Hawaii, Dept. of Health Food Handler...</div><div>Tue, Mar 25 • 9:00 AM HST</div><div>Free</div></div></div>	<div><div>Sold Out</div><div><div>HAWAII STATE DEPARTMENT OF HEALTH</div></div><div><div></div><div>(ONLINE) State of Hawaii, Dept. of Health Food Handler...</div><div>Fri, Mar 28 • 9:00 AM HST</div><div>Free</div></div></div>
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- <https://health.hawaii.gov/san/food-safety-education/>



and



HAWAI'I FARM-TO-CAR
by HO'OLA FARMS

present: ***Technical Assistance Workshop Series***

Supply Chain Workshop

featuring ***Catarina Zaragoza***
with ***The Locavore Store***



- **WHEN: Thursday, April 17th - 1:00-4:00pm**
- **WHERE: Hilo, Hawai'i Island**
 - **ZOOM** virtual attendance available



www.hawaiicommercialkitchens.com

HCK – Permitting & Compliance

Questions!

- Zoom Recording of this presentation will be edited and made available at **hawaiicommercialkitchens.com**