



No Time To Train

Short Lessons for School Nutrition Assistants

Effect of Batch Cooking on Food Quality

Lesson Overview

Lesson Participants: School Nutrition Assistants/Technicians

Type of Lesson: Short face-to-face training session

Time Needed to Conduct the Lesson: 15 minutes

Lesson Description: This lesson defines batch cooking and specifies reasons to batch cook. Participants work through a real-life situation in a school cafeteria to apply principles of batch cooking that illustrate how batch cooking can improve quality. The lesson is designed for managers to teach school nutrition assistants/technicians.

Lesson Objectives:

At the end of this lesson, the participant will be able to:

1. Define batch cooking.
2. Discuss the reasons to batch cook.

Get Ready to Train

The format for the **No Time to Train** lessons includes an overview, preparation checklist, lesson at a glance with timeline for conducting the lesson, reference, and an instructor's script. The manager/instructor will use the script to present the lesson to the participants. The script gives directions to the manager/instructor—**DO, SAY, ASK, LISTEN, AND ACTIVITY**—to deliver the lesson.

No special audiovisual or electronic equipment is needed to conduct the lesson. The lesson can be presented in the cafeteria, media center, or classroom.

Preparation Checklist

Directions: Use the Preparation Checklist to prepare for the training session. Track your progress by checking off tasks as they are completed.

Done <input checked="" type="checkbox"/>	Lesson Tasks
	Gather Materials
	Materials Needed:
<input type="checkbox"/>	• Instructor’s Script
<input type="checkbox"/>	• Handout 1: Take a Peek in the Pans (one for each participant)
<input type="checkbox"/>	• Handout 2: Take a Peek in the Pans with Suggested Answers (one for each participant)
<input type="checkbox"/>	• Pencils (one for each participant)
<input type="checkbox"/>	• Session Evaluation form (one for each participant)
	Prepare for Lesson
	Before the Training:
<input type="checkbox"/>	• Make copies of Handouts 1 and 2 (one for each participant).
<input type="checkbox"/>	• Make copies of Session Evaluation form (one for each participant).
	On Training Day:
<input type="checkbox"/>	• Place pencils on tables (one for each participant).
<input type="checkbox"/>	• Distribute Handout 1 to each participant.
<input type="checkbox"/>	• Distribute Handout 2 to each participant after activity.
	On the Instructor’s Table:
<input type="checkbox"/>	• Instructor’s Script
<input type="checkbox"/>	• Handout 1: Take a Peek in the Pans
<input type="checkbox"/>	• Handout 2: Take a Peek in the Pans Key with Suggested Answers (one for each participant to distribute after discussion)
<input type="checkbox"/>	• Session Evaluation forms

Lesson at a Glance
(15 minutes)

Time	Topic	Task	Materials
2 minutes	Introduction and Overview	Instructor introduces batch cooking as it relates to food quality.	Instructor's Script
5 minutes	Objective 1: Define batch cooking Objective 2: Discuss reasons to batch cook	Participants describe the visual characteristics they would expect to find when a select group of foods are held on the hot steam table and warming cabinets until the end of the last serving period.	Handout 1: Take a Peek in the Pans
6 minutes	Wrap up and Review	Instructor leads a discussion on the activity completed using Handout 1 and the questions about the food at Early Bird School.	Handout 2: Take a Peek in the Pans with Suggested Answers
2 minutes	Session Evaluation	Conduct a short evaluation of the lesson.	Session Evaluation form

Notes to Instructor:

Definition: Batch cooking, sometimes called **cooking to the line** or **just-in-time preparation**, means preparing food in small batches as needed throughout the serving period in order to preserve food quality and prevent waste due to leftovers.

Reference:

National Food Service Management Institute. (2008). *Cooking for the new generation: Storing, cooking, and holding the new generation foods.* (2nd ed.). University, MS: Author.

Instructor's Script



SAY:

As you know, our primary goal as school nutrition providers is to serve students food of the highest quality possible in appearance, flavor, texture, and nutritional value.

One of the keys to achieving this goal is to **cook foods in small batches as needed throughout the serving periods**, whenever possible. We call this method of food preparation **batch cooking**. You may have also heard it referred to as **cooking to the line** or **just-in-time preparation**.

Batch cooking can help us protect food quality and reduce waste. For example, if we batch cook and find that a food item is not as popular as we thought it would be, we can scale back the amount we had planned to prepare. On the other hand, if a food item is selected by customers more than we had planned, we can prepare additional batches to meet demand. Although it takes a little more effort to batch cook, it is easy to develop and execute a production plan. The end result is well worth the time – higher quality food for the students with a reduction in waste.

Let's take a few minutes to talk about how batch cooking can affect food quality.



ACTIVITY:

Handout 1: Take a Peek in the Pans



DO:

Organize the participants into small groups. Give the participants **Handout 1: Take a Peek in the Pans**.



ASK:

May I get a volunteer to read aloud the scenario at the top of **Handout 1**?



LISTEN:

Listen as the scenario is read aloud.



SAY:

Let's take 5 minutes to complete the activity that is at the bottom of **Handout 1**. As a group, discuss and write down what changes you would expect to see with each of the food items if held in warming cabinets and on the hot steam table for 2 hours and 15 minutes.



DO:

Once the participants have finished their small group work bring them together again as a class.



ASK:

Ask a spokesperson from each group to read their group’s description of one of the foods that was held in warming cabinets and on the hot steam table for 2 hours and 15 minutes.

Ask for a volunteer to try to put into quality terms the characteristics of that particular food that would result when batch cooked.



LISTEN:

Listen to responses.



ASK:

Would batch cooking improve the quality of food served to students at Early Bird School?



LISTEN:

Listen to responses.



ASK:

How does higher quality food affect participation in school nutrition programs?



LISTEN:

Listen to responses.



DO:

Distribute **Handout 2: Take a Peek in the Pans with Suggested Answers.**



SAY:

The suggested answers on this handout may give us some reasons for batch cooking these items.



ASK:

Will the information presented in today’s lesson on batch cooking affect how you plan to prepare food items in the future?



LISTEN:

Listen to responses.



ASK:

Are there any other comments or questions about **Handout 1: Take a Peek in the Pans?**



LISTEN:

Listen to individual responses. Answer questions to the best of your ability. If there are questions you can’t answer, tell participants you will find out the answer and let them know later. If you need assistance in finding answers, please call the National Food Service Management Institute at 800-321-3054.



DO:
Distribute the Session Evaluation form.



SAY:
Thank you for participating in the lesson today. Please take a couple of minutes to complete the Session Evaluation form. Thank you for your input.

Handout 1: Take a Peek in the Pans

Read this scenario and complete the matching activity on the other side of this page.

Holding many foods in warming cabinets or on the steam table for an extended period of time destroys quality. The manager at Early Bird School is new and worried that the food will not be prepared on time. She insists that all food on the cafeteria line be prepared and ready-to-serve by 10:00 a.m. Most days, the kitchen staff has all the food needed for the day cooked and in warmers before they sit down for their own lunch at 10:00 a.m. When they resume work, they record the temperatures of foods, clean the entire kitchen, wash pots and pans, and freshen up in preparation for the arrival of the students at 11:15 a.m.

When the first serving period begins, the food has been held for **1 hour and 15 minutes**. The last child is served at 12:15 p.m., **adding 1 hour to the total time** that the hot food is held. Imagine that you are behind the steam table at the end of the last serving period lifting the lid on each of the pans to **take a peek at the foods listed below**. What changes do you expect to see in the quality of the foods after being held in a warming cabinet and on a hot steam table for **2 hour and 15 minutes**?

Handout 1: Take a Peek in the Pans (continued)

Match: Food products on the left with food descriptions on the right that have been held for an extended period of time destroying quality. See examples of quality achieved **with batch cooking**.

- A. _____ Beef patties
Clumps together, sticky, overcooked, and a crust is forming on the bottom and around the edge of the pan
With batch cooking: separated, not overcooked or sticky, and no clumps
- B. _____ Sandwich rolls
Limp and soggy, breaking apart
With batch cooking: oven fresh, crisp, and maintaining original shape
- C. _____ BBQ chicken breasts
Flat and hard where item rested against bottom of the pan
With batch cooking: warmed immediately before service or served room temperature
- F. _____ Oven-prepared potato wedges
Dry, tough, or rubbery, and two-toned where each food item lay against the next, lighter than the areas that were exposed
With batch cooking: moist, tender, and uniform in color
- E. _____ Steamed fresh broccoli
Begins to burn on the bottom with dry hard edges and dried sauce on top
With batch cooking: moist, tender, sauce in liquid form, evenly colored
- F. _____ Steamed rice
Limp, mushy, discolored (dull green) edges turning yellow brown. Falls apart when served
With batch cooking: bright green color, tender yet firm, remains slightly crisp and flavorful)

Handout 2: Take a Peek in the Pans with Suggested Answers

Match: Food products on the left with food descriptions on the right that have been held for an extended period of time destroying quality. See examples of quality achieved **with batch cooking**.

- A. D Beef patties Clumps together, sticky, overcooked, and a crust is forming on the bottom and around the edge of the pan
With batch cooking: separated, not overcooked or sticky, and no clumps
- B. C Sandwich rolls Limp and soggy, breaking apart
With batch cooking: oven fresh, crisp, and maintaining original shape
- C. E BBQ chicken breasts Flat and hard where item rested against bottom of the pan
With batch cooking: warmed immediately before service or served room temperature
- D. B Oven-prepared potato wedges Dry, tough, or rubbery, and two-toned where each food item lay against the next, lighter than the areas that were exposed
With batch cooking: moist, tender, and uniform in color
- E. F Steamed fresh broccoli Begins to burn on the bottom with dry hard edges and dried sauce on top
With batch cooking: moist, tender, sauce in liquid form, evenly colored
- F. A Steamed rice Limp, mushy, discolored (dull green) edges turning yellow brown. Falls apart when served
With batch cooking: bright green color, tender yet firm, remains slightly crisp and flavorful



National Food Service Management Institute
The University of Mississippi

Session Evaluation

Instructions:

Completely fill in the circle of your answer. Use a #2 pencil.

Please select only one response for each statement. Do not fold or crease this sheet.

Title of Meeting: _____	
Session Topic: _____	Trainer's Code: _____
Date: _____	Time Slot: _____ Location: _____ Length of Event (hrs/min): _____

Attendee Status:

- | | | |
|--|---|--|
| <input type="radio"/> District director | <input type="radio"/> Major city director | <input type="radio"/> Private consultant/trainer |
| <input type="radio"/> State agency staff | <input type="radio"/> Site-level manager | <input type="radio"/> Foodservice assistant |
| <input type="radio"/> Educator | <input type="radio"/> Other (please list) _____ | |

Reaction to this Session		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Please read the following statements related to the session. Rate your level of agreement by using the scale 5 (Strongly Agree) to 1 (Strongly Disagree).						
1.	The session objectives were clearly presented.	⑤	④	③	②	①
2.	The session objectives were achieved.	⑤	④	③	②	①
3.	I can apply what I learned in this session to my job.	⑤	④	③	②	①
4.	Attending the session increased my skill on the topic.	⑤	④	③	②	①
5.	Attending the session increased my knowledge on the topic.	⑤	④	③	②	①
6.	I would recommend this session to others.	⑤	④	③	②	①
7.	Overall, the session met or exceeded my expectations.	⑤	④	③	②	①

Comments about this Session
<p>The information I found MOST useful was:</p> <hr/> <hr/> <hr/>
<p>Please share any additional comments:</p> <hr/> <hr/> <hr/>

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