



CULINARY  
INSTITUTE OF  
CHILD NUTRITION

# CULINARY QUICK BITES

DEVELOPING FLAVOR: BASIC OVERVIEW  
OF FLAVOR PROFILES



# **CULINARY QUICK BITES**

## **DEVELOPING FLAVOR: BASIC OVERVIEW OF FLAVOR PROFILES**

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Key Area: 2 – Operations

**USDA Professional Standards Code**  
Food Production – 2100

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# TABLE OF CONTENTS

**3** DISCLAIMER

**4** TABLE OF CONTENTS

**5** TRAINING OVERVIEW

**5** KEY AREA

**5** PROFESSIONAL STANDARDS

**6** FACILITATOR'S NOTES

**7** MATERIALS NEEDED

**8** LESSON OVERVIEW

**10** INFOGRAPHIC: THE FIVE BASIC TASTES

**11** RECIPE: CHICKPEA WALDORF SALAD

**14** TRAINING VIDEO

**14** QR CODE

**15** ACTIVITY

**17** POST ACTIVITY

# TRAINING OVERVIEW

The Culinary Quick Bites training series is a tool to help child nutrition professionals develop and refine their culinary skills. Each lesson is designed to last approximately fifteen minutes. Each lesson should be facilitated (led) by the person responsible for overseeing food production at a meal site, service area, or the district level.

Training facilitators should review the training, in its entirety, prior to conducting the training.

This training has been developed to address a variety of learning styles. The training includes an overview of the topic presented by the facilitator, an infographic to reinforce the training topic visually, a video to demonstrate the topic, and an activity to reinforce learning.

Please contact the Institute of Child Nutrition Help Desk at 1-800-321-3054 or [helpdesk@theicn.org](mailto:helpdesk@theicn.org) if you have any questions about how best to facilitate this training.

## KEY AREA

Key Area: 2 – Operations

## PROFESSIONAL STANDARDS

### FOOD PRODUCTION – 2100

Employee will be able to effectively utilize food preparation principles, production records, kitchen equipment, and food crediting to prepare foods from standardized recipes, including those for special diets.

2130 – Develop culinary skills necessary for school meal preparation.

## FACILITATOR'S NOTES

This training counts for 15 minutes of training credit under USDA Professional Standards learning objective 2130 – Develop culinary skills necessary for school meal preparation.

The activity at the end of the lesson involves preparing Chickpea Waldorf Salad. This activity helps reinforce knowledge and skills learned during this lesson. The Chickpea Waldorf Salad prepared during this lesson may be included in the next day's menu production.

Before the training, prepare for the lesson activity and set up the kitchen workstation as described on page 15.

Deliver the lesson/training to participants:

- Read the lesson overview to the participants.
- Discuss the infographic and how it relates to the training topic.
- View the instruction video with participants.
- Answer any questions participants may have on the lesson, infographic, and video.

Complete the activity as instructed on page 15.

## MATERIALS NEEDED



**NOTE:** Participants will be working together to make the recipe. Determine the quantity of recipe to prepare based on the number of servings needed for your service. Scale recipe accordingly.

- Required recipe ingredients
  - Required recipe utensils, tools, pans, etc.
  - Recipe handout: Chickpea Waldorf Salad – 1 per person
  - Infographic: The Five Basic Tastes – 1 per person
  - Access to a screen to show the training video. Possible options include:
    - Site computer monitor with sound
    - Projector with sound
    - Tablets and smartphones
- A QR code has been provided for quick access to the video on handheld devices.

# LESSON OVERVIEW

## OBJECTIVE:

At the end of this lesson, participants will be able to recognize how to use the five basic tastes to develop flavor in school nutrition recipes.

## GENERAL INFORMATION ABOUT THE FIVE BASIC TASTES

We detect the five basic tastes through taste receptors located within the taste buds that line the tongue. Each receptor contains a microscopic pore that lets in molecules of food as we eat them. There are five different taste sensations: salty, sour, sweet, bitter, and umami.

- Salty
  - Salty is the taste of sodium and chloride (salt crystals), and potassium and magnesium (mineral salts).
  - Salt plays two very important roles in flavoring a dish. First, it balances against bitterness. Second, it enhances most other flavors present in the dish—particularly sweetness.
  - Salt contrasts the fattiness or sweetness of a dish and can also cut bitter flavors.
  - Salt revives bland flavors, but it is important to make sure not to overdo it. Always follow the site's standardized recipe when adding salt.
- Sour
  - Sourness is the taste that detects acids.
  - Sourness highlights and enhances the existing flavors of your meal.
  - Sourness can balance the taste of a fatty or sweet dish.
  - TIP: if adding something acidic to cooked food, add it towards the end. Acid breaks down quickly in heat.
- Sweet
  - Sweet is the taste of natural sugars. Sweetness is produced by the presence of sugars, some proteins, and a few other substances.
  - Sweetness will balance bitter and sour flavors.
  - Sweetness can be used to cut down the heat of a spicy meal.
- Bitter
  - Bitterness is the taste that detects bases.
  - Bitter foods are balanced by sweet and fatty flavors.
  - Saltiness can also reduce the taste of bitterness.
- Umami
  - A common way to describe umami is savory.
  - Umami is the name for the taste sensation produced by the free glutamates commonly found in fermented and aged foods.
  - Umami is best used to complement other flavors.



## HOW TO USE THE FIVE BASIC TASTES

- Utilizing the infographic, review the five basic tastes and their uses to develop flavor in your recipes.
- Review the embedded training video.

***After we review the infographic and video, there will be an activity to reinforce skills learned.***

## Culinary Quick Bites FLAVOR ENHANCEMENT

## THE FIVE BASIC TASTES

**We detect the five basic tastes through taste receptors located within the taste buds that line the tongue.**  
**The five sensations are:** salty, sour, sweet, bitter and umami.

### Salty

- Salty is the taste of sodium and chloride (salt crystals), and the mineral salts potassium and magnesium.
- Salt plays two very important roles in flavoring a dish. First, it balances against bitterness. Second, it enhances most other flavors present in the dish - particularly sweetness.
- Salt contrasts the fattiness or sweetness of a dish and can also cut bitter flavors.
- Salt revives bland flavors, but it is important to make sure not to overdo it. Always follow the standardized recipe when adding salt.

### Sour

- Sourness is the taste that detects acids.
- Sourness highlights and enhances the existing flavors of your meal.
- Sourness can balance the taste of a sweet dish, or make a fatty dish seem lighter.

### Sweet

- Sweet is the taste of natural sugars. Sweetness is produced by the presence of sugars, some proteins, and a few other substances.
- Sweetness will balance bitter and sour flavors.
- Sweetness can be used to cut down the heat of a spicy meal.

### Bitter

- Bitterness is the taste that detects bases.
- Bitter foods are balanced by sweet and fatty flavors.
- Saltiness can also reduce the taste of bitterness.

### Umami

- A common way to describe umami is savory.
- Umami is the name for the taste sensation produced by the free glutamates commonly found in fermented and aged foods.
- Umami is best used to complement other flavors.

## FLAVOR STAR



# RECIPE: CHICKPEA WALDORF SALAD

## CHICKPEA WALDORF SALAD

HACCP Process: #1 No Cook  
Size of Portions: 1 Salad

CREDITING INFORMATION:  
one salad provides

Meats/MA

Grains

Fruits

Vegetables

2.25 oz eq

0

½ cup

**Legumes:**  
**Dark Green:** ¼ cup  
**Red/Orange:**  
**Starchy:**  
**Other:** ½ cup

INGREDIENTS	50 SERVINGS		100 SERVINGS		DIRECTIONS
	Weight	Measure	Weight	Measure	
Yogurt, Greek, plain, nonfat	6 lb 11 oz	3 qt 1 ½ cups	13 lb 6 oz	1 gal 2 qt 2 ⅔ cups	<b>1</b>  <b>Dressing:</b> Combine yogurt, cider vinegar, mustard, honey, salt, pepper, and cayenne pepper in a bowl. Whisk until well-combined.  <b>CCP:</b> Hold for cold service at 41° F or lower.
Vinegar, cider		1 ½ cups		3 cups	
Mustard, Dijon	8 oz	¾ cup 3 Tbsp	1 lb	1 ¾ cups 2 Tbsp	
Honey	12 oz	1 cup 1 tsp	1 lb 8 oz	2 cups 2 tsp	
Salt, Kosher		2 tsp		1 Tbsp 1 tsp	
Pepper, black		1 Tbsp		2 Tbsp	
Pepper, cayenne		½ tsp		1 tsp	
*Apples, fresh, with skin, ½ inch dice	5 lb	1 gal 2 cups	10 lb	2 gal 1 qt	<b>2</b>  Add cold water to an 8 quart (or larger) plastic food storage container. For every gallon of cold water, add ½ tsp of salt to the water and stir until dissolved.  Place the cut apples in the water to prevent oxidization (browning).  Store under refrigeration until ready for use.
Water		1 gal		1 gal	
Salt, table		½ tsp		½ tsp	

# RECIPE: CHICKPEA WALDORF SALAD

## Chickpea Waldorf Salad

HACCP Process: #1 No Cook  
Size of Portions: 1 Salad

CREDITING INFORMATION:  
one salad provides

Meats/MA

Grains

Fruits

Vegetables

2.25 oz eq

0

½ cup

Legumes:  
Dark Green: ¼ cup  
Red/Orange:  
Starchy:  
Other: ¼ cup

INGREDIENTS	50 SERVINGS		100 SERVINGS		DIRECTIONS	
	Weight	Measure	Weight	Measure		
Beans, garbanzo (chickpeas), canned, low-sodium, drained, rinsed	7 lb 14 oz	1 gal 1 qt 3 ⅔ cups	15 lb 12 oz	2 gal 3 qt 2 ⅔ cups	3	<b>Salad:</b> Remove apples from water and drain.  In a large container combine the garbanzo beans, celery, onions, parsley, grapes, apples, sunflower seeds, and dried cranberries. Fold together.  Add dressing and continue to gently fold, incorporating the dressing.  For grab-and-go service, place ½ cup of spinach in the bottom of the serving container. Top with 9.5 oz of the salad mixture.  <b>CCP:</b> Refrigerate until served.  <b>CCP:</b> Hold for cold service at 41° F or lower.
*Celery, fresh, ½ inch dice	3 lb 2 oz	3 qt	6 lb 4 oz	1 gal 2 qt		
*Onions, fresh, red, ¼ inch dice	11.25 oz	2 cups	1 lb 6.5 oz	1 qt		
*Parsley, fresh, minced	6.5 oz	3 cups 1 Tbsp	13 oz	1 qt 2 cups 2 Tbsp		
*Grapes, fresh, red or green, halved lengthwise	5 lb	3 qt 3 cups	10 lb	1 gal 3 qt 2 cups		
Sunflower seed kernels, dried	1 lb	3 ½ cups	2 lb	1 qt 3 cups		
Cranberries, dried	2 lb	2 qt ¼ cup	4 lb	1 gal ½ cup		
*Spinach, fresh	3 lb 7 oz	1 gal 1 qt 1 cup	6 lb 14 oz	2 gal 2 qt 2 cups		
MARKETING GUIDE FOR 50 SERVINGS			MARKETING GUIDE FOR 100 SERVINGS			

### NOTES

\*See Marketing Guide for purchasing information on foods that will change during preparation or when a variation of the ingredients is available.

Cooking Process #1: No Cook

This item may be held refrigerated at or below 41° F for 1–2 days.



# RECIPE: CHICKPEA WALDORF SALAD

**Chickpea Waldorf Salad** | HACCP Process: #1 No Cook | Size of Portions: 1 Salad |

## DIRECTIONS

In a mixing bowl, whisk together yogurt, cider vinegar, mustard, honey, salt, black pepper, and cayenne pepper.



In a large container, combine the garbanzo beans, celery, onions, parsley, grapes, apples, sunflower seeds, and dried cranberries. Fold together.



Add dressing and continue to gently fold, incorporating the dressing.



For grab-and-go service, place ½ cup of spinach in the bottom of the serving container. Top with 9.5 oz of the salad mixture.

**CCP:** Refrigerate until served.

**CCP:** Hold for cold service at 41° F or lower.





# CULINARY QUICK BITES

## Basic Tastes

### WATCH THE VIDEO

<https://vimeo.com/695263874/21cd2010ff>

### QR CODE

Utilize the QR code embedded to the right to share the video with staff utilizing handheld devices such as smartphones and tablets. Use the photo app on the smart device to scan the code to be directed to the video.



# ACTIVITY

## SETUP

### MATERIALS:



Infographic: The Five Basic Tastes  
– 1 per person



Required recipe ingredients



Required recipe utensils, tools, pans, etc.



Recipe handout: Chickpea Waldorf Salad  
– 1 per person

**NOTE:** Participants will be working together to make the recipe. Determine the quantity of the recipe to prepare based on the number of servings needed for your service. Scale recipe accordingly.

## SETUP INSTRUCTIONS FOR FACILITATOR

- 1** Prior to the training, gather all of the materials needed for the activity. Pre-wash the ingredients that will be used for the training. Set up a workstation for each participant with the utensils and ingredients needed to prepare the recipe.
- 2** During the activity, remember to monitor and observe staff as they practice their culinary skills.

# ACTIVITY

## ACTIVITY INSTRUCTIONS FOR PARTICIPANTS

- 1** Refer the participants to the infographic and recipe. Then read the instructions for the activity. Ask the participants if there are any questions before beginning the activity.
- 2** Instruct all participants to wash their hands and put on single-use gloves before starting the activity.
- 3** As a group, the participants will prepare the recipe. Divide and assign the recipe steps so everyone can participate.
  - Instruct participants to take their time and follow the recipe carefully.
  - Discard waste.



## POST ACTIVITY

- After completing the activity, recap the lesson with the participants. Offer an opportunity for participants to share their learning experience during the training and highlight any tips or takeaways they want to share with the group.
- If time allows, facilitate a discussion with participants. Suggested topics:
  - Ask participants to discuss menu items that combine both sweet and sour flavors.
  - Ask participants if they can suggest menu items where adding one of the five basic tastes would enhance the dish and be more appealing to the students.
- Plan the next training session based on the needs of your staff.
- Remind participants that they should not add ingredients to any standardized recipe without consulting with the Menu Planner or Supervisor first. Recipes may need to be tested/analyzed when adding spices/herbs/culinary acids, etc. before implementing in school cafeterias.



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