Seasonings

National Food Service Management Institute
The University of Mississippi
Culinary Techniques for Healthy School Meals

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The National Food Service Management Institute was authorized by Congress in 1989 and established in 1990 at The University of Mississippi in Oxford. The Institute operates under a grant agreement with the U.S. Department of Agriculture, Food and Nutrition Service.

**PURPOSE**

The purpose of the National Food Service Management Institute is to improve the operation of child nutrition programs through research, education and training, and information dissemination. The Administrative Offices and Divisions of Information Services and Education and Training are located in Oxford. The Division of Applied Research is located at The University of Southern Mississippi in Hattiesburg.

**MISSION**

The mission of the National Food Service Management Institute is to provide information and services that promote the continuous improvement of child nutrition programs.

**VISION**

The vision of the National Food Service Management Institute is to be the leader in providing education, research, and resources to promote excellence in child nutrition programs.

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# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seasonings</td>
<td>2</td>
</tr>
<tr>
<td>Important Terms</td>
<td>3</td>
</tr>
<tr>
<td>Mise en Place</td>
<td>4</td>
</tr>
<tr>
<td>Seasonings and Healthy School Meals</td>
<td>5</td>
</tr>
<tr>
<td>Culinary Principles</td>
<td>6 - 14</td>
</tr>
<tr>
<td>Culinary Technique: Enhancing the Flavor of Salad Dressing for Fruit</td>
<td>15</td>
</tr>
<tr>
<td>Culinary Technique: Enhancing the Flavor of Salad Dressing for Baked Potatoes</td>
<td>16</td>
</tr>
<tr>
<td>Culinary Technique: Enhancing the Flavor of Honey Lemon Chicken with a Marinade</td>
<td>17</td>
</tr>
<tr>
<td>Culinary Technique: Enhancing the Flavor of Ground Beef Using Seasoning Blends</td>
<td>18</td>
</tr>
<tr>
<td>Culinary Application and Practice Activity</td>
<td>19</td>
</tr>
<tr>
<td>References</td>
<td>20</td>
</tr>
</tbody>
</table>
Objectives
Improve the quality of foods served to students.
Improve the appeal of foods served to students.
Improve the healthfulness of foods served to students.

Main Ideas in This Lesson
• The way a food is seasoned can enhance the flavor.
• Seasoning can be added by following the recipe.
• The creative use of seasoning can enhance flavor and create a new recipe.
• There are five basic types of seasonings.
• There are general rules to be followed in the use of seasoning.
• Experience is required to learn appropriate seasoning and food combinations.

Preparation for Learning
Review the list of recipes with each Culinary Technique. The recipes are available at:

Available online at http://www.nfsmi.org
Available online at http://www.nfsmi.org

Practice or Application
Prepare one or more of the recipes listed with one of the Culinary Techniques.
Important Terms

**Bouquet Garni (Bo-Ka GAHR-Nee)**
A selection of herbs that are wrapped with kitchen twine and put in the food to season it during cooking. The bouquet garni is removed when the desired level of seasoning has been achieved. The twine is used to remove the herbs.

**Culinary**
Relating to the kitchen or cooking. An example of use is to describe food preparation skills as culinary skills.

**Culinary Technique**

**Sachet D’Epices (Sa-SHA Day-Pees)**
A selection of herbs and spices tied in a cloth bag usually made of cheese cloth. The Sachet D’Epices is used for flavoring soups, stews, and sauces and is removed when cooking is complete.

**Caramelize**
The heating of a seasoning food until a golden to brown color is developed and the characteristic flavor is developed.

**Marinade**
A mixture of oil, acid foods, and seasonings used to flavor meats and vegetables.

**Mise en Place (meez-un-plahss)**
A French term used by chefs and other food professionals to describe all the different things that have to be done to get ready up to the point of cooking. Translated, it means *put in place*. It includes all the *get ready steps* in food preparation such as using the recipe to assemble the equipment needed and getting ingredients ready to combine.

**Mirepoix (MIHR-pwah)**
A mixture of chopped vegetables used in flavoring soup or roasts; generally includes 50% onions, 25% carrots, and 25% celery.

**Pungent (PUN-jent)**
A sharp taste, biting.

**Stock**
A flavorful liquid prepared by simmering meat, poultry, fish, and/or vegetables in water until the flavor is extracted.
Getting Ready

Purchasing spices and herbs

Federal Standards of Identity define what can be included in a spice or herb of a specific name. These standards are in Title 21 Code of Federal Regulations. Because there are no Federal grade standards, consider prior approval of brands to be certain that the supplier is reliable.

The bid/price quote instructions or the food description should require that the code for the date of manufacture be provided with the prices. Give the code to the person who receives deliveries at the site or warehouse and ask the receiver to determine how much of the shelf life remains.

In most school food authorities the spice or herb is placed on the bid list, and each preparation site orders as needed. With this practice, small spice or herb orders are placed each week. Changing the purchasing system to obtain prices for spices and herbs twice each year is more efficient. This process also assures product freshness. Purchasing spices and herbs before school starts and in January avoids the problem of storing the product in a hot storage area while the kitchen is closed.

Reputable manufacturers will quote prices in the same general range. All prices should be checked for variance from other prices offered. Investigate differences in the price over 5% to determine the quality differences.

Fresh herbs can be purchased with the other fresh produce items. A small produce distributor may be encouraged to stock those fresh herbs you have chosen to use. Providing the quantity needed and the frequency of use will encourage the produce distributor to stock these items.

Storing spices and herbs

Fresh Herbs

- Refrigerate cut fresh herbs to prevent spoilage.
- Put fresh herb bouquets in containers and place in the refrigerator.
- Loosely wrap the bouquet in film wrap to extend the shelf life of the fresh herb. Smaller sprigs and individual leaves should be wrapped in a paper towel or placed in a food-safe plastic bag.
- Fresh herbs will keep up to four days in the refrigerator.

Dried Herbs and Spices

- Store dried herbs and spices in a cool, dry place in an airtight container. Herbs and spices provide flavor because they contain oils that break down faster if they are exposed to air, light, and warm temperatures.
- The majority opinion is that dried herbs and spices will retain their flavor for 6 months to 1 year. Record the date of delivery on all dried spice and herb containers. Discard a dried spice or herb that has developed a flat aroma. Some foodservice assistants are hesitant to discard old seasonings because of their cost. Remember serving customers foods that taste good is what is most important.
Menu-Planning Practices for Healthy School Meals

• Use a low sodium broth or stock for additional flavor in soups, sauces, and cooked grains, such as rice and quinoa.
• Experiment with herbs, spices, and lemon for seasonings to use in place of part of the salt.

Purchasing Practices for Healthy School Meals

• Check for the amount of sodium in purchased items.
• Purchase garlic, onion, and celery powders or granules, not garlic, onion, or celery salts, which have more sodium.
• Purchase seasoning mixes that do not contain monosodium glutamate (MSG) or where salt is not the primary ingredient.
• Look to local farmers as an alternative to purchasing fresh produce. Check out www.farmtoschool.org.

What do you want to hear when your customer has finished a meal? Something like, “The meal was delicious. It tasted so good.” Appropriate seasonings can make it happen.

Exploring the exciting world of seasonings and how to use them gives foodservice assistants wonderful opportunities to express their creativity.

As fat, salt, and sugar are reduced in school menus to meet the goals of the Dietary Guidelines, seasonings can help replace lost flavors. The exciting new flavors that can be introduced are limited only by our skill and creativity.

Seasonings can be used by foodservice assistants to enhance the flavor of food in two ways:

• Follow the standardized recipe. Mix the seasonings with the food at the exact time specified, and use the food preparation technique (browning, caramelizing, and marinating) specified.
• Create a new recipe by experimenting with the addition of new herbs and spices.
Basic Principles of Seasonings

The general term spices is commonly used to mean spices, herbs, and dried vegetables used for seasoning. Food preparation techniques such as caramelizing and marinating are also methods of adding flavor to foods. Fruit juices are also flavoring agents. We do not think of marinating or fruit juice as a spice. Successful food service assistants’ creativity in seasoning foods is not limited to spices.

Below are ingredients or techniques that are tools of effective flavoring of foods.

**Spices**
Spices include allspice, cardamom, cinnamon, cloves, ginger, mace, mustard, nutmeg, paprika, peppercorns, and red pepper.

**Herbs**
Herbs include anise seed, basil, bay leaves, caraway seed, celery seed, chives, cilantro (coriander leaves), coriander, cumin, dill, fennel seed, marjoram, mint, oregano, parsley, poppy seed, rosemary, sage, savory, sesame seed, tarragon, thyme, and turmeric.

**Seasoning foods**
Bell peppers – green, red, yellow, hot chili pepper such as Jalapeno pepper, and many other varieties of pepper; carrots, celery, garlic, lean smoked meat, leek, onion, and shallot are examples of seasonings.

**Additional seasonings**
Other seasonings include juices: apple, lemon, lime, orange, pineapple; orange and lemon zest; meat bases; vegetable stock; olive oil; hot sauce; soy sauce; Worcestershire sauce; smoke flavor concentrate; and sesame seed oil.

**Preparation techniques**
Browning, caramelizing, roasting, and marinating are simple culinary techniques that add flavor.

The lists above were limited to seasonings most practical for school foodservice. In summary, seasonings added to a food during preparation enhance the natural flavor of the food.

This enhancement can be achieved in five different ways:
1. By adding spices
2. By adding herbs
3. By adding seasoning foods
4. With additional seasonings
5. By using certain food preparation techniques
## Spices

Spices are prepared from the roots, buds, flowers, fruits, bark, or seeds of plants. The chart shows some of the basic information about spices.

<table>
<thead>
<tr>
<th>Name</th>
<th>Form</th>
<th>Taste</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allspice</td>
<td>Whole berries, ground</td>
<td>The aroma suggests a blend of cloves, cinnamon, and nutmeg; sweet flavor</td>
<td>Fruit cakes, pies, relishes, preserves, sweet yellow vegetables, such as sweet potatoes and tomatoes</td>
</tr>
<tr>
<td>Cardamom seed</td>
<td>Whole, ground</td>
<td>Mild, pleasant, sweet ginger-like flavor</td>
<td>Baked goods, apple and pumpkin pies; an important ingredient in curry</td>
</tr>
<tr>
<td>Cinnamon</td>
<td>Whole sticks, ground</td>
<td>Warm, spicy sweet flavor</td>
<td>Cakes, buns, breads, cookies, and pies</td>
</tr>
<tr>
<td>Cloves</td>
<td>Whole, ground</td>
<td>Hot, spicy, sweet, penetrating flavor</td>
<td>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 examples beets, sweet potatoes, and winter squash</td>
</tr>
<tr>
<td>Ginger</td>
<td>Fresh, whole, cracked, ground</td>
<td>Aromatic, sweet, spicy, penetrating flavor</td>
<td>Baked goods; rubbed on meat, poultry, and fish; in stir-fry dishes</td>
</tr>
<tr>
<td>Mace</td>
<td>Ground</td>
<td>Strong nutmeg flavor</td>
<td>The thin red network surrounding the nutmeg fruit; used in baked goods where a color lighter than nutmeg is desirable</td>
</tr>
<tr>
<td>Mustard</td>
<td>Whole seeds, powdered, prepared</td>
<td>Sharp, hot, very pungent</td>
<td>Meats, poultry, fish, sauces, salad dressings, cheese and egg dishes; whole seeds in pickling and boiled beets, cabbage, or sauerkraut</td>
</tr>
<tr>
<td>Nutmeg</td>
<td>Whole, ground</td>
<td>Spicy, pleasant flavor</td>
<td>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</td>
</tr>
<tr>
<td>Paprika</td>
<td>Ground</td>
<td>Sweet, mild, or pungent flavor</td>
<td>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</td>
</tr>
<tr>
<td>Peppercorns: black, white, red, and pink</td>
<td>Whole, ground, coarse ground</td>
<td>Hot, biting, very pungent</td>
<td>Many uses in a wide variety of foods; white pepper ideal in light colored foods where dark specks might not be attractive</td>
</tr>
<tr>
<td>Red pepper (Cayenne)</td>
<td>Ground, crushed</td>
<td>Hot, pungent flavor</td>
<td>Meats and sauces</td>
</tr>
</tbody>
</table>
**Herbs**

Herbs come from the leaf or soft portions of plants.

<table>
<thead>
<tr>
<th>Name</th>
<th>Form</th>
<th>Taste</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anise seed</strong></td>
<td>Seeds</td>
<td>Sweet licorice flavor</td>
<td>Cookies, cakes, fruit mixtures, chicken</td>
</tr>
<tr>
<td><strong>Basil</strong></td>
<td>Fresh, dried chopped leaves</td>
<td>Mint licorice-like flavor</td>
<td>Pizza, spaghetti sauce, tomato dishes, vegetable soups, meat pies, peas, zucchini, green beans</td>
</tr>
<tr>
<td><strong>Bay leaves</strong></td>
<td>Whole, ground</td>
<td>Flavor distinctly different from celery</td>
<td>Fish, soups, tomato juice, potato salad dressing</td>
</tr>
<tr>
<td><strong>Caraway seed</strong></td>
<td>Whole</td>
<td>Sharp and pungent</td>
<td>Baked goods such as rye bread, cheeses, sauerkraut dishes, soups, meats, stews</td>
</tr>
<tr>
<td><strong>Celery seed</strong></td>
<td>Whole, ground</td>
<td>Flavor distinctly different from celery</td>
<td>Fish, soups, tomato juice, potato salad</td>
</tr>
<tr>
<td><strong>Chives</strong></td>
<td>Fresh, freeze dried</td>
<td>In the onion family; delicate flavor</td>
<td>Baked potato topping, all cooked green vegetables, green salads, cream sauces, cheese dishes</td>
</tr>
<tr>
<td><strong>Coriander seed</strong></td>
<td>Whole, ground</td>
<td>Pleasant, lemon orange flavor</td>
<td>Ingredient in curry, ground form used in pastries, buns, cookies, and cakes; in processed foods such as frankfurters</td>
</tr>
<tr>
<td><strong>Cilantro</strong></td>
<td>Fresh, dried</td>
<td>Sweet aroma, mildly peppery</td>
<td>Ingredient in Mexican foods</td>
</tr>
<tr>
<td><strong>Cumin</strong></td>
<td>Whole seeds, ground</td>
<td>Warm, distinctive, salty-sweet, resembles caraway</td>
<td>Ingredient in chili powder and curry powder; German cooks add to pork and sauerkraut and Dutch add to cheese</td>
</tr>
<tr>
<td><strong>Dill</strong></td>
<td>Fresh, dried, seeds</td>
<td>Aromatic, like caraway but milder and sweeter</td>
<td>Dill pickles; seeds in meats, sauces, salads, coleslaw, potato salad, and cooked macaroni; dill weed in salads, sandwiches, and uncooked mixtures</td>
</tr>
<tr>
<td><strong>Fennel seed</strong></td>
<td>Whole</td>
<td>Flavor similar to anise, pleasant sweet licorice</td>
<td>Breads, rolls, apple pies, seafood, pork and poultry dishes; provides the distinctive flavor to Italian sausage</td>
</tr>
<tr>
<td><strong>Marjoram</strong></td>
<td>Fresh, dried whole or ground</td>
<td>Faintly sage like, slight mint aftertaste, delicate</td>
<td>Vegetables, one of the ingredients in poultry and Italian seasoning; processed foods such as bologna</td>
</tr>
<tr>
<td><strong>Mint</strong></td>
<td>Fresh leaves or dried flakes</td>
<td>Strong and sweet with a cool aftertaste</td>
<td>Peppermint is the most common variety; popular flavor for candies and frozen desserts; many fruits, peas and carrots</td>
</tr>
<tr>
<td><strong>Oregano</strong></td>
<td>Fresh, dried leaves, ground</td>
<td>More pungent than marjoram, reminiscent of thyme</td>
<td>Pizza, other meat dishes, cheese and egg dishes; vegetables such as tomatoes, zucchini, or green beans; an ingredient in chili powder</td>
</tr>
<tr>
<td>Name</td>
<td>Form</td>
<td>Taste</td>
<td>Uses</td>
</tr>
<tr>
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<td>-----------------------</td>
<td>--------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Parsley</td>
<td>Fresh, dried flakes</td>
<td>Sweet, mildly spicy, refreshing</td>
<td>A wide variety of cooked foods, salad dressings, and sandwich spreads</td>
</tr>
<tr>
<td>Poppy seed</td>
<td>Whole, crushed</td>
<td>Nut flavor</td>
<td>Whole as a topping for rolls, breads, cakes, cookie, and pastries; crushed in fillings for pastries; over noodles and pasta or rice; in vegetables such as green beans</td>
</tr>
<tr>
<td>Rosemary</td>
<td>Fresh, whole leaves</td>
<td>Refreshing, pine, resinous, pungent</td>
<td>Chicken dishes and vegetables such as eggplant, turnips, cauliflower, green beans, beets, and summer squash; enhances the flavor of citrus fruits</td>
</tr>
<tr>
<td>Sage</td>
<td>Whole, rubbed, ground</td>
<td>Pungent, warm, astringent</td>
<td>Meats, poultry stuffing, salad dressings; cheese; a main ingredient in poultry seasoning blend; an ingredient in a wide variety of commercial meat products</td>
</tr>
<tr>
<td>Savory</td>
<td>Fresh, dried whole or ground</td>
<td>Warm, aromatic, resinous, delicate sage flavor</td>
<td>Beans, meats, soups, salads, sauces; an ingredient in poultry seasoning blend</td>
</tr>
<tr>
<td>Sesame seed</td>
<td>Whole</td>
<td>Toasted nut flavor</td>
<td>Rolls, bread, and buns</td>
</tr>
<tr>
<td>Tarragon</td>
<td>Fresh, dried leaves</td>
<td>An aroma with a hint of anise; licorice flavor, pleasant, slightly bitter</td>
<td>Vinegar, salad dressings, chicken, tartar sauce, and egg salad</td>
</tr>
<tr>
<td>Thyme</td>
<td>Fresh, dried whole or ground</td>
<td>Strong, pleasant, pungent clove flavor</td>
<td>New England clam chowder, Creole seafood dishes, midwest poultry stuffing; blended with butter is good over green beans, eggplant, and tomatoes</td>
</tr>
<tr>
<td>Turmeric (Tumeric)</td>
<td>Dried, powder</td>
<td>Aromatic, warm, mild</td>
<td>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</td>
</tr>
</tbody>
</table>
Other Seasoning Foods
Other seasoning foods are items that are added for additional flavor. This may include the following:
- sweet bell peppers (green, red, yellow),
- hot chili peppers,
- Jalapeno peppers and many other varieties of peppers,
- carrots,
- celery,
- onions,
- garlic,
- lean smoked meats,
- leeks,
- shallots, and
- citrus zest or peel. Zest is the grated outer peel of any citrus fruit. The most common are lemon and orange. The white inner peel should not be used as it imparts a bitter flavor.

General Rules for Enhancing Flavor During Food Preparation
- The development of flavor through the use of seasonings is a creative process. Always start with a small amount and increase until the product has an acceptable taste and aroma. In general start with 1/4 teaspoon per pint or pound of a food product. When using garlic powder or pepper start with only 1/8 teaspoon.
- Use two times as much of a fresh herb or spice as of the dried form (for example, 2 teaspoons of fresh basil equals 1 teaspoon dried whole leaf basil).
- Use twice as much of a dried leaf herb as of the ground form (for example, 1/2 teaspoon dried thyme leaves equals 1/4 teaspoon ground thyme).

- A total of 1–3 tablespoons herbs and spices per 50 portions of a recipe is generally adequate.
- In general, double the spices and herbs in a recipe when increasing from 50–100 servings. Increase the spice or herb by 25% for each additional 100 servings.
- Heat builds in recipes quickly. Be especially careful when adding hot seasonings such as red pepper (cayenne), mustard, cloves, and peppercorns: red, white, pink, or black.

Processes to Capture Flavor
Gourmets consider the true value of a food is its flavor. Several different processes help to capture flavor.
- Infusion: Infuse (steep) herbs and spices in vinegars, oils, stocks, and juice to enhance the flavor before the liquids are used in recipes.
- Marination: Marinate foods by submerging (soaking) in the mixture of ingredients, by basting or brushing the food while it is being cooked, or putting a dry or wet rub on the food before the cooking is started.
- Reduction: Reducing enhances flavor through concentration. A liquid is reduced by boiling away some of the liquid. Reduce fruit juice concentrate by decreasing the amount of water before it is added to a recipe.
Short Cuts to Use Spices and Herbs as Seasoning

Blends of seasoning foods, spices, and herbs can save time when assembling ingredients for food preparation. Some blends have been in use for a long time. The chart below identifies the ingredients in some of the blends you use in your kitchen.

Many spice and herb mixtures can be purchased commercially, but school foodservice 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 recommend moderate use of sodium (salt).

Common Blends of Herbs and Spices

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

Time, practice, and patience will help you develop a sense of how to build and blend flavors effectively through seasoning. Each spice, herb, or additional food has its own flavoring strength. Flavors will vary with different foods, other seasonings, and the form of the herb or spice. Be creative with the use of seasoning, but do it gradually. Learn your customers’ taste preferences. All changes made to recipes to enhance the flavor should be student tested. As we age, our taste buds lose sensitivity; therefore, it takes more seasoning for adults to taste the flavor. What may be right for the adult taste could turn off student customers.

Foodservice assistants can obtain students’ opinions on the taste of food in two simple ways, listed below.

1. Choose a select group of students; make a small portion of a new recipe; ask students to taste and give their opinion.
2. Prepare a small portion of a new recipe; place the food on the serving line; ask those students who selected the new item to rate the taste of the food.
Seasoning Tips
Learning to use a wide variety of seasonings requires experience. Below are seasoning tips as we expand our experience with a wide variety of 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, chopped, basil, or cilantro can be added directly to a green salad.
• Salads with strong-flavored ingredients call for pepperier 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
  ◦ Seasoning foods: chopped garlic, grated onion, or chopped 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.
• The flavor of ground herbs can be lost quickly. Ground herbs should be added just before the cooking of the food is complete.
• 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.
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 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%. The spice enhances the flavor, and less sugar is required.

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.
1. Prepare Honey Dressing according to standardized recipe, *USDA Recipes for Schools* E-20.

2. Identify the fruits in the salad on which the dressing will be used.

3. Decide whether you want to complement (blend with) or contrast with the flavor of the fruit.
   
   A *contrast* example: citrus juices or zest added to the dressing will contrast nicely with milder fruits like bananas.

   A *complement* example: light spices - like cinnamon complements apple slices nicely, or sweet herbs like mint complement citrus fruit such as orange slices.

4. Experiment by seasoning to taste.

5. Prepare the day before and refrigerate over-night to allow the flavors to fully develop.

6. Write down the changes you have made to create this new standardized recipe.

7. Serve the food to your students. Talk to the students about how the food tasted and smelled.

8. Decide if the change is acceptable to students.
   
   If the product is acceptable you now have a new recipe. If the change is not acceptable to students, repeat steps 4, 5, 6, and 7.
Enhancing the Flavor of Salad Dressing for Baked Potatoes

2. Identify the dried herbs in the recipe that could be replaced with a fresh herb or seasoning food. Remember that chives, parsley, onions, and garlic can be purchased and used fresh.
3. Review the rule for quantity of fresh seasoning that should be used in a recipe to replace the dried seasoning. The general rule is to use two times as much fresh seasoning as dried.
4. Prepare the recipe according to the directions, leaving out the dried seasonings you have selected to replace with fresh.
5. Add 2/3 of the quantity of fresh seasonings to the recipe and refrigerate overnight.
6. Taste the new salad dressing and decide if the remaining 1/3 of the fresh seasonings is needed. If needed, add the remaining fresh seasonings and refrigerate until meal service time.
7. Write down the changes you have made to create the new standardized recipe.
8. Serve the food to your students. Talk to the students about how the food tasted and smelled.
9. Decide if the change is acceptable to students. If the product is acceptable you now have a new recipe. If the change is not acceptable to students, repeat steps 2, 3, 4, 5, and 6.
1. Review the recipe for Honey Lemon Chicken, *USDA Recipes for Schools* D-44.

2. Remove the skin from the thighs.

3. Use your creativity to enhance the flavor of this product by creating a marinade for the chicken.

   Approximately 1 quart of marinade will be required per 50 servings. Potential ingredients for the marinade are pineapple juice, soy sauce, fresh garlic, and cilantro, if available. Start with 3 cups pineapple juice, 1 cup of soy sauce, 2 cloves of chopped fresh garlic, and 1/4 cup of chopped fresh cilantro. Taste the marinade and adjust the seasoning, if necessary.

4. Place the skinned chicken thighs in a food container and pour the marinade over the product.

   Refrigerate for a minimum of 2 hours or overnight.

5. Drain the marinade from the chicken and continue preparation according to the instructions on recipe.

   Be certain the marinade is discarded and not served or saved for future use.

6. Write down the changes you have made to create this new standardized recipe. Serve the food to your students.

   Talk to the students about how the food tastes and smells.

7. Decide if the change is acceptable to students.

   If the product is acceptable you now have a new recipe. If the change is not acceptable to students, repeat steps 2, 3, 4, and 5. It may be necessary to wait until chicken is on the menu again to revise the new recipe.
1. Choose your favorite ground beef recipe.

2. Decide what flavor you want to develop in the ground beef.
   Some suggestions are on USDA Recipes for Schools G-l (Seasoning Mixes) and the seasoning blend chart in this module.

3. Prepare the ground beef according to the recipe directions.
   Add 1/4 cup of the seasoning blend selected per 5 lbs of ground beef. Cook according to the recipe directions. Taste and determine if the flavor developed is acceptable. The amount of seasoning blend required to fully develop the flavor will vary based on the blend selected and the food it is being mixed with. Remember the rule, start with a small amount and add until the desired flavor is achieved.

4. Complete the ground beef dish using the recipe selected.

5. Write down the changes you have made to create this new standardized recipe.

6. Serve the food to your students. Talk to the students about how the food tasted and smelled.

7. Decide if the change is acceptable to students.
   If the product is acceptable you now have a new recipe. If the change is not acceptable to students, repeat steps 2, 3, and 4.
Culinary Practice is an activity designed to give foodservice assistants an opportunity to practice enhancing the flavor of foods with seasonings. This practice should be completed within 10 days after the lesson. Use the Culinary Practice Score Card* for the product (see Culinary Techniques lessons for example) for the activity.

1. Foodservice assistants may work as partners or individually, depending on the directions from the manager. One partner should be someone who cooks and the other, someone who has other responsibilities. Both foodservice assistants should work together to complete the Culinary Practice.

2. The manager and foodservice assistants should discuss the Culinary Practice for enhancing the flavor of foods with seasoning. Make a note of the date the Culinary Practice should be completed and discussed with the manager.

3. The manager will approve the recipe to be used or modified for the practice. The recipe should use one of the culinary techniques described in this lesson. To review the steps of the culinary techniques, refer to:
   • Culinary Technique: Enhancing the Flavor of Salad Dressing for Fruit
   • Culinary Technique: Enhancing the Flavor of Ranch Dressing for Baked Potatoes
   • Culinary Technique: Enhancing the flavor of Honey Lemon Chicken with a Marinade
   • Culinary Technique: Enhancing the Flavor of Ground Beef with a Seasoning Blend

4. The manager and foodservice assistants who prepared the product will evaluate the product before it is placed on the service line. Use the Quality Score Card* for enhancing the flavor of foods with seasonings. Use the Quality Score Card for the product being prepared. (See Culinary Techniques lessons for examples.)

* The Culinary Practice Score Card and the Quality Score Card are not Included in this lesson.

Restaurant spice chart, McCormick Food Service Division


