

USING TIME AS A PUBLIC HEALTH CONTROL

Keep it cold, keep it hot, or don't keep it too long!

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Objectives

- Recognize TCS foods
- Learn the Food Code Requirements for TPHC procedures
- Recognize acceptable TPHC marking procedures
- Determine how TPHC and HACCP complement

Factors Affecting Pathogen Growth

Water Activity	Time	Atmosphere
pH	Temperature	Nutrients
		Inhibitors
		Previous Stress
		Microbial Interaction

Time/temperature Controlled for Safety (TCS) Food

A food that requires time or temperature control for safety to limit pathogenic microorganism growth or toxin formation

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TCS foods

- Animal foods
- Heat-treated plant food
- Raw seed sprouts
- Cut melons
- Garlic-in-oil mixtures that have not been modified to prevent growth

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TCS foods

- Cut tomatoes or cut tomato mixtures
- Cut leafy greens
- A food that because of its pH and Aw values is designated as Product Assessment Required (PA) in Interaction Tables A or B of the Food Code

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Non-TCS foods

- Air-cooled, hard-boiled egg with intact shell
- Pasteurized egg with intact shell
- A food that does not support the growth and toxin formation of pathogens but may otherwise be contaminated and capable of causing illness

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Non-TCS foods

- A food that because of its pH and A_w values is designated as non-PHF/non-TCS food in Interaction Tables A and B
- A food designated as Product Assessment Required (PA) with subsequent PA proving that the food does not support the growth and toxin production of pathogens

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Holding TCS Foods

Use temperature

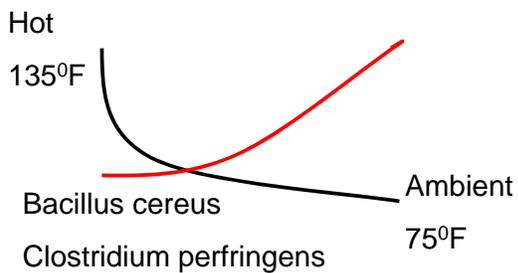


OR

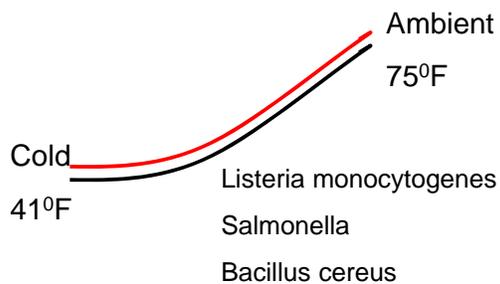
Use time



Holding Hot TCS Foods



Holding Cold TCS Foods



Holding TCS Foods using Time

Food Code section 3-501.19 describes requirements

Up to 4 hours, irreversible and uninterrupted

Cold foods up to 6 hours under specific circumstances

Holding TCS Foods using Time

No prior approval required

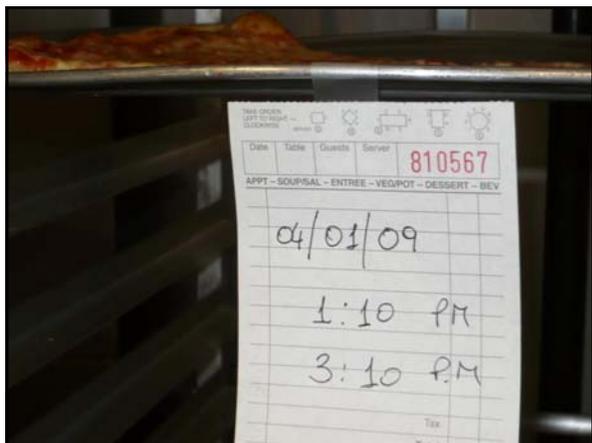
Foods must be marked to indicate time

Must have written procedures available upon request

Procedures must be followed exactly

All foods discarded at end of time period

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How does TPHC fit into HACCP?

- Menus and Recipes
- Safe Food Handling

Template Provided in HACCP Section: Menus and Recipes

- Name of food product/recipe
- How the food will be prepared, served, and discarded
- Time Control Procedure
- Holding information

Sample Template HACCP Section: Safe Food Handling

Food or Menu Item:	Beef, Turkey and Cheese Subs
Size of Batch/Quantity to prepare:	As ordered (max 100)
Ingredients:	Meat, Cheese, Turkey, Ham, Deli Turkey, Lean American Cheese
Procedures for preparation, service, and discard:	<ol style="list-style-type: none"> 1. Deli Turkey and cheese are held in a walk-in cooler at a maximum temperature of 40 degrees Fahrenheit. HACCP procedures for hot and cold holding are followed and checked at least every 15 minutes. Hot and cold holding are maintained at or below the maximum temperature. 2. Turkey and Cheese is removed from refrigerator and prepared in subs. 3. Sandwiches are assembled and each sandwich is held in a cooler at 40 degrees Fahrenheit or below. 4. During serving time, sandwiches are stored from the cooler in a hot holding cabinet or removed from the cooler and served immediately. 5. Sandwiches prepared with cold meats are served and discarded.
Time Control	<input type="checkbox"/> Cooking Completion - Time begins at the completion of the cooking process. i.e. cooked pizza removed from the oven. <input type="checkbox"/> Removal from hot or cold holding - Time begins when the food is removed from temperature control. i.e. meats or vegetables are removed from hot holding unit, sub sandwiches or meats are removed from refrigeration. <input checked="" type="checkbox"/> Assembly from Room Temperature Ingredients - Time begins when preparing from room temperature ingredients. i.e. tuna salad, cut meats.
Holding Time	Maximum holding time for food is 4 hours.
Specify food location during holding:	Hot or cold holding unit, walk-in cooler, walk-in freezer and hot line.
Describe labeling method:	All hot lines are marked as such and removed to discard the next 2 hours of service (max 4 hours).
Labeling Method includes:	<input type="checkbox"/> when time control begins <input checked="" type="checkbox"/> discard time
Disposal Method:	Discard in a cooler until discarded in the garbage disposal.

Food or Menu Item:	Deli Turkey and Cheese Subs
Size of Batch/Quantity to prepare:	Up to 25 sandwiches in a pan
Ingredients:	Whole grain-rich sub buns, sliced deli turkey, sliced American Cheese.

Procedures for preparation, service, and discard:	1. Deli turkey and cheese are held in a walk-in cooler at a product temperature below 41 degrees per our HACCP procedures. Sub buns are held in the freezer and thawed at room temperature no more than 1 day in advance of sandwich preparation.
	2. Turkey and Cheese is removed from refrigeration at the proper temperature.
	3. Sandwiches are assembled and each pan is marked with a discard time 2 hours from the time assembly begins.
	4. During serving time, sandwiches are served from the pan within 2 hours from the time they were assembled.
	5. Sandwiches not used within two hour time period are discarded.

Time Control Time control begins at the completion of the cooking process when the food is removed from hot holding or cold holding, or the start of assembly when using room temperature ingredients. Check the appropriate box that represents the beginning of time control.	<input type="checkbox"/> Cooking Completion - time begins at the completion of the cooking process: i.e. cooked pizza removed from the oven.
	<input type="checkbox"/> Removal from hot or cold holding - time begins when the food is removed from temperature control: i.e. meats or vegetables are removed from hot holding unit, sub sandwiches or milks are removed from refrigeration.
	<input checked="" type="checkbox"/> Assembly from Room Temperature Ingredient(s) - time begins when preparing from room temperature ingredients: i.e. tuna salad, cut melons.

Holding Time	
Maximum holding time for food is 4 hours.	
Specify food location during holding:	On unrefrigerated serving/transporting equipment on serving lines and kiosks
Describe labeling method:	A label will be attached to each pan and denoting the discard time within 2 hours of sandwich assembly.
Labeling Method includes:	<input type="checkbox"/> when time control begins <input checked="" type="checkbox"/> discard time
Disposal Method:	Unused sandwiches will be discarded in the garbage disposal.

Similar TCS foods

- Can use same form or attach listing for like products
- Group by identical preparation, serving, and discarding procedures

A few more comments about food safety:

No food can be recovered and re-served once it passes the point of service (i.e. cashier) in a traditional cafeteria setting.

No food provided for service in an alternate or innovative service location can be recovered and re-served in the SN program once it leaves supervision of nutrition staff.

QUESTIONS?



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Department of Public Instruction
Safe and Healthy Schools Support Division
School Nutrition Services Section

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