

TOOLS, TIPS & INFORMATION FOR THE KITCHEN ~

Batch Cooking

The primary goal as child 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. This method of food preparation is called **batch cooking**. It is also referred to as *cooking to the line* or *just-in-time preparation*.

Batch cooking can help protect food quality and reduce waste. For example, if food is batch cooked and that food item is not as popular as thought it would be, the amount cooked can be scaled back. On the other hand, if a food item is selected by customers more than planned, additional batches can be prepared to meet the 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.



SET MEAL SERVICE

- All customers eat at one time.
- Often called quantity cooking because large batches are prepared in advance.
- School, summer feeding sites, and child daycare centers are a good example of Set Meal Service

The traditional method of set meal preparation, still widely used, is to prepare the entire quantity of each item in a single large batch and to keep it hot for the duration of the meal service. This method has two major disadvantages:

1. Deterioration of the food quality due to long holding.
2. The potential for large quantities of leftovers.

Modern high-speed equipment, such as pressure steamers, convection ovens, infrared ovens, and microwave ovens, make possible a system called small-batch cooking. Required quantities are divided into smaller batches, placed in pans ready for final cooking or heating, and then cooked only as needed. The advantages of this system are:

- Fresher food, because it is not held as long.
- Fewer leftovers, because servings not needed are not cooked.

Small-batch cooking also accommodates items prepared in advance and frozen or chilled for storage.

The Goal: The goal of pre-preparation is to do as much work in advance as possible without loss of quality. Then, at service time, all energy can be used for finishing each item immediately before serving, with the utmost attention to quality and freshness. Many preparation techniques in common use are designed for the convenience of the cooks at the expense of quality of the food. Remember, quality should always take highest priority.

The Problem: Every food-service operation faces a basic conflict between two unavoidable facts:

1. There is far too much work to do in a kitchen to leave until the last minute, so some work must be done ahead.
2. Most foods are at their best quality immediately after preparation, and they deteriorate as they are held.

The Solution: To address this conflict, the chef must plan pre-preparation carefully. Planning generally follows these steps:

1. Break down each menu item into its stages of production. Production procedures are divided into a sequence of steps that must be done in a certain order to make a finished product.
2. Determine which stages may be done in advance.
 - The first step of every recipe is always part of advance preparation: assembling and preparing the ingredients.
 - Succeeding steps of a recipe may be done in advance if the foods can then be held without loss of quality.
 - Final cooking should be done as close as possible to service for maximum freshness.
3. Determine the best way to hold each item at its final stage of pre-preparation. Holding temperature is the temperature at which a product is kept for service or for storage. Holding temperatures for all potentially hazardous foods must be outside the Food Danger Zone.
4. Determine how long it takes to prepare each stage of each recipe. Plan a production schedule beginning with the preparations that take the longest.
5. Examine recipes to see if they might be revised for better efficiency and quality as served.

DETERMINING WHEN TO BATCH COOK

- When determining when to batch cook, the question to ask is “Does the food lose quality in appearance, texture, shape, or nutrition when it is held at the proper temperature for an extended period of time?”
- Although all foods do not need to be batch cooked, the quality of many foods can benefit greatly by cooking them closer to the time they will be served.
- Food quality refers to characteristics that an individual food possesses that make it desirable. For example, high quality steamed broccoli retains its bright green color, is tender but not mushy, is not brown or yellow on the edges, and holds its shape.
- High quality foods deliver high quality nutrients. The quality of two pans of cooked broccoli from the same case of frozen product can be significantly different when served depending on how the product is cooked, how long it is held, and at what temperature the food is held.

BENEFITS OF BATCH COOKING

- Holding foods for an extended period of time can potentially effect the appearance, texture or consistency, flavor, and nutritional value of many foods. One of the benefits of batch cooking is persevering food quality by preparing foods closer to the time of service.
- Batch cooking can also potentially reduce waste and food cost. When the total projected amount of a food is not needed, the amount prepared can be cut back during the last serving periods thus reducing waste and food cost.