

# RECEIVING (SATELLITE) KITCHENS

Receiving kitchens (satellites) are located at the schools that receive food from either a central or regional kitchen. The layout, equipment, and procedures of receiving kitchens vary depending on the objectives of the school district foodservice department, type of delivery (bulk or pre-plated, hot or cold), and space availability. This chapter will focus on the following:

- Decisions required in planning a receiving kitchen
- Equipment typical for a receiving kitchen
- Food safety and HACCP programs at the receiving kitchen
- Staffing
- Other considerations

## Decisions Required in Planning a Receiving Kitchen

### Mission/Objectives

The mission and objectives impact decisions made about the receiving kitchen. For example, if it is important for the “smells” of baking to permeate the serving area, then the school foodservice director may decide that ovens for baking will be required. If permanent ware dishes and flatware are used to give more of a home or restaurant feel, then dishwashing equipment will be needed.

### Central/Regional Kitchen System

The foodservice system employed at the central or regional kitchen will influence the design of new receiving kitchens. For example, if the central kitchen uses cook/chill, there would need to be space and equipment at the receiving kitchen for ovens to reheat food. If food is transported pre-plated on disposable ware, little space would be needed in the receiving kitchen for serving lines and dishwashing.

Existing facilities at receiving kitchens influence decisions about the type of foodservice system needed for a new central or regional kitchen. For example, if a school foodservice director were planning a new central or regional kitchen, the space and equipment available in existing school kitchens would be a factor in determining whether

to transport food hot or cold and in bulk or pre-plated. These decisions impact all of the facility design decisions in planning the central kitchen.

## **Available Resources**

The availability of resources, such as money and labor, impacts decisions about the central/regional kitchen and the receiving kitchen. In situations where money is extremely limited, more centralization may be necessary, and the decision would be to allocate minimal space and equipment in the receiving kitchen. If labor were scarce, again more functions would be centralized to take better advantage of the labor resources that are available.

## **Space Availability**

Space available for foodservice at the school site will impact the function of the receiving kitchen and the equipment selected. Many older schools have minimal space for kitchen facilities. Some districts distribute food hot so that rethermalization equipment is not needed due to space limitations in the receiving kitchen. In new schools being built, often administrators do not want to use space for kitchens and incur the costs associated with the space and equipment needs. Thus, kitchen spaces are small necessitating that food preparation be done elsewhere. Little equipment will be needed in these receiving kitchens.

The space available for storage impacts how food deliveries are made to the receiving kitchens. In some centralized foodservice systems, there are daily deliveries of food and supplies from the central kitchen and little space is used for storage. In other centralized operations, storerooms are maintained on site and many items are delivered to the school by the food distributor. In almost every case, milk deliveries are made directly to the receiving kitchen by the milk vendor.

## **Disposables vs. Permanent Ware**

The use of disposable service ware (plates, bowls, portion cups, forks, spoons, and knives) or permanent, reusable service ware will need to be determined. If a pre-plate system is used, then disposable service ware also will be used. For other systems, either type of service ware would be an option. If permanent ware is used, then dish-washing equipment must be available either at the receiving kitchen or at the regional or central kitchen. Some receiving kitchens are designed to include a separate dish-washing area and are most often equipped with a single-tank dish-washing machine.

## **Serving Area**

A serving area is required at the satellite. This might be a permanent steam table, a mobile serving cart, or self-service cart. In operations with limited space, and perhaps no kitchen, food may be served from a window or even off a folding table. Consideration

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### Receiving Kitchens

will need to be given to the facility and resources and an appropriate serving area established.

## Equipment Typical for a Receiving Kitchen

The equipment required for a receiving kitchen varies depending on many of the factors that were discussed previously. Table 11.1 presents the major equipment needed for bulk and pre-plate systems and those that deliver the food either hot or cold.

Table 11.1 Equipment for Receiving Kitchens (Satellites)

EQUIPMENT	BULK		PRE-PLATE	
	HOT	COLD	HOT	COLD
Hand Sink	X	X	X	X
Freezers*	X	X	X	X
Refrigerators	X	X	X	X
Ovens—Convection or Combi		X		X
Microwave		X		
Stove, or hot water dispenser		X		
Steamer		X		
Serving Counter	X	X	X	X
Dishwasher**—single or multi-tank	X	X		
3-compartment sink	X	X	X	X
Service equipment—scoops, spoons, spoodles, ladles	X	X		
Self service tray caddies	X	X		

\*Small freezer optional depending on menu and preparation done at the satellite.

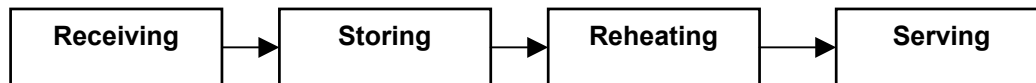
\*\*Trays, pans, and smallwares may be shipped back to the central kitchen for washing and sanitizing. The use of disposable serving containers also will impact the need for dishwashing equipment at the receiving kitchen.

NOTE: A small storage shelf or area will be needed for all receiving kitchens.

## Food Safety and HACCP Programs at the Receiving Kitchen

Food safety is as important at the receiving kitchen as it is at the central or regional kitchen. Part of the school district's HACCP program will occur at the receiving kitchen, and there will need to be a set of Standard Operating Procedures (SOP) at the receiving kitchen to guide employees on appropriate handling of food. These SOP also can be used in orientation and training of employees.

At the receiving kitchen, the flow of food can be drawn as follows:



**Receiving.** All food products received at the receiving kitchen should be at the appropriate temperatures and immediately should be placed into appropriate storage areas. SOPs would indicate how and when these practices are done.

**Storing.** All foods should be stored at the appropriate temperatures. There should be thermometers in all storage areas—refrigerators, freezers, and storerooms, and temperatures should be taken and recorded on a periodic basis. There should be a SOP on how to handle leftovers or unused foods. Some centralized foodservice systems require that all food that is not served be returned to the central kitchen. This provides control over those foods and ensures that the staff in all receiving kitchens follow the same procedure.

**Reheating.** It is important to rethermalize or reheat foods to appropriate temperatures within a short period of time. SOP in the receiving kitchens would include reheating instructions for each food item served. There would be a procedure designated for when and how temperatures are taken and recorded.

**Serving.** Once the food is reheated, it needs to be served in a short period of time to maintain the temperature. If pre-plated foods are served, there needs to be a SOP in place for randomly taking temperatures of pre-plated items at the time of service. If bulk foods are transported to the receiving kitchens and food is served from a steam table, there needs to be a procedure for randomly taking temperatures throughout the serving period. A system for recording these temperatures needs to be in compliance with the HACCP program.

### CASE IN POINT

Portland, Oregon Public Schools Nutrition Services assembled “tool kits” for each school that included thermometers, wrenches and ice containers for calibrating thermometers, and time/temperature charts. A session was held to train receiving kitchen employees on calibration procedures, procedures for taking and recording temperatures, and appropriate temperatures.

## Staffing

Staffing for receiving kitchens varies depending on how food is distributed--bulk vs. pre-plated or hot vs. cold. For those kitchens that receive food pre-plated, minimal staffing is required. There are no standards for staffing, but two examples include:

- Elko, Nevada schools staff elementary schools at 3.5 hours per day. If participation exceeds 400 students, an additional two hours are added. The school secretary serves as the cashier.
- Minneapolis, Minnesota Public Schools uses a standard of 60 meals per labor hour for staffing of elementary schools. They use meal equivalents (ME) of two breakfasts equal one lunch. For schools with food courts, they use a 40% labor cost to determine staffing.

For cook/chill operations that distribute food in bulk, staffing requirements are greater than for pre-plate operations. Again, there are no standards for staffing, but examples from central kitchen operations provide guidance:

	<b>Portland</b>	<b>Saint Paul</b>	<b>Salem</b>
<b>Elementary Schools</b>	30 MLH*	25-30 MLH	30 MLH
<b>Middle Schools</b>	43 MLH	22-24 MLH	20-25 MLH
<b>High Schools</b>	25-30 MLH	20 MLH	20-25 MLH
<b>1 Meal Equivalent (ME)</b>	2 breakfast 1 lunch 3 snacks \$1.50 a la carte	2 breakfast 1 lunch \$2.00 a la carte	1 breakfast 1 lunch \$2.00 a la carte

\*Meals per Labor Hour (MLH)

## Other Considerations

**Material Safety Data Sheets.** The Material Safety Data Sheet (MSDS) for all chemicals used in the receiving kitchen should be maintained on site. All employees should know the location of the MSDS in case of an emergency.