Nutrition and Aging Resource Center

# Conducting Meal Test Trays Congregate and Home-Delivered Meals

## Checking Quality and Food Temperatures

Congregate and home-delivered meal programs should ensure meals are prepared, held, served, and delivered at appropriate temperatures and that food quality is maintained throughout. Checking food temperatures is critical to ensure meals are safe and wholesome for program participants. Nutrition site staff, drivers, and volunteers should document food and beverage temperatures daily, prior to serving or delivery, so that appropriate temperatures are maintained and can be corrected if needed.

To verify the quality and food temperatures reaching participants, designated personnel can conduct a test tray. A test tray is a sample meal that is evaluated at the beginning and end of the service or delivery process to assess its quality, safety, and compliance.

This kind of periodic audit to verify that meals are safe and taste good is separate from the daily temperature checks that should happen at every meal. Conducting a test tray should follow state unit on aging (SUA), area agency on aging (AAA), and local service provider policies and food safety guidelines. Some programs choose to conduct test trays quarterly. Programs should attempt to test different types of food each time (for example, fish one quarter, chicken the next quarter, casserole or soup another quarter) and different mealtimes if more than one meal is served each day. For programs operating multiple sites or routes, test trays should be conducted at each site or route on a rotating basis, so that every site and route is tested within a set period, rather than testing only one representative site or route each time.

If participants express concern about food being cold, not tasting right, or otherwise having quality issues, additional testing should be completed more frequently.

## Quality Changes During Service

Some drop in temperature and quality between the start and end of service or a route is expected, since food is no longer being actively heated once it leaves the warmer or steam table. This alone is not a problem. Staff should flag a concern when the end-of-service or route temperature falls outside the safe ranges below, or when appearance, smell, or taste has declined noticeably more than what is typical for that meal.

## Recommended Meal Temperatures

Refer to your state's food code for temperature guidelines.

- Hot food must be kept and served at 135°F or above, or it should not be served.
- Cold food must be kept and served at 41°F or below. Follow established food safety procedures if the temperature is above 41°F.
- Frozen food (home-delivered meals only) must be kept and delivered at 32°F or below, or it should not be left with the participant.
- Food should not be in the "danger zone" (between 41°F and 135°F) for more than four hours total, from the time it is prepared until the time it is eaten.
- Acceptable temperature ranges are based on how an item is served, not on the type of food. A salad or dessert served warm should meet the hot food standard, and any item served cold or chilled, including entrées, should meet the cold food standard. Confirm how each menu item is meant to be served before testing it.

## General Procedures

Regardless of the service model (congregate, home-delivered, grab-and-go, or food truck), the test tray should reflect the same holding time and conditions experienced by the last participant served. Sites should adapt the steps below to fit their specific service model while preserving this core principle.

- Designated staff notify the relevant team (kitchen and serving staff for congregate sites, drivers for home-delivered routes) that a test tray will be conducted that day.
- Before service or the route begins, staff take the initial temperature of each hot and cold menu item and record it on the meal test tray form, using a calibrated bimetallic stem thermometer or a digital thermometer. For congregate bulk-serve sites, this reading is taken from the bulk serving containers, since no individual test tray exists yet. For congregate pre-plated sites and home-delivered routes, this reading is taken from the tray marked "test tray."
    - Thermometers should be calibrated regularly according to your program's food safety procedures (commonly checked using the ice-point or boiling-point method), and calibration records should be kept on file. Between testing each menu item, wipe and sanitize the thermometer probe to prevent cross-contamination.
- A tray is marked "test tray" for the service or the route.
    - **Congregate bulk-serve** (cafeteria line style, food served from steam table or bulk containers as participants go through the line): there is no individual test tray at the start of service. The "before" reading is taken from the bulk serving containers before the line opens. After the last participant has been served, staff plate one additional plate from the same bulk containers, mark it "test tray," and take the "after" reading immediately.
    - **Congregate pre-plated** (trays assembled in advance and then distributed to participants at tables or handed out): a tray is marked "test tray" and set aside right

after plating, before service or distribution begins. The before reading is taken from that tray at the time it is set aside. The after reading is taken from that same tray at the point the last participant receives their meal.
    - **Home-delivered**: the test tray stays in the hot food delivery bag or compartment with the other participant meals, so it shares the same temperature environment.
    - **Grab-and-go or food truck**: Since these models may not involve extended active holding, mark the test tray at the time of pack-out or loading, and test it at the point of actual pickup or the last stop of the route, whichever reflects the longest real-world gap between preparation and consumption. If meals are packed and picked up within a short window with no meaningful holding time, programs may instead test a meal at pack-out and note the pickup time span, so trends can still be tracked over time.
- At the end of service or the route, after the last participant has been served, staff take the temperature of each hot and cold item on the test tray and record it on the meal test tray form, using a calibrated bimetallic stem thermometer or a digital thermometer. For congregate bulk-serve sites, this is the point where the test tray is plated from the remaining bulk containers and tested immediately.
- Insert the thermometer into the thickest part of each food item and wait for the reading to settle before recording it. Record a separate temperature for each item on the test tray.
- Staff should also note how the food looks, smells, and tastes at the end of service or the route.
- **For home-delivered meals**: written or verbal instructions should be given to participants for handling and, when necessary, reheating their meals. All home-delivered meals should be marked with the date the meal was served.
- After testing is complete, the test tray meal should not be served to a participant and should be handled or discarded according to local provider, AAA, or SUA policy.
- If any food temperature or quality aspect is not acceptable, put a corrective action plan in place. This may include changes to holding equipment, prep and serving times, route order, or delivery timing. Review temperature records regularly to identify trends.
- If corrective action is needed, complete a follow-up test tray within one week to confirm the changes were effective.
- Keep completed test tray forms on file for at least one year, or in accordance with local provider, AAA, or SUA policy.
- All staff, drivers, and volunteers involved in food service or delivery should be trained on procedures, with proof of training kept on file in accordance with local provider, AAA, or SUA policy.

# Example One: Meal Test Tray Form

**Sample: Home-Delivered**
**(Completed for Training Reference)**

**Service Type**: ☐ Congregate Bulk-Serve ☐ Congregate Pre-Plated ☒ Home-Delivered Meals (HDM)

☐ Grab-and-Go ☐ Food Truck

**Site Name:** n/a (mobile)

**Route:** Main Street

**Time meal, service, or route started**: 11:00 a.m.

**Time test tray was checked (pickup, last stop, or pack-out)**: 12:15 p.m. (last stop)

## Instructions

For congregate bulk-serve sites, take the start reading from the bulk serving containers before the line opens, then plate and test a tray marked “test tray” from the same containers immediately after the last participant is served. For all other service types, set aside a tray marked “test tray" at the start of meal service, the route, the pickup or loading (for grab-and-go or food truck), and test it after the last participant has been served, the last delivery is made, or at the point of actual pickup or last stop, whichever reflects the longest real-world gap between preparation and consumption.

If meals are packed and picked up within a short window with no meaningful holding time, test at pack-out instead and note the pickup time span in the additional notes section. Insert the thermometer into the thickest part of the food item and let the reading settle before writing it down. For each item, mark whether it is served hot, cold, or frozen, since this determines the acceptable temperature range, not the food category itself. Also note how the food looks, smells, and tastes.

*Thermometers used for test trays should be calibrated regularly according to your program's food safety procedures. Between testing each menu item, wipe and sanitize the thermometer probe to prevent cross-contamination.*

| Menu Item | Item Name | Served as Hot (H) / Cold (C) / Frozen (F) | Temp at start | Temp at end |
|---|---|---|---|---|
| Entrée | Baked chicken | H | 165°F | 138°F |
| Starch | Mashed potatoes | H | 160°F | 140°F |
| Vegetable | Green beans | H | 155°F | 136°F |
| Salad | Pasta salad | C | 38°F | 40°F |
| Dessert | Fruit cup | C | 36°F | 39°F |
| Milk | 2% milk | C | 34°F | 38°F |
| Additional item (HDM only) | Ice cream cup | F | 10°F | 22°F |

**Temperature key**: H (Hot) = 135°F or above. C (Cold) = 41°F or below. F (Frozen, home-delivered only) = 32°F or below.

*As a reminder, these temperatures help keep food safe and taste its best. Food should never sit in the danger zone (41°F to 135°F) for more than four hours total.*

**Food appearance comments**: Chicken and vegetables looked slightly drier than at the start, consistent with normal holding time. No discoloration noted.

**Food taste comments**: Chicken and potatoes tasted fine, seasoning held up. Green beans are slightly softer than ideal but still acceptable.

**Food smell comments**: No off odors on any item.

**Corrective action needed?** No

**Additional notes** *(for grab-and-go and food trucks with short pickup windows, note pickup time span here)*:

All items stayed within acceptable range at end of route. Minor texture softening on vegetables noted as expected given route length, will continue to monitor if route times increase.

**Completed by**: J. Smith

**Date of completion**: 8/25/26

# Example Two: Meal Test Tray Form

**Sample: Grab-and-Go and pick-up window**
**(Completed for Training Reference)**

**Service Type**: ☐ Congregate Bulk-Serve ☐ Congregate Pre-Plated ☐ Home-Delivered Meals (HDM)

☒ Grab-and-Go ☐ Food Truck

**Site Name:** Main Street Senior Center

**Route**: Grab-and-Go Table

**Time meal service, route, or started**: 11:00 a.m. (pack-out)

**Time test tray was checked (pickup, last stop, or pack-out)**:11:00 a.m. (tested at pack-out; pickup window noted below)

## Instructions

For congregate bulk-serve sites, take the start reading from the bulk serving containers before the line opens, then plate and test a tray marked 'Test Tray' from the same containers immediately after the last participant is served. For all other service types, set aside a tray marked "Test Tray" at the start of meal service, the route, the pickup or loading (for grab-and-go or food truck), and test it after the last participant has been served, the last delivery is made, or at the point of actual pickup or last stop, whichever reflects the longest real-world gap between preparation and consumption.

If meals are packed and picked up within a short window with no meaningful holding time, test at pack-out instead and note the pickup time span in the additional notes section. Insert the thermometer into the thickest part of the food item and let the reading settle before writing it down. For each item, mark whether it is served hot, cold, or frozen, since this determines the acceptable temperature range, not the food category itself. Also note how the food looks, smells, and tastes.

*Thermometers used for test trays should be calibrated regularly according to your program's food safety procedures. Between testing each menu item, wipe and sanitize the thermometer probe to prevent cross-contamination.*

| Menu Item | Item Name | Served as Hot (H) / Cold (C) / Frozen (F) | Temp at start | Temp at end |
|---|---|---|---|---|
| Entrée | Turkey sandwich | C | 39°F | 39°F |
| Starch | Pasta salad | C | 38°F | 38°F |
| Vegetable | Carrot sticks | C | 37°F | 37°F |
| Salad | — | — | — | — |
| Dessert | Fruit cup | C | 36°F | 36°F |
| Milk | 2% milk | C | 35°F | 35°F |
| Additional item (HDM only) | — | — | — | — |

**Temperature Key**: H (Hot) = 135°F or above. C (Cold) = 41°F or below. F (Frozen, home-delivered only) = 32°F or below.

*As a reminder, these temperatures help keep food safe and taste its best. Food should never sit in the danger zone (41°F to 135°F) for more than four hours total.*

**Food Appearance Comments**: All items looked fresh at pack-out; no visible issues.

**Food Taste Comments**: Not tasted (single test at pack-out only; short pickup window).

**Food Smell Comments**: No off odors noted.

**Corrective Action Needed?** No

**Additional Notes** *(for grab-and-go and food truck with short pickup windows, note pickup time span here)*:

Meals packed at 11:00 a.m. The pickup window was 11:00 a.m.–12:00 p.m. (60 minutes), well within the safe holding time. Since pickup window was short with no meaningful holding time, only a single pack-out reading was taken. Will note if pickup window lengthens in future service periods.

**Completed by**: J. Smith

**Date of Completion**: 8/25/26