



No Time To Train

Short Lessons for School Nutrition Assistants

Herbs, Spices, and Seasonings

Lesson Overview

Lesson Participants: School Nutrition Assistants/Technicians, School Nutrition Managers, and CACFP Staff

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

Time Needed to Conduct the Lesson: 20 minutes

Lesson Description: This lesson discusses herbs, spices, and seasonings used to enhance flavor in food preparation. Learning to use seasoning techniques is helpful in lowering fat, sugar, sodium, and calories in recipes. Participants will review handouts for herbs, spices, and seasoning tips. 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. Describe herbs, spices, seasoning foods, and additional seasonings, and
2. Discuss the advantages of using seasonings to enhance flavor in food preparation.

Get Ready to Train

Note: This lesson should be taught along with the No Time to Train lesson *Identifying the Parts of a USDA Quantity Recipe* and *Adjusting a Recipe with Herbs and Spices*.

The format for this **No Time to Train** lesson includes: a lesson overview, preparation checklist, lesson at a glance with timeline for conducting the lesson, references, an instructor's script, and handouts. The manager/instructor will use the script to present the lesson to participants. The script gives directions to the manager/instructor—**DO, SAY, ASK, LISTEN, AND ACTIVITY**—for delivering 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
	<p>Gather Materials</p> <p>Materials Needed:</p>
<input type="checkbox"/>	<ul style="list-style-type: none"> • Instructor’s Script
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 1: Herbs
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 2: Spices
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 3: Common Blends of Herbs and Spices
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 4: Seasoning Tips
<input type="checkbox"/>	<ul style="list-style-type: none"> • Pencils (one for each participant)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Session Evaluation form (one for each participant)
	<p>Prepare for Lesson</p> <p>Before the Training:</p>
<input type="checkbox"/>	<ul style="list-style-type: none"> • Make copies of Handouts 1, 2, 3, and 4 (one for each participant)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Make copies of Session Evaluation form (one for each participant)
	<p>On Training Day:</p>
<input type="checkbox"/>	<ul style="list-style-type: none"> • Place pencils on tables (one for each participant)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Distribute Handouts 1, 2, 3, and 4 to each participant
	<p>On the Instructor’s Table:</p>
<input type="checkbox"/>	<ul style="list-style-type: none"> • Instructor’s Script
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handouts 1, 2, 3, and 4
<input type="checkbox"/>	<ul style="list-style-type: none"> • Session Evaluation forms



Lesson at a Glance
(20 minutes)

Time	Topic	Task	Materials
8 minutes	Introduction and Overview Objective 1: Describe herbs, spices, seasoning foods, and additional seasonings.	Distribute Handouts 1, 2, and 3. Instructor introduces topic and discusses the differences in herbs, spices, seasoning foods, and additional seasonings.	Instructor's Script Handout 1: Herbs Handout 2: Spices Handout 3: Common Blends of Herbs and Spices
5 minutes	Objective 2: Discuss the advantages of using seasonings to enhance flavor in food preparation.	Distribute Handout 4. Participants will discuss the advantages of using seasoning to enhance flavor in food preparation.	Handout 4: Seasoning Tips
5 minutes	Wrap up and Review	Instructor discusses the application of seasoning techniques in a group discussion.	
2 minutes	Session Evaluation	Conduct a short evaluation of the lesson.	Session Evaluation form

References:

National Food Service Management Institute. (2007). *On the road to professional food preparation*. (2nd ed.). University, MS: Author.

<http://nfsmi.org/documentlibraryfiles/PDF/20111118033712.pdf>

National Food Service Management Institute. (2009). *Culinary techniques for healthy school meals: seasonings*. (2nd ed.). University, MS: Author.

<http://www.nfsmi.org/documentlibraryfiles/PDF/20100210102351.pdf>

National Food Service Management Institute. (2009). *Culinary techniques: using seasonings* online course. University, MS: Author. <http://www.nfsmi.org/onlinecourses>

Culinary Techniques for Healthy School Meals: Introduction course is a prerequisite.

U.S. Department of Agriculture, Food and Nutrition Service. (2008). *A menu planner for healthy school meals...to help you plan, prepare, serve, and market appealing meals*.

http://www.fns.usda.gov/tn/resources/menuplanner_chapter7.pdf

U.S. Department of Agriculture, Food and Nutrition Service, and National Food Service Management Institute. (2002). *Measuring success with standardized recipes*. University, MS: Author.

<http://nfsmi.org/ResourceOverview.aspx?ID=88>

U.S. Department of Agriculture, Food and Nutrition Service, and National Food Service Management Institute. (2006). *USDA recipes for schools*.

http://www.fns.usda.gov/tn/Resources/usda_recipes.html



Instructor's Script



SAY:

As a school nutrition professional, your responsibility is to prepare and serve foods that are nutritious, appealing, good tasting, and safe. A good food item should be the same each time it is served. The *Dietary Guidelines for Americans* and USDA Food and Nutrition Service guidelines for menu planning have set minimum and maximum levels of calories and maximum levels of saturated fat and sodium in school menus. Learning to use seasoning techniques in food preparation can be helpful in lowering fat, sugar, sodium, and calories. Flavors can be enhanced by using herbs and spices to season foods. Experience is required to learn appropriate seasoning and food combinations. **Standardized recipes** are a must to achieve consistency in using seasonings for student taste preferences.



ACTIVITY:

Organize the participants into small working groups for the following activities. Participants will review **Handout 1: Herbs, Handout 2: Spices, Handout 3: Common Blends of Herbs and Spices, and Handout 4: Seasoning Tips.**



DO:

Allow 2-4 minutes for the group to review each chart. Briefly discuss each handout and answer any questions.



ASK:

Do you know the difference between herbs, spices, and seasonings?



LISTEN:

Listen to individual responses.



SAY:

Let's look at **Handout 1: Herbs**. Herbs are leaves, stems, and seeds from plants and are available fresh, dried, or ground. Some herbs commonly used in school recipes are basil, marjoram, oregano, and thyme. NOTE: The herb equivalent is *1 tablespoon of fresh herbs or 1 teaspoon dried leafy herbs or 1/4 to 1/2 teaspoon ground dried herbs.*

Let's look at **Handout 2: Spices**. Spices come from the bark, roots, seeds, and fruit of plants and trees. Some spices commonly used in food preparation are cinnamon, cumin, chili powder, and paprika. NOTE: In general, double the herbs and spices in a recipe when increasing from 50-100 servings. Increase the herbs or spices by 25% for each additional 100 servings and test the recipe. Heat builds in recipes quickly, especially when adding hot seasoning such as red pepper (cayenne), mustard, cloves, and peppercorns.

**SAY:**

Let's talk about the importance of storage for herbs and spices. Protected fresh herbs will keep up to four days in the refrigerator. Store dried herbs and spices in a cool, dry place in an airtight container. The oils in herbs and spices provide flavor but will break down faster if they are exposed to air, light, and warm temperatures. Dried herbs and spices will retain their flavor for 6 months to 1 year. Record the date of delivery on all dried herb and spice containers. Purchasing dried herbs and spices for schools twice each year to be used within a school year is a good practice. Discard dried herbs or spices that have developed a flat aroma.

Seasonings foods include a variety of bell peppers, chili varieties, carrots, celery, garlic, leeks, onions, and shallots. Seasonings foods can be fresh, dried, powders, or granules. Purchase garlic, onion, and celery powders or granules; not garlic, onion, or celery salts, which have more sodium.

Let's look at **Handout 3: Common Blends of Herbs and Spices**. This chart shows herb and spice blends that can save time when assembling ingredients for food preparation. *USDA Recipes for Schools* has recipes for Italian Seasoning Mix (G-01) and Mexican Seasoning Mix (G-01A).

**SAY:**

Additional seasonings include juices such as apple, lemon, lime, orange, and pineapple; orange and lemon zest; meat bases; vegetable stock; and olive oil. Acids such as lemon juice can also be used to inhibit oxidation in fruits and vegetables.

Learning to use a wide variety of seasoning requires experience. **Handout 4: Seasoning Tips** provides suggestions for enhancing flavors in recipes. A final step in the standardization process is for each individual school nutrition service to adjust seasonings according to student taste preferences and local tastes.

**ASK:**

Do you have any questions about seasonings?

**LISTEN:**

Listen to individual responses. Answer questions to the best of your ability. If there are questions you can't answer, tell the 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: Herbs

Name	Form	Taste	Uses
Anise seed	Whole	Sweet licorice flavor	Cookies, cakes, fruit mixtures, chicken
Basil	Fresh, dried chopped leaves	Mint licorice-like flavor	Pizza, spaghetti sauce, tomato dishes, vegetable soups, meat pies, peas, zucchini, green beans
Bay leaves	Whole, ground	Flavor distinctly different from celery	Fish, soups, tomato juice, salad dressing
Caraway seed	Whole	Sharp and pungent	Baked goods such as rye bread, cheeses, sauerkraut dishes, soups, meats, stews
Celery seed	Whole, ground	Flavor distinctly different from celery	Fish, soups, tomato juice, potato salad
Chives	Fresh, freeze dried	In the onion family; delicate flavor	Baked potato topping, all cooked green vegetables, green salad, cream sauces, cheese dishes
Coriander seed	Whole, ground	Pleasant, lemon orange flavor	Ingredient in curry, ground form used in pastries, buns, cookies, and cakes; in processed foods such as frankfurters
Cilantro	Fresh, dried	Sweet aroma, mildly peppery	Ingredient in Mexican foods
Cumin	Whole seeds, ground	Warm, distinctive, salty-sweet, resembles caraway	Ingredient in chili powder and curry powder; German cooks add to pork and sauerkraut and Dutch add to cheese
Dill	Fresh, dried, seeds	Aromatic, like caraway but milder and sweeter	Dill pickles; seeds in meats, sauces, salads, coleslaw, potato salad, and cooked macaroni; dill weed in salads, sandwiches, and uncooked mixtures
Fennel seed	Whole	Flavor similar to anise, pleasant sweet licorice	Bread, rolls, apple pies, seafood, pork and poultry dishes; provides the distinctive flavor to Italian sausage
Marjoram	Fresh, dried whole or ground	Faintly sage like, slight mint aftertaste, delicate	Vegetables, one of the ingredients in poultry and Italian seasoning; processed foods such as bologna
Mint	Fresh leaves or dried flakes	Strong and sweet with a cool aftertaste	Peppermint is the most common variety; popular flavor for candies and frozen desserts; many fruits, peas and carrots



Oregano	Fresh, dried leaves, ground	More pungent than marjoram, reminiscent of thyme	Pizza, other meat dishes, cheese and egg dishes, vegetables such as tomatoes, zucchini, or green beans; an ingredient in chili powder and Italian seasoning
Parsley	Fresh, dried flakes	Sweet, mildly spicy, refreshing	A wide variety of cooked foods, salad dressings, and sandwich spreads
Poppy seed	Whole, crushed	Nut flavor	Whole as a topping for rolls, breads, cakes, cookies, and pastries; crushed in fillings for pastries; over noodles and pasta or rice; in vegetables such as green beans
Rosemary	Fresh, whole leaves	Refreshing, pine, resinous, pungent	Chicken dishes and vegetables such as eggplant, turnips, cauliflower, green beans, beets, and summer squash; enhances the flavor of citrus fruits
Sage	Whole, rubbed, ground	Pungent, warm, astringent	Meats, poultry stuffing, salad dressings; cheese; a main ingredient in poultry seasoning blend; an ingredient in a wide variety of commercial meat products
Savory	Fresh, dried whole or ground	Warm, aromatic, resinous, delicate sage flavor	Beans, meats, soups, salads, sauces; an ingredient in poultry seasoning blend
Sesame seed	Whole	Toasted nut flavor	Rolls, bread, and buns
Tarragon	Fresh, dried leaves	An aroma with a hint of anise; licorice flavor, pleasant, slightly bitter	Vinegar, salad dressings, chicken, tartar sauce, and egg salad
Thyme	Fresh, dried whole or ground	Strong, pleasant, pungent clove flavor	New England clam chowder, Creole seafood dishes, Midwest poultry stuffing, blended with butter is good over green beans, eggplant, and tomatoes
Turmeric (Tumeric)	Dried, powder	Aromatic, warm, mild	Prepared mustards; a main ingredient in curry powder; chicken and seafood dishes, rice, creamed or mashed potatoes, macaroni; salad dressing for a seafood salad; in melted butter for corn on the cob

Source: National Food Service Management Institute. (2009). *Culinary Techniques for Healthy School Meals: Seasonings* (p. 8-9). <http://www.nfsmi.org/documentlibraryfiles/PDF/20100210102351.pdf>



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Handout 2: Spices

Name	Form	Taste	Uses
Allspice	Whole berries, ground	The aroma suggests a blend of cloves, cinnamon, and nutmeg; sweet flavor	Fruit cakes, pies, relishes, preserves, sweet yellow vegetables, such as sweet potatoes and tomatoes
Cardamom seed	Whole, ground	Mild, pleasant, sweet ginger-like flavor	Baked goods, apple and pumpkin pies; an important ingredient in curry
Cinnamon	Whole sticks, ground	Warm, spicy sweet flavor	Cakes, buns, breads, cookies, and pies
Cloves	Whole, ground	Hot, spicy, sweet, penetrating flavor	Whole cloves for baking hams and other pork, pickling fruits, and in stews and meat gravies; ground cloves in baked goods and desserts and to enhance the flavor of sweet vegetables, such as beets, sweet potatoes, and winter squash
Ginger	Fresh, whole, cracked, ground	Aromatic, sweet, spicy, penetrating flavor	Baked goods; rubbed on meat, poultry, and fish; in stir-fry dishes
Mace	Ground	Strong nutmeg flavor	The thin red network surrounding the nutmeg fruit; used in baked goods where a color lighter than nutmeg is desirable
Mustard	Whole seeds, powdered, prepared	Sharp, hot, very pungent	Meats, poultry, fish, sauces, salad dressings, cheese and egg dishes; whole seeds in pickling and boiled beets, cabbage, or sauerkraut
Nutmeg	Whole, ground	Spicy, pleasant flavor	Seed of the nutmeg fruit for baked goods, puddings, sauces, vegetables; in spice blends for processed meats; mixed with butter for corn on cob, spinach, and candied sweet potatoes
Paprika	Ground	Sweet, mild, or pungent flavor	A garnish spice, gives an appealing appearance to a wide variety of dishes; used in the production of processed meats such as sausage, salad dressings, and other prepared foods
Peppercorns; black, white, red, and pink	Whole, ground, coarse ground	Hot, biting, very pungent	Many uses in a wide variety of foods; white pepper ideal in light colored foods where dark specks might not be attractive
Red pepper (Cayenne)	Ground, crushed	Hot, pungent flavor	Meats and sauces

Source: National Food Service Management Institute. (2009). *Culinary Techniques for Healthy School Meals: Seasonings* (p. 7). <http://www.nfsmi.org/documentlibraryfiles/PDF/20100210102351.pdf>



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Handout 3: Common Blends of Herbs and Spices

Many herb and spice mixtures can be purchased commercially, but school nutrition assistants can make their own blends to reduce the number of seasonings in inventory. If commercial blends are purchased, the amount of salt included should be evaluated. The *Dietary Guidelines for Americans* recommends reducing sodium (salt).

Name	Ingredient	How it is Used
Apple pie spice	Cinnamon, cloves, nutmeg, mace, allspice, ginger	Baked pies, cakes, pastries
Barbeque spice	Cumin, garlic, cloves, paprika, and other ingredients: chili pepper, salt, sugar	Barbeque sauce, salad dressing, meat casseroles, potatoes
Chili powder	Cumin, garlic, oregano, cloves, allspice, powdered onion, and other ingredients: chili pepper, salt	Chili con carne, gravy, meat stews
Curry powder	Ginger, turmeric, cloves, cinnamon, cumin, black and red pepper, fenugreek seed (a spice specific to this blend)	Indian curry dishes, curry sauces, French dressing, scalloped tomatoes, fish chowders, split pea soup
Poultry seasoning	Sage, thyme, marjoram, savory, sometimes rosemary	Poultry and other stuffing, meat loaf; biscuits served with poultry
Pumpkin pie spice	Cinnamon, nutmeg, cloves, ginger	Pumpkin pie, spice cookies and cakes, gingerbread

Source: National Food Service Management Institute. (2009). *Culinary Techniques for Healthy School Meals: Seasonings* (p. 11). <http://www.nfsmi.org/documentlibraryfiles/PDF/20100210102351.pdf>



Handout 4: Seasoning Tips

Learning to use a wide variety of seasonings requires experience. Below are seasoning tips you can use as you expand your experience with seasonings.

- Citrus juices, such as lime juice and orange or lemon zest contrast with milder fruits like bananas.
- Spices like cinnamon complement apple slices.
- Sweet herbs like mint, nutmeg, ginger, or anise complement citrus fruit such as orange or grapefruit slices.
- Fresh herbs like savory, basil, or cilantro can be added directly to a green salad.
- Salads with strong-flavored ingredients call for peppery dressings. Try some of these additions to a basic dressing:
 - Peppery herbs: red pepper, black pepper, mustard, and paprika
 - Strong herbs: oregano, tarragon, chives, and dill
 - Seasonings: garlic, onion, or pepper
 - Additional seasonings: hot sauce, Worcestershire sauce, garlic powder, or onion powder
- For delicately flavored vegetables like mashed potatoes, add a sweet spice like nutmeg to complement the flavor; add a savory spice like oregano, chives, or dill to totally change the flavor.
- For strong-flavored vegetables use peppery spices like basil, black pepper, and savory.
- Use less salt to season fries; try Cajun seasoning blend to enhance flavor.
- For baked fruits, use dessert type spices such as nutmeg, cloves, or apple pie spice blend.
- A mix of ginger, soy sauce, and pineapple juice makes a good light, sweet, moist marinade for poultry.
- Cayenne pepper, garlic, coriander, cilantro, black pepper, cumin, and lime juice make a heavier, peppery, moist marinade for a Caribbean taste.
- For an Italian taste, use garlic, white pepper, and an Italian blend in a savory, moist marinade.
- Blends of dry spices can be rubbed into cuts of meat the day before cooking as a dry marinade. The flavors are absorbed into the meat before and during cooking.
- Browning or grilling meat is a subtle form of seasoning that adds a distinct flavor, color, and aroma.
- Herbs and seeds like caraway, dill, poppy, and sesame can be baked into bread or sprinkled on top for a nice accent.
- Use cinnamon and nutmeg in raisin bread.
- Use garlic and ground peppercorns in garlic sticks.
- Add chopped onions to dough to create onion rolls.
- Cook rice in stock or flavored broth instead of water to enhance flavor.
- Spice up your spaghetti sauce with fennel to replace some of the Italian sausage taste.

Handout 4: Seasoning Tips (continued)

- The flavor of ground herbs can be lost quickly. There is no exact rule, but the herbs should be added close to the end of the cooking time. Adequate time should be allowed for the dried herb to absorb enough moisture to release the flavor. Ground herbs should be added just before the cooking of the food is complete.
- Whole spices are best suited to long cooking recipes. Whole spices should be added as soon as cooking begins to obtain maximum flavor enhancement. Whole spices and herbs (fresh and dried) should be removed before the food is served. The use of a sachet d'epices (cheese cloth or bag) makes removal of these whole herbs and spices easy.
- In a fruit recipe, a general rule is to increase the spice by 50% and decrease the sugar by 50% to enhance the flavor.
- Sesame seed should be toasted before use unless it is used as a topping that will be exposed to the direct heat of the oven.
- Dry mustard has no smell. The aroma develops when it is mixed with a cold liquid. Allow 10-15 minutes for the full flavor to develop.
- The flavor of seasonings (especially dried herbs) tends to become more intense in a food over time. If a food (for example, chili or spaghetti sauce) is cooked the day before and reheated for serving, this preparation technique should be taken into consideration when deciding how much seasoning to use. The longer a food is held after preparation the more the flavors have an opportunity to fuse, mellow, and develop a full, rich taste.
- For cold foods such as salad dressings and cold salads, add the seasoning several hours in advance to allow the flavors to develop. When adding additional seasonings to salad dressing, make the additions the day before and allow the flavor to develop overnight.
- In quick-cooking foods such as vegetables, add the herbs at the start of cooking.
- In slow-cooking foods such as soups or stews, add herbs in the final 15-20 minutes.
- To prepare fresh herbs for use, wash in cool water and discard any blemished leaves. The herbs are ready for use in a bouquet garni. If the fresh herbs are to be used chopped, the woody stems should be removed and the fresh herb should be chopped to the size appropriate for the food.

Source: National Food Service Management Institute. (2009). *Culinary Techniques for Healthy School Meals: Seasonings* (p. 13-14). <http://www.nfsmi.org/documentlibraryfiles/PDF/20100210102351.pdf>



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Herbs, Spices, and Seasonings



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: _____	Trainer's Code: _____
Session Topic: _____	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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