

USING TIME AS A PUBLIC HEALTH CONTROL

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

Revised July 2014

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

4

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

5

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

6

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

7

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

8

Holding TCS Foods

Use temperature

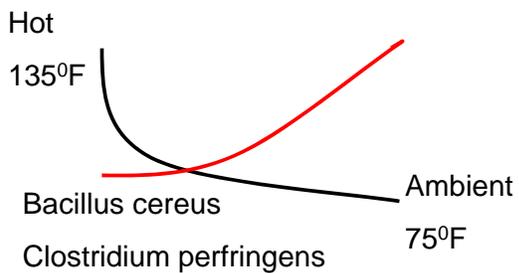


OR

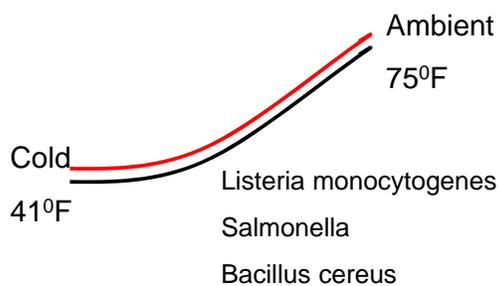
Use time



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

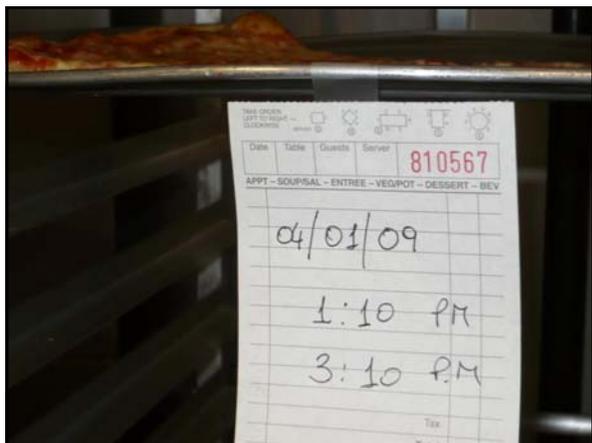
Foods must be marked to indicate time

Must have written procedures available upon request

Procedures must be followed exactly

All foods discarded at end of time period

13









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:	8 fl oz containers of milk
Size of Batch/Quantity to prepare:	Up to 50 cartons in each crate
Ingredients:	Pasteurized 1% and skim milk

Procedures for preparation, service, and discard:	<ol style="list-style-type: none"> 1. Containers of milk are kept in the hot/cold area product temperature in the HACCP procedure. 2. Milk is moved from refrigerator to place on cart for handling in the kitchen. 3. Each carton of milk is held with the correct time. 4. During serving time, milk is used from the cart within 2 hours from the time it is moved from cold holding. 5. Milk is used within two-hour time period and is discarded.
Time Control	<p><input type="checkbox"/> Cooling Completion - Time begins at the completion of the cooling process. i.e. cooked pizza removed from the oven.</p> <p><input checked="" 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, sandwiches or milk are removed from refrigeration.</p> <p><input type="checkbox"/> Assembly to a Room Temperature Ingredient(s) - Time begins when preparing from room temperature ingredients. i.e. tuna salad, oat meals.</p>
Holding Time	Maximum holding time for food is 4 hours.
Specify food location during holding:	On unstaffed serving line pointing cart into both hot/cold stations.
Describe labeling method:	Labeling tags will be attached to each crate and denote the discard time within 2 hours of removal from cold holding.
Labeling Method includes:	<input type="checkbox"/> when time control begins <input checked="" type="checkbox"/> discard time
Disposal Method:	Unused milk will be discarded in the trash can.

Food or Menu Item:	8 fl oz containers of milk
Size of Batch/Quantity to prepare:	Up to 50 cartons in each crate
Ingredients:	Pasteurized 1% and skim milk

Procedures for preparation, service, and discard:	1. Containers of milk are held in a walk-in cooler at a product temperature below 41 degrees per our HACCP procedures
	2. Milk is removed from refrigeration and placed on a cart for breakfast meal service in the classroom.
	3. Each crate of milk is marked with the discard time.
	4. During serving time, milk is served from the cart within 2 hours from the time it is removed from cold holding.
	5. Milks not used within two hour time period are 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.
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 checked="" 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 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 cart in school hallways and classrooms
Describe labeling method:	Masking tape will be attached to each crate and denoting the discard time within 2 hours of removal from cold holding.
Labeling Method includes:	<input type="checkbox"/> when time control begins <input checked="" type="checkbox"/> discard time
Disposal Method:	Unused milk will be discarded in the trash can.

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?



susan.thompson@dpi.nc.gov

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

USDA Non-Discrimination Statement

"The United States Department of Agriculture (USDA) prohibits discrimination against its customers, employees, and applicants for employment on the basis of race, color, national origin, age, disability, sex, gender identity, religion, reprisal, and where applicable, political beliefs, marital status, familial or parental status, sexual orientation, or if all or part of an individual's income is derived from any public assistance program, or protected genetic information in employment or in any program or activity conducted or funded by the Department. (Not all prohibited basis will apply to all programs and/or employment activities).

Under the Federal School Nutrition Program and USDA policy, discrimination is prohibited under the basis of race, color, national origin, sex, age or disability.

If you wish to file a Civil Rights complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at http://www.ascr.usda.gov/complaint_filing_cust.html, or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, DC 20250-9410, by fax (202) 690-7442 or email at program.intake@usda.gov. Individuals who are deaf, hard of hearing or have speech disabilities may contact USDA through the Federal Relay Service at (800) 877-8339; or (800) 845-6136 (Spanish). USDA is an equal opportunity provider and employer."
