

Fifth Edition

HEALTHY CUISINE FOR Kids



Culinary Manual



I N S T I T U T E O F
child nutrition
R E S O U R C E S • T R A I N I N G • R E S E A R C H

Healthy Cuisine for Kids

Culinary Manual

PROJECT COORDINATOR

Lewanda Morse, PhD

ACTING EXECUTIVE DIRECTOR

Aleshia Hall-Campbell, PhD, MPH



2016

Institute of Child Nutrition

The University of Mississippi

The Institute of Child Nutrition was authorized by Congress in 1989 and established in 1990 at The University of Mississippi in Oxford and is operated in collaboration with The University of Southern Mississippi in Hattiesburg. The Institute operates under a grant agreement with the United States Department of Agriculture, Food and Nutrition Service.

PURPOSE

The purpose of the Institute of Child Nutrition is to improve the operation of child nutrition programs through research, education and training, and information dissemination.

MISSION

The mission of the Institute of Child Nutrition is to provide information and services that promote the continuous improvement of child nutrition programs.

VISION

The vision of the Institute of Child Nutrition is to be the leader in providing education, research, and resources to promote excellence in child nutrition programs.

This project has been funded at least in part with Federal funds from the U.S. Department of Agriculture, Food and Nutrition Service through an agreement with the Institute of Child Nutrition at The University of Mississippi. The contents of this publication do not necessarily reflect the views or policies of the U.S. Department of Agriculture, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. government.

The University of Mississippi is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA Employer.

In accordance with Federal law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability.

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights; Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

© 2016, Institute of Child Nutrition, The University of Mississippi, School of Applied Sciences

Except as provided below, you may freely use the text and information contained in this document for non-profit or educational use with no cost to the participant for the training providing the following credit is included. These materials may not be incorporated into other websites or textbooks and may not be sold.

Suggested Reference Citation:

Institute of Child Nutrition. (2016). *Healthy cuisine for kids*. University, MS: Author.

The photographs and images in this document may be owned by third parties and used by The University of Mississippi under a licensing agreement. The University cannot, therefore, grant permission to use these images.

For more information, please contact helpdesk@theicn.org.

November /2016

Table of Contents

ICN Competencies, Knowledge, and Skills	1
Professional Standards & Key Areas	3
Preparation Checklist.....	5
Overview	7
Purpose of the Culinary Lab	8
The Culinary Manual	8
Training-at-a-Glance	9
Day 1 – Introduction and Lesson 1: Culinary Basics.....	11
Introduction	13
Seminar Objectives.....	14
Classroom Instruction.....	15
Team Rosters.....	19
Culinary Demonstration #1	33
Culinary Lab #1	35
Day 1 – Lesson 2: Fruits and Vegetables	37
Classroom Instruction.....	39
Culinary Demonstration #2.....	47
<i>Roasted Vegetables</i> recipe	49
<i>Spinach with Garlic</i> recipe	51
Culinary Lab #2.....	53
<i>Tasty Tots</i> recipe	55
<i>Stir Fry Fajita Chicken, Squash, and Corn</i> recipe	59
<i>Roasted Fish Crispy Slaw Wrap</i> recipe.....	63
<i>Sweet Potato and Black Bean Stew</i> recipe	67
Product Evaluation	71
Day 2 – Lesson 1: Whole Grain-Rich Foods	73
Classroom Instruction.....	75
Culinary Demonstration #3.....	79
<i>Brown Rice Pilaf</i> recipe	81
<i>Chić Penne</i> recipe	83

Table of Contents

Day 2 – Lesson 1: Whole Grain-Rich Foods, continued	
Culinary Lab #3.....	87
<i>Chicken Alfredo with a Twist</i> recipe	89
<i>Mediterranean Quinoa Salad</i> recipe	91
<i>Chicken Curry Casserole</i> recipe	95
<i>Porcupine Sliders</i> recipe.....	99
Product Evaluation	103
Day 2 – Lesson 2: Meat/Meat Alternate.....	105
Classroom Instruction.....	107
Bean and Legume Varieties	115
Culinary Demonstration #4.....	121
<i>Dirty Brown Rice</i> recipe	123
<i>Fiesta Wrap</i> recipe	125
Culinary Lab #4.....	129
<i>Tuscan Smoked Turkey and Bean Soup</i> recipe	131
<i>Lentils of the Southwest</i> recipe	135
<i>Eagle Pizza</i> recipe	139
<i>Vegetable Chili Boat</i> recipe	143
Product Evaluation	147
Appendix	149

ICN COMPETENCIES, KNOWLEDGE, AND SKILLS

These are the competencies, knowledge, and skills that apply to this training. A full listing can be found on the Institute of Child Nutrition (ICN) website.

MANAGERS

Functional Area 1: Nutrition and Menu Planning

Competency 1.2: Ensures all meals served in the school nutrition program (SNP) meet current nutritional standards and meal pattern requirements, including children with special diets.

Knowledge Statements

- Knows current United States Department of Agriculture (USDA) nutrition standards that apply to meals served in the SNP.

Skill Statements

- Applies principles of good menu planning to school meals, including those necessary for selective menus that incorporate choice.

Functional Area 6: Food Production

Competency 6.1: Applies management principles to establishing and maintaining high standards of control for quality food production and distribution.

Knowledge Statements

- Knows how ingredients and preparation techniques influence the quality of the food product.

Skill Statements

- Establishes procedures of food preparation to conserve the nutritive value, enhance flavor and attractiveness, and promote peak freshness of the final product.
- Tests new recipes and food products prior to service.

Functional Area 8: Service

Competency 8.1: Develops standards of excellence for providing and maintaining quality in the presentation and service of food.

Knowledge Statements

- Knows standards for holding and serving food in volume that maintains nutritive value and food quality.

Skill Statements

- Identifies techniques to present menu items attractively on plate or tray.

ICN COMPETENCIES, KNOWLEDGE, AND SKILLS (continued)

ASSISTANTS AND TECHNICIANS

Functional Area 1: Food Production

Competency 1.1: Maintains high standards of control for quality food production and service.

Knowledge Statements

- Knows importance of and how to evaluate food quality during preparation and service.
- Knows basic food preparation techniques that are used in producing large quantities of food items.

Skill Statements

- Prepares food products following standardized recipes and evaluates products to ensure quality standards are met.

Functional Area 3: Customer Service

Competency 3.1: Maintains quality standards for the presentation and service of food in a pleasant environment.

Knowledge Statements

- Knows the importance of the appearance of the serving line and dining room during the meal period.

Skill Statements

- Garnishes menu items and serving lines attractively

USDA PROFESSIONAL STANDARDS

Nutrition – 1000

General Nutrition (1300)

- Dietary Guidelines for Americans, MyPlate and School Nutrition (1310) – Relate the *Dietary Guidelines* and USDA food guidance (such as MyPlate) concepts to the goal of school nutrition programs.
- General Nutrition (1320) – Understand general nutrition concepts that relate to school meals, such as whole grains, sodium, etc.

Operations – 2000

Food Production (2100)

- Standardized Recipes (2110) – Understand and effectively prepare food using a standardized recipe.
- Culinary Skills (2130) – Develop culinary skills necessary for school meal preparation.

KEY AREAS

1 – Operations

2 – Nutrition, Nutrition Education, and Physical Activity

Preparing for the *Healthy Cuisine for Kids* training

Before the training begins, prepare the learning environment and review the Preparation Checklist for items that will be needed. Follow the Training-at-a-Glance for approximate timing.

Preparation Checklist

The following tasks are necessary for presenting this training. Assign each task to a specific person, and determine the date it should be completed. Keep track of the progress by recording information on the tracking form and checking off tasks as they are completed.

Task	Person Responsible	Completion Date	✓
<ul style="list-style-type: none"> Carefully read each lesson plan. Review culinary demonstrations. Review learning activities. Cut apart the <i>Dietary Guidelines</i> activity sheet in the index. Reserve equipment and gather supplies as needed for use on the day of the class (6 weeks prior). 	Instructor		
Training Materials Needed			
<ul style="list-style-type: none"> Culinary Manuals Roster of participants attending for instructor Participants' sign-in sheets Agenda Handouts Certificates of Completion Pre- and post-assessments Grocery list (See Appendix) Equipment list (See Appendix) <i>Cooling Food Safely</i> resource <i>My Plate at School</i> poster 			
Equipment and Supplies Needed			
<ul style="list-style-type: none"> Microphone (preferably wireless) Computer to present slides and/or DVD Projector Screen Wireless presenter device and laser pointer Flip chart paper (self-adhesive strip sheets) 			

Equipment and Supplies Needed, continued			
<ul style="list-style-type: none"> • Painter's tape (Do not use masking tape.) • Markers (flip chart and participants) • Pens, pencils, note paper, highlighters, self-adhesive notes, page markers, index cards (each table) • Name tags and table tents • Index cards • Disposable gloves • Hairnets • Aprons • Lab kitchen supplies (See Appendix for list) • Groceries (See Appendix for list) 			
Handouts (1 for each participant) <ul style="list-style-type: none"> • <i>Basics at a Glance</i> poster • <i>Culinary Techniques – Spices</i> poster • <i>Employee Health and Personal Hygiene</i> resource • <i>Managing Food Allergies in Schools</i> resource 			

Overview

Can you think of anything that is more fun than getting in the kitchen and trying new recipes? That is what the culinary lab is about. It is designed to give the participant an opportunity to learn and practice healthy cooking methods by applying the nutrition principles of the *Dietary Guidelines for Americans* in preparing and serving healthy and appealing recipes that students will enjoy.

During the *Healthy Cuisine for Kids* seminar, there will be four culinary lab experiences. Each lab involves preparing, scoring, presenting, tasting, and evaluating recipes. Each team will prepare recipes selected from the *Recipes for Healthy Kids* cookbook and other resources and will be responsible for a recipe in each lab. All participants will taste and evaluate each of the finished products.

The lessons and culinary demonstrations preceding the culinary labs provide the framework – nutrition concepts, *Dietary Guidelines for Americans* principles, and culinary techniques – needed to be successful in the lab. The culinary manual has valuable information to assist you in recalling nutrition principles, culinary techniques, and healthy cooking methods.

The four culinary labs focus on helping you learn healthier ways to prepare and present food at school. These labs feature recipes related to school and child care meal components. The topics for the culinary labs are:

- Culinary Basics
- Fruits and Vegetables
- Whole Grain-Rich Foods
- Meats/Meat Alternates

Purpose of the Culinary Lab

Healthy Cuisine for Kids is about healthy cooking. These four lab experiences will be fun, fascinating, and full of great ideas for school or child care food programs. In each culinary lab, teams of approximately five participants will prepare a recipe (found in this manual) to have hands-on experience in practicing healthy cooking techniques.

The Healthy Cuisine trainer/chef will give an orientation to the culinary lab that includes team responsibilities and team assignments. In addition to learning healthier cooking methods, the four labs will focus on teamwork, planning and organizing lab assignments, garnishing and presenting food, and evaluating food products prepared.

The culinary lab experiences are developed to help:

- sharpen the skills needed to work as a team,
- understand the essential concept of mise en place and the benefits of organization,
- learn new and healthier cooking methods that apply the nutrition principles of the *Dietary Guidelines for Americans* (DGA),
- develop new techniques for presenting and garnishing food,
- learn skills in evaluating and scoring finished products, and
- integrate safety and sanitation principles in preparing and serving food and using equipment.

The Culinary Manual

The culinary manual is handbook for this training. It will be used by both the trainer and the participants during classroom instruction, for culinary demos, and in the culinary labs. The manual includes all of the information needed for this training.

Healthy Cuisine for Kids is about preparing healthy and safe food, but it is also about much more: working as a team to produce quality food; learning to use tested recipes; developing an understanding of mise en place or getting organized for each task; learning and applying culinary techniques of preparing, cooking, presenting, and evaluating healthy and appealing food; and applying the nutrition principles of the *Dietary Guidelines for Americans* in preparing food.

Training-at-a-Glance

DAY ONE			
Time	Activity	Presenter	Materials
1 hour	<i>Lesson 1:</i> <i>Culinary Basics</i> Classroom Instruction	Culinary Trainer	<ul style="list-style-type: none"> • Culinary Manual • Pre-Assessment
1 hour	Culinary Demonstrations	Chef Instructor	<ul style="list-style-type: none"> • Culinary Manual
2 hours	Culinary Lab and Clean-up/Restock	Participants	<ul style="list-style-type: none"> • Knives • Cutting boards • Scales • Food items
30 minutes	Lunch		
Objective(s)	<ul style="list-style-type: none"> • Describe how fruits and vegetables support the recommendations of the <i>Dietary Guidelines for Americans</i>. • Identify the nutrients found in fruits and vegetables. 		
1 hour	<i>Lesson 2:</i> <i>Fruits and Vegetables</i> Classroom Instruction	Culinary Trainer	<ul style="list-style-type: none"> • Culinary Manual
Objective(s)	<ul style="list-style-type: none"> • Describe various methods of enhancing the flavor of fruits and vegetables. • Identify ways to use speed scratch fruit and vegetable products to reduce labor without sacrificing product quality. 		
1 hour	Culinary Demonstrations	Chef Instructor	<ul style="list-style-type: none"> • Culinary Manual
Objective(s)	<ul style="list-style-type: none"> • Demonstrate the culinary techniques, basic skills, and cooking methods needed to produce nutritious and appealing fruit and vegetable products. • Apply the correct methods for selecting and handling fruits and vegetables for quality and safety. • Identify quality standards for fruits and vegetables prepared in child nutrition programs. • Identify ways to market school meals. 		
2 1/2 hours	Culinary Lab and Clean-up/Restock	Participants	<ul style="list-style-type: none"> • Culinary Manual • Groceries for lab
9 hours	End of Day One		

DAY TWO			
Time	Activity	Presenter	Materials
Objective(s)	<ul style="list-style-type: none"> Describe how whole grain-rich foods support the recommendations of the <i>Dietary Guidelines for Americans</i>. Identify the nutrients found in whole grain-rich foods. 		
1 hour	<i>Lesson 1:</i> <i>Whole Grain-Rich Foods</i> Classroom Instruction	Culinary Trainer	<ul style="list-style-type: none"> Culinary Manual
Objective(s)	<ul style="list-style-type: none"> Identify ways to use speed scratch whole grain-rich foods to reduce labor without sacrificing product quality. 		
1 hour	Culinary Demonstrations	Chef Instructor	<ul style="list-style-type: none"> Culinary Manual
Objective(s)	<ul style="list-style-type: none"> Demonstrate the culinary techniques, basic skills, and cooking methods needed to produce nutritious and appealing whole grain-rich foods. Apply the correct methods for selecting and handling whole grain-rich foods for quality and safety. Identify quality standards for whole grain-rich foods prepared in child nutrition programs. Identify ways to market school meals. 		
1 1/2 hours	Culinary Lab and Clean-up/Restock	Participants	<ul style="list-style-type: none"> Culinary Manual Groceries for lab
30 minutes	Lunch		
Objective(s)	<ul style="list-style-type: none"> Describe how meat/meat alternates support the recommendations of the <i>Dietary Guidelines for Americans</i>. Identify the nutrients found in meat/meat alternates. 		
1 hour	<i>Lesson 2:</i> <i>Meats/Meat Alternates</i> Classroom Instruction	Culinary Trainer	<ul style="list-style-type: none"> Culinary Manual
Objective(s)	<ul style="list-style-type: none"> Describe various methods of enhancing the flavor of meat/meat alternates. Identify ways to use speed scratch meat/meat alternates to reduce labor without sacrificing product quality. 		
1 hour	Culinary Demonstrations	Chef Instructor	<ul style="list-style-type: none"> Culinary Manual
Objective(s)	<ul style="list-style-type: none"> Demonstrate the culinary techniques, basic skills, and cooking methods needed to produce nutritious and appealing meat/meat alternates. Apply the correct methods for selecting and handling meat/meat alternates for quality and safety. Identify quality standards for meat/meat alternates prepared in child nutrition programs. Identify ways to market school meals. 		
2 hours	Culinary Lab and Clean-up	Participants	<ul style="list-style-type: none"> Culinary Manual Groceries for lab
30 minutes	Certificates & Evaluation		
8 1/2 hours	End of Day Two		

DAY 1

Introduction

Lesson 1: Culinary Basics

DAY 1 – Introduction

SHOW SLIDE: *Welcome*

Welcome and thank you for taking part in the *Healthy Cuisine for Kids* training. Let's take a few minutes and get to know each other.

SHOW SLIDE: *Purpose*

At the end of this training, we will have learned and practiced healthy cooking methods by applying the nutrition principles of the *Dietary Guidelines for Americans* (DGA) in preparing and serving healthy and appealing recipes that students will enjoy.

SHOW SLIDE: *Expectations*

As a participant in the *Healthy Cuisine for Kids* training, there are several expectations of which you need to be aware. Everyone should:

1. Participate in discussions and activities.
2. Perform the assigned tasks.
3. Practice the presented content when given the opportunity.
4. Be a positive and effective team member, including...
 - a. Organizing for each culinary lab.
 - b. Preparing the assigned food products using the correct recipes.
 - c. Preparing products that can appear on the serving line by using garnishes and considering food placement.
 - d. Presenting the products for tasting and evaluation.
 - e. Completing the Product Evaluation forms.

SHOW SLIDES: *Objectives (3 slides)*

Seminar Objectives

- Discuss how meals support the recommendations of the *Dietary Guidelines for Americans* and follow Federal guidance in preparing and serving nutritious, high quality meals that appeal to the children.
- Identify quality standards for fruits and vegetables, whole grain-rich foods, and meats/meat alternates prepared in child nutrition programs.
- Demonstrate an understanding of the nutrition principles related to preparing fruits and vegetables, whole grain-rich foods, and meats/meat alternates.
- Demonstrate basic culinary skills required to prepare and serve nutritious, high quality meals that appeal to the children.

SHOW SLIDE: *Culinary Labs*

The two-day *Healthy Cuisine for Kids* training includes four labs. Each member of the four-member culinary team should be team leader for at least one lab. As a team, you may designate other responsibilities on the team to rotate. For example, you may want to rotate the leadership responsibility for garnishing the recipes or overseeing the clean-up. Each lab involves many details. Developing teamwork and organization will help get the work done easier and faster.

Teamwork

Just as you work with a team in your school or child care program, you will work as part of a 4-5 member team in the Culinary Lab. The teams are designated by number in the Culinary Manual. Each member of the team will have specific responsibilities related to the recipes and the lab. It is essential to work as a team to complete the assignments on time. Team members support each other to help out where needed. Getting the tasks completed on time is essential, just as getting the food prepared in your program to meet the meal schedule is essential. You will work with the same culinary team in all the labs.

DAY 1 – Lesson #1: Culinary Basics

Classroom Instruction**1 hour**

SHOW SLIDES: *Day 1 Lesson 1*
 Culinary Basics

Mise en Place

Mise en place, the French phrase for “put in place,” is about having everything in place for the task. It begins with the organization of your team, making sure each member understands his/her assignment for the lab. The team should read the recipes before beginning any preparation and make a time and task schedule for each part of the task – including how the products will be evaluated, garnished, and presented. Don’t forget the clean-up task that takes place during the lab and after the products are prepared, presented, and tasted. After the team is organized, assemble all ingredients and supplies before beginning the preparation; this is mise en place – getting it all together.

Preparation

Preparation begins with an understanding of the recipe or procedure to be followed. It involves assembling all ingredients and supplies, determining the large and small equipment to be used in preparing the recipe, understanding the cooking method to be used, preheating equipment if required, and weighing and measuring ingredients. The recipe or procedure should be followed exactly unless the training team suggests a modification. Preparation also includes a plan for garnishing the recipe and how it will be presented on the service line, including how it will be portioned and served.

Knife Skills

Learning how to choose the proper knife for the job and safe handling techniques are very important skills. From the basics of how to properly hold and guide a knife to more precision skills of basic and advanced cuts, the importance of knife skills cannot be overstated.

SHOW SLIDE: *More Culinary Basics*

Tasting and Product Evaluation

Each team prepares its products for presentation on the service line. The product should be appropriately garnished for presentation. Each team should provide an appropriate serving utensil for the product prepared. One of the training team members will set up the serving area with drinks, disposable plates, napkins, cups, and eating utensils. The training team will have copies of the Product Evaluation form for that lab available for guests participating in the tasting and evaluation. The forms will be used to evaluate each recipe in four categories: appearance, taste, texture, and eating quality. The leader of each culinary team will describe the products prepared by their team and discuss any unique aspects of the preparation. The leader should also identify a nutrition principle involved in the preparation, cooking method used, flavor enhancing techniques, and special culinary techniques used.

Discussion of Evaluation

The Chef Instructor or another member of the training team will lead the discussion of the evaluation using the descriptors on the Product Evaluation form.

Clean-Up

Each culinary team is responsible for cleaning the workspace and utensils used in preparing and garnishing the recipes. The training team and all culinary teams will share in the overall clean-up of the service area and getting the food preparation area in order and ready for the next culinary lab.

SHOW SLIDE: *Lab Responsibilities*

Lab Responsibilities

The lab can be a fun and rewarding experience if we ALL work together as a team. To help you get the most out of the lab experience:

- Go into the lab with a positive attitude determined to contribute, work, follow directions from your team leader, and have fun.
- Read the recipe twice. Ask questions if something is not clear.

Team Leader

- Select a team leader for each lab. Rotate among team members.
- The team leader will keep everyone on task and keep track of time much like a manager in a school would.
- In the upper left corner of the recipe, the team leader will note the following information.
 - Oven temperature, if needed
 - Time of food presentation
 - Time required for cooking
 - Time the food must begin cooking
- The team leader will assign responsibilities to each team member. For example: One team member may be assigned to gather the dry ingredients, another assigned to get the pans needed, another to get refrigerated ingredients, etc. After the ingredients and supplies are gathered, one team member can be assigned to weigh the dry ingredients, another one or two to chop and weigh the vegetables, etc.

Participants

- Taste the product as it is being prepared.
- Each person should prepare a Product Evaluation form.
- Each team member will help clean up and keep the station clean and organized.
- Each team will “reset” their workspace for the next lab.

Team Roster

Trainer Tip: To provide an opportunity for teambuilding, have each team decide on a team name.

Team #1 - _____	
1	
2	
3	
4	
5	

Team #2 - _____	
1	
2	
3	
4	
5	

Team #3 - _____	
1	
2	
3	
4	
5	

Team #4 - _____	
1	
2	
3	
4	
5	

Team #5 - _____	
1	
2	
3	
4	
5	

Team #6 - _____	
1	
2	
3	
4	
5	

Team #7 - _____	
1	
2	
3	
4	
5	

Team #8 - _____	
1	
2	
3	
4	
5	

Trainer Tip: (Intro discussion on *Dietary Guidelines*)

- Using the cut apart *Dietary Guideline* activity strips, pass out one to each group.

SHOW SLIDE: *Thinking about the Dietary Guidelines for Americans*

- Ask the class to discuss within their groups how they are incorporating the *Dietary Guideline* on their slip of paper into their child nutrition programs.
- Have each group record their responses on a flip chart then discuss as a class.

SHOW SLIDE: *Dietary Guidelines for Americans*

Dietary Guidelines for Americans

The *Dietary Guidelines for Americans* (DGAs) is the national nutrition policy that is reviewed and updated every 5 years. The 2015 version is the 8th edition released since 1980 and will serve as the most current policy until the 2020 guidelines are released.

As child nutrition professionals, we are required by law to follow and provide meals which are consistent with these recommendations. The goal of the current Dietary Guidelines is to promote overall health and help prevent chronic disease by encouraging people to follow healthy eating patterns throughout their life. This goal can be accomplished by adhering to five major guidelines.

1. Follow a healthy eating pattern across the lifespan.

All food and beverage choices matter. Choose a healthy eating pattern at an appropriate calorie level to help achieve and maintain a healthy body weight, support nutrient adequacy, and reduce risk of chronic disease.

2. Focus on variety, nutrient density, and amount.

To meet nutrient needs within the calorie limits, choose a variety of nutrient-dense foods across and within all food groups in recommended amounts.

3. Limit calories from added sugars and saturated fats, and reduce sodium intake.

Consume an eating pattern low in added sugars, saturated fats, and sodium. Cut back on food and beverages higher in these components to amounts that fit within healthy eating patterns.

4. Shift to healthier food and beverage choices.

Choose nutrient-dense foods and beverages across and within all food groups in place of less healthy choices. Consider cultural and personal preferences to make these shifts easier to accomplish and maintain.

5. Support healthy eating patterns for all.

Everyone has a role in helping to create and support healthy eating patterns in multiple settings nationwide, from home to school to work to communities.

SHOW SLIDES: *It's the Law!*

Basic Culinary Techniques/Basic Kitchen Skills

Basic Culinary Techniques & Kitchen Skills

To prepare meals which support and follow the *Dietary Guidelines*, it is important to utilize basic kitchen skills and culinary techniques.

- Maintain desirable work habits.
- Use mise en place – be organized and manage your time effectively to produce final products for just-in-time service.
- Correctly use standardized recipes, weights, and measures.
- Use flavorings and seasonings appropriately.
- Follow the recipe exactly.

SHOW SLIDE: *Basic Techniques and Skills, contd.*

- Select the appropriate cooking/preparation methods and equipment.
- Properly use equipment.
- Strictly adhere to rules of food safety and sanitation.

SHOW SLIDE: *Five Key Points in Preparing Quality Foods***Five Key Points in Preparing Quality Foods****The “PROUD” Method**1. **P***lan food production for just-in-time service.*

Since most foods taste their best immediately after they are prepared, the production schedule times food preparation so that foods are prepared as close to the time of service as possible.

2. **R***eview the recipe.*

Child nutrition professionals have quality standards for various menu items just like professionals in other fields. The quality standards for a food are like a target. They are the goal of food preparation.

The quality standards for foods can be grouped into four areas:

- Appearance – how the food should look when it is prepared according to a recipe
- Texture or Consistency – how the food should feel in the mouth and how it cuts
- Flavor – how the food tastes
- Service Temperature – the ideal temperature for serving the food

3. **O***rganize equipment and ingredients.*

A well-organized cook saves time and energy by assembling all ingredients and equipment before starting food preparation. This process is called mise en place or to put in place. Use the recipe or directions to find out what is needed, then gather the equipment and ingredients. Stay organized during food production by keeping things in order and cleaning as needed.

4. **U***se the right culinary technique.*

A professional uses the right culinary technique for the food that is to be prepared. A recipe includes a description of the right culinary technique to use for that food. By learning the basic culinary technique and then following the directions for a recipe, the result will be a quality product.

5. **D***eliver a quality product.*

A professional evaluates each product using the Product Evaluation form before it is placed on the service line.

SHOW SLIDE: *Safe Way to Taste Test***Safe Way to Taste Test**

- Place a small amount of food into a separate container.
- Step away from exposed food and food contact surfaces.
- Use a teaspoon to taste the food. Remove the used teaspoon and container to the dish room. Never reuse a spoon that has already been used for tasting.
- Wash hands immediately.

Trainer Tip: Put tasting spoons and cups at each station.

SHOW SLIDE: *Organizing Equipment and Ingredients***Preparation for Cooking***Organize Yourself*

Chefs consider a thorough and complete mise en place essential to meal preparation success. Mise en place is a collection of good work habits. It takes planning, effort, and practice to develop any habit. Once these good habits are established, you will be more organized and efficient. You will be more confident about your work, and it will be of better quality.

- Plan your work. Select the recipes to be prepared each day.
- Read over the recipes so you have a basic idea of what you need to do to complete the recipe. Pay attention to things like how long foods need to cook or cool and whether you need special equipment.
- Prioritize your work. More advanced mise en place skills include the ability to prioritize work so you are doing the right things at the right time and the ability to organize your work so you don't waste time. As you write your mise en place list, certain activities need to take place at certain times and some tasks can be grouped together. Review your lists before you begin to work to be sure that you have properly organized your work.

Ingredients

Collect all ingredients needed for each recipe. Organizing your mise en place involves all pre-preparation of all ingredients. This may include the following steps.

- Measuring
- Washing, trimming, and cutting ingredients
- Pre-preparation of ingredients, such as stocks or sauces

SHOW SLIDE: *Organizing, cont'd.*

Equipment

Collect all tools and prepare equipment.

Small Tools That Might be Needed	Possible Equipment Preparation
knives cutting boards spatulas spoons service utensils steam-table pans sheet pans	preheat ovens assemble mixer assemble food processor line sheet pans

Workstation

The workstation is where the tools and ingredients needed to prepare the mise en place, cook, or serve foods are all placed. When set up properly, you should not have to leave the area while working. Use the mise en place lists as reminders to prevent you from making several trips or to retrieve something you forgot. The set-up of a workstation depends on what is being done.

Different tools and ingredients are needed when preparing mise en place than when preparing foods. Holding containers are needed when preparing foods, pots and pans while cooking, and plates when serving. A variety of hand tools such as spoons, whisks, spatulas, peelers, or ladles may also be needed.

Work Flow

Once you have all the necessary ingredients, tools, and equipment, take the time to arrange them so they are easy to reach as you work. Also, try to put them into a logical order; this order is known as a work flow. For example, when peeling and chopping onions, you might put all the unpeeled onions in a bucket on the left side of your work station. Next to the bucket, you put a cutting board, above which you place a container to hold the peels. Yet another container is to the right of the board to hold the peeled onions.

Measure Ingredients Carefully

SHOW SLIDE: *Rules for Weighing*

Rules for Weighing Ingredients

- Be sure the pointer is on zero when you begin.
- Place the container for the ingredient on the scale's platform.
- If using a scale with a fixed dial, place the container on the platform and record the weight of the container. Add the ingredients until the total weight equals the required weight, plus the weight of the container.

SHOW SLIDE: *Weighing, cont'd.*

- If using a scale with an adjustable dial, place the container on the platform and turn the pointer to zero. Add the ingredients until the dial reflects the required weight.
- If using an electronic scale, press the tare button after the container is placed on the platform.

SHOW SLIDE: *Rules for Measuring Dry Ingredients***Rules for Measuring Dry Ingredients**

- Use standard measuring equipment.
- Use the largest appropriate standard measuring container to save time and to reduce error.
 - Exception: To measure flour, do not use a container larger than 1 quart because flour packs easily. Spoon ingredient lightly into the measuring container.
(If lumpy, sift before measuring).
 - Exception: Pack brown sugar firmly into the measuring container so it will take the shape of the container when emptied.
- Fill the measuring container to overflowing and level off with a straight-edged spatula.
- Avoid shaking or tapping measuring container.

SHOW SLIDE: *Rules for Measuring Liquid Ingredients***Rules for Measuring Liquid Ingredients**

- Use the largest appropriate standard measuring container.
- Place liquid measuring container on a flat surface.
- Pour liquid into the container until it reaches the desired level.
- Read at eye level when using a clear container. If a metal container is used, look inside the container as the liquid is filled to the desired level.

SHOW SLIDE: *Measuring Tools***Measuring Tools**

When measuring ingredients, it is important that the measurement standards be consistent. The ICN *Basics at a Glance* poster is a great resource to help understand measurement and measurement tools. Having and using the proper tool is necessary to maintain measurement standards. The ingredient and amount of ingredient will determine which tool is right for the job. In addition, knowing and using proper measuring techniques is important.

SHOW SLIDE: *Measuring Spoons*

Measuring spoons – These measurement tools are used to measure small volumes of liquid or dry ingredients. They are shaped like a spoon and are available in a variety of styles, materials, and colors. There are different sizes in a set, and each spoon indicates different capacity: 1/8 teaspoon, 1/4 teaspoon, 1/2 teaspoon, 1 teaspoon, and/or 1 tablespoon. If the measuring spoons are being used with liquid ingredients, the spoons should be filled to the top. With dry ingredients, the spoons should be overfilled and the ingredient leveled off. It is also important to not pack the dry ingredients into the spoon, unless indicated by the recipe.

SHOW SLIDE: *Dry Measuring Cups*

Dry measuring cups – These cups are used for measuring specific volumes of dry ingredients. They are shaped like a cup with a short handle and are designed for the ingredients to be filled to the top. Since there is not space above the maximum capacity, liquids should not be measured in dry measuring cups due to the possibility of spilling. Dry measuring cups usually come in a set that measures 1/4 cup, 1/3 cup, 1/2 cup, and 1 cup. Some sets may also include measures for 2/3 cup and 3/4 cup. Unless stated in the recipe, ingredients should be spooned into the cup – first, overfilling, then leveling to remove the excess. Dry measuring cups should not be dipped directly into the ingredients nor should they be leveled off against the edge of the container.

SHOW SLIDE: *Dry Measuring Containers*

Dry measuring containers – These containers are used for measuring specific volumes, from small (teaspoons) to large (gallons), of dry ingredients. Usually made of metal for durability, they are shaped like a cup or pitcher with a handle and have a flat top edge and graduated markings or levels. Ingredients should be filled to the top and leveled off. Just like dry measuring cups, unless stated in the recipe, ingredients should be spooned into the container – first, overfilling, then leveling to remove the excess.

SHOW SLIDE: *Liquid Measuring Containers*

Liquid measuring containers – These containers are using for measuring specific volumes, from small (ounces and cups) to large (gallons), of liquid ingredients. Commonly made of aluminum, stainless steel, glass, or plastic, they are shaped like a cup or pitcher and have graduated markings to make measuring the liquid easier. Liquid measuring containers are designed to hold more than the max amount being measured to help reduce the chance for spilling.

Trainer Tip: Never grab top part of scales to move; pick up from the base.

There are three types of scales typically used in a school nutrition kitchen: mechanical scale (also known as a spring scale), digital scale, and balance scale.

SHOW SLIDE: *Mechanical Scales*

Mechanical scales – This type of scale, which is also known as a spring scale, has a spring-loaded platform and a mechanical-dial display that is either fixed or adjustable. These are frequently used to weigh consistent portions of food and to measure ingredients for recipes. Mechanical scales are available to measure in grams, ounces, or pounds. It is important to make sure the amount to be weighed does not exceed the maximum capacity of the scale. Before using a mechanical scale, the pointer should first be set to zero. Next, an empty container should be placed on the platform, and the pointer adjusted back to zero, after which, the ingredients may be added to the container.

SHOW SLIDE: *Digital Scales*

Digital scales – These scales are electronic and measure and display weight digitally. They measure weight in grams, ounces, or pounds. The unit of measure is changed with a switch or button. The main difference between a digital scale and a mechanical scale is that a digital scale is set to zero by pushing a button instead of turning a dial. On some digital scales, this button is labeled “tare,” which means setting the scale to zero. The scale should be reset after each measurement.

SHOW SLIDE: *Balance Scales*

Balance scales – This type of scale, which is also known as a baker’s scale, has two platforms that use counterbalances to measure weight. Several sizes of lead weights are used on one platform to balance the weight of the ingredient(s) on the other platform; a beam between the two platforms is then used for fine adjustments. Just as with the other types of scales, after placing an empty container on the scale, it must be set to zero before ingredients are added.

SHOW SLIDE: *Portion-Controlled Scoops*

Portion-controlled scoops – Also known as dishers, these volume measuring tools have a fixed size scoop on the end and a handle. They come in various sizes and are marked with a number that indicates how many level scoops make a quart – the lower the number the bigger the scoop.

SHOW SLIDE: *Spoodles*

Spoodles – This portion controlled measuring tool is a combination spoon and ladle. They are available in a variety of sizes ranging from 2 to 8 ounces and may be solid or perforated.

SHOW SLIDE: *Ladles*

Ladles – A ladle is a fixed size cup on a long handle and is used to serve portion controlled amounts of liquids such as soups, sauces, and creamed or other similar foods. Ladles are available in various sizes, and the amount of liquid, in fluid ounces, that can be held by the ladle is stamped on the handle.

SHOW SLIDE: *Serving Spoons*

Serving spoons – These are the least accurate portion controlling tool and are best suited for serving pre-portioned items. Serving spoons may be solid, slotted, or perforated and are not identified by a number.

Common Conversions

When measuring many ingredients, the most accurate method is to weigh. For liquid items, measurement of volume may be preferred. Regardless of the method used, it is important to use measurement units and tools that result in the least number of measurements possible. As a result, ingredient amounts must often be converted, so it is important to memorize or know the most common ones. A list of these are included in the Appendix.

SHOW SLIDE(S): *Common Conversions – Fluid Ounces*
 Common Conversions – Teaspoons & Tablespoons
 Common Conversions – Tablespoons & Cups
 Common Conversions – Cups to Gallons

Sample Recipes from *Recipes for Healthy Kids* Cookbooks

If you're looking to add to your collection of delicious, kid-approved recipes that are made from healthy ingredients, look no further than the *Recipes for Healthy Kids* (RH4K) cookbooks. To recognize and share this culinary creativity nationwide, 30 recipes from the R4HK competition have been standardized and compiled into cookbooks for use in homes, child care centers, and schools.

Recipes for Healthy Kids:

- *Cookbook for Homes* – Recipes for 6 servings
www.fns.usda.gov/tn/recipes-healthy-kids-cookbook-homes
- *Cookbook for Child Care Centers* – Recipes for 25 servings
www.fns.usda.gov/tn/recipes-healthy-kids-cookbook-child-care-centers
- *Cookbook School* – Recipes for 50 and 100 servings
www.fns.usda.gov/tn/recipes-healthy-kids-cookbook-schools

Many ingredients in these recipes are available to schools as USDA Foods. For more information on USDA Foods, such as food safety guidance and nutrient data, you may refer to the USDA website at fns.usda.gov/fdd/schfacts/

DAY 1 – Lesson 1: Culinary Basics

Culinary Demonstration

1 hour

- *Mise en Place*
 - Equipment and ingredients
 - Station set-up
 - Work flow
- *Knife Skills*
 - Sharpening
 - Safety
 - Knife cuts*
 - Slice
 - Dice
 - Julienne and bâtonnet
 - Chiffonade
- *Weighing and Measuring*
 - Equipment
 - Procedure
- *Flavor Enhancement*
 - Herbs and Spices
 - **Basic Principles of Seasonings*
 - Flavor Layering
 - **Flavor Shakers*
- Demo: *Melon Chunks and Orange Smiles*
- Demo: *Seasoned Green Beans*
- *Taste testing*

*Handouts located in the Appendix

NOTES

DAY 1 – Lesson 1: Culinary Basics

Culinary Lab #1

2 hours

ALL TEAMS

- Each participant will sharpen knives.
- Each participant will practice knife cuts.
 - onion – dice
 - celery – bâtonnet
 - carrots – sliced on diagonal
- Each participant will weigh and measure.

Item	Weight
1 cup of diced onions	
1 cup of sliced carrots	
1 cup of flour	

1. Each group will use or create a seasoning blend (see *Flavor Shakers* handout in Appendix) to make *Seasoned Green Beans*.

SHOW SLIDE: *Day 1 Lesson 2*

DAY 1

Lesson 2: Fruits and Vegetables

DAY 1 – Lesson 2: Fruits and Vegetables

Classroom Instruction

1 hour

SHOW SLIDE: *Applying the DGA to Fruits and Vegetables*

When reviewing the *DGA* as it relates to fruits and vegetables, there are five key points to consider.

- Focus on eating whole fruits, which includes cut up, cooked, frozen, and dried fruits, as well as fruit juice.
- Two cups of fruit per day are recommended.
- Focus on eating a variety of vegetables from all five subgroups (dark green, starchy, red and orange, beans and peas, and other).
- Two and a half cups of vegetable equivalents per day are recommended.
- Fruits and vegetables can be fresh, frozen, canned, or dried.

Trainer Tip:

- Write the words *Nutrients of Public Health Concern* on a flip chart.
- Explain that a *nutrient of concern* is one that is consumed below the estimated Average Requirement or Adequate Intake levels. Ask what they think the *nutrients of concern* are for adults and children.
- Record the correct nutrients of public health concern on the flip chart.
 - Calcium, potassium, dietary fiber, and vitamin D
 - Under-consumption of iron (women ages 19-50 and small children)

SHOW SLIDE: *Three Reasons to Eat More Fruits and Vegetables*

The *Dietary Guidelines* indicate that the U.S. population, as a whole, is consuming well below the recommended amounts of foods from the various food groups. With regards to fruits and vegetables, this issue is a concern because of the benefits received from these food groups.

1. Fruits and vegetables are major sources of the following vitamins and minerals.
 - Folate – a B vitamin that is especially important during pregnancy for prevention of birth defects of the brain and spine, according to the Centers for Disease Control and Prevention
 - Magnesium – a mineral vital for bone structure and strength
 - Potassium – a mineral necessary for muscle contractions, maintaining fluid balance, transmitting nerve signals, and various chemical reactions
 - Dietary fiber – roughage or bulk that is the part of plant foods your body cannot digest or absorb – important for lowering cholesterol levels, controlling blood sugar levels, maintaining a healthy bowel; and it aids in weight management
 - Vitamin A – important for healthy teeth, skin, and good vision
 - Vitamin C – needed for the growth and repair of tissues throughout your body
 - Vitamin K – essential for blood clotting
2. Healthy eating patterns include a recommended intake of fruits and vegetables per day based on age and gender. Consuming the recommended amount may help reduce the risk of many chronic diseases including heart attack, stroke, and certain types of cancer.

SHOW SLIDES: *Daily Fruit Table*
 Daily Vegetable Table

The amounts recommended in the Daily Vegetable Table are appropriate for individuals who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie needs.

3. When prepared without added fats or sugars, most fruits and vegetables are also low in calories and help to maintain a healthy weight.

SHOW SLIDE: *Fruit Choices*

When trying to make healthy choices, it is important to consider the fruit and fruit juice options.

- Majority of fruits should come from whole fruits – fresh, canned, frozen, and dried.
- Select 100% juice and/or fruit canned in 100% juice, rather than fruit canned in syrup.
- Consuming 100% juice in excess can add extra calories to the diet, and it lacks dietary fiber.

SHOW SLIDE: *Preparing Fresh 109Fruits to Maintain Nutrients***Basic Principles of Preparing Fruits to Maintain Nutrients**

- Use fresh fruits at their peak of ripeness.
- Wash fresh fruits in cool water before they are peeled or stemmed.
- Cut fresh fruits in the largest pieces that are acceptable for serving, considering the age of the student. Avoid crushing fruits since this injures the fruit cells and causes more vitamin loss.
- Follow the recipe or directions for preparing a fruit dish.

SHOW SLIDE: *Preparing Fruits to Meet Quality Standards***Basic Principles of Preparing Fruits to Meet Quality Standards**

- Prepare fruit dishes to have an appealing appearance.
- Prepare fruit dishes to have appropriate texture.
- Prepare fruit dishes for good flavor typical of the main fruit ingredients.
- Serve fruit dishes at the right temperature.
- Fruit juice should be kept frozen or at 40 °F.

SHOW SLIDE: *Handling Fresh Produce***Handling Fresh Produce**

- Store produce at least six inches off the floor, including in walk-in refrigerators.
- Store produce in a covered container and above other items that might cause contamination.
- Wash produce just before preparation, not before storage.
- Mark the time when cut produce is displayed without refrigeration. Display cut produce for a maximum of 4 hours if not in a refrigeration unit or containers surrounded by ice. Discard any uneaten produce at the end of 4 hours.

SHOW SLIDE: *Fresh Produce Tips***Leafy Greens**

- Do not rewash packaged produce labeled “ready-to-eat,” “washed,” or “triple washed.”
- Do not use leafy greens with visible signs of decay or damage because there is an increased risk of the presence of harmful bacteria. When in doubt about the use of decayed or damaged product, either remove the unusable portions, or do not use the leafy greens.

Tomatoes

- Do not store cut tomatoes in direct contact with ice or water.
- Mark the date on refrigerated cut tomatoes to indicate that they must be consumed or discarded within 7 days.

SHOW SLIDE: *Tips for Melons*

- Discard cut melons after 4 hours if maintained at 41 °F or above. If possible, display cut melons in a refrigerated case, not just on top of ice.
- Display cut melons for a maximum of 4 hours without being kept cool with refrigeration or ice and discard uneaten melons at the end of 4 hours.
- Mark the date on refrigerated cut melons to indicate that they must be consumed or discarded within 7 days.

SHOW SLIDE: *Cooking Vegetables to Maintain Nutrients***Basic Principles of Cooking Vegetables to Maintain Nutrients**

- Cook vegetables in the smallest amount of liquid possible.
- Cook vegetables the shortest amount of time for the desired tenderness.
- For vegetables that have a skin, scrub well and cook with the skin on whenever possible.
If the vegetable must be peeled, peel as thinly as possible.

SHOW SLIDE: *Cooking Vegetables to Maintain Nutrients, cont'd.*

- When cutting vegetables, use a sharp blade and cut in the largest pieces that are desirable for the recipe. Pieces should be uniform to allow for even cooking. Large pieces help preserve the nutrient content of the vegetable.
- Follow the recipe or directions for cooking a vegetable.
- Cook vegetables just-in-time for service on the line.

Trainer Tip:

- Write the words *Function of Salt* on a flip chart.
- Explain that salt has a definite function in cooking and in foods. It is important to understand those function before eliminating or reducing the amount of salt.
- Ask, “What is the function of salt?” As participants respond, write the correct answers on the flip chart.
 - Adds flavor.
 - Brings out the flavor and enhances the natural flavors of food. If used excessively, it overwhelms the flavor of food.
 - Acts as a preservative in many processed foods.
 - Aids in the control of the rate of yeast fermentation in bread-making.

SHOW SLIDE: *Basic Cooking Methods*

There are multiple ways to cook fruits and vegetables while maintaining the nutrients, and they fall into two basic categories: moist heat and dry heat. The five methods of moist heat cooking include: blanching/shocking, steaming, poaching, simmering, and boiling. There are three methods of dry heat cooking: roasting, baking, and sautéing/stir-frying.

SHOW SLIDE: *Blanching***Blanching**

Blanching means dipping a food into boiling water for a very short time. This method briefly and partially cooks a food. It is used to:

- Prepare vegetables for further cooking (for example, broccoli).
- Remove strong or bitter flavors (for example, kale).
- Soften firm foods (for example, carrots).
- Set colors of vegetables (for example, snow peas).
- Loosen skins for peeling (for example, ripe tomatoes).

Some vegetables can be blanched before they are used in salads, such as broccoli, cauliflower, carrots, and snow peas.

SHOW SLIDE: *Blanching Vegetables***To blanch a vegetable:**

1. *Prepare the washed, cut vegetable.*
2. *Use a steam kettle, tilting braising pan, or stockpot.* Bring water to a boil. Place the vegetables in the boiling water and cook for 2-3 minutes or just until the color of the vegetables becomes brighter (green vegetables will become a brighter green). For small amounts of vegetables to be blanched, the vegetables may be placed in a colander and then the whole colander set in the boiling water.
3. *Immediately drain all hot water.*

4. *Immerse the vegetables into an ice bath* (water with ice). Be sure all the vegetables are submerged in the water. Leave about 1 minute, to stop the cooking process.
5. *Drain the vegetables well and store covered in the refrigerator until time for use.*

SHOW SLIDE: *Roasting Vegetables*

Roasting Vegetables

1. *Preheat the oven to 350 °F.*
2. *Cut vegetables into uniform shape and size.*
3. *Toss vegetables with olive oil.* Season with pepper, garlic, spices, or herbs. Use no more than 1 teaspoon of seasoning per 50 portions.
4. *Place vegetables in a single layer on a sheet pan.* Do not crowd the vegetables as this will cause them to steam.
5. *Bake until vegetables are tender.*

SHOW SLIDE: *Try These for Roasting*

Try these vegetables for roasting:

- | | | |
|--------------------|-------------|------------------|
| • asparagus | • mushrooms | • summer squash |
| • beets | • onions | • sweet potatoes |
| • brussels sprouts | • parsnips | • tomatoes |
| • carrots | • peppers | • turnips |
| • corn | • potatoes | • zucchini |
| • eggplant | • rutabagas | |

DAY 1 – Lesson 2: Fruits and Vegetables

Culinary Demonstration #2

1 hour

- *Fruit and Vegetables Basics*
 - Proper techniques for washing and cutting vegetables
 - Proper method to cut and roast vegetables
- Demo: *Roasted Fresh Vegetables*
- Demo: *Spinach with Garlic*

NOTES

ROASTED VEGETABLES

Recipe

Ingredients

2 Tbsp olive oil
8 cups carrots (peeled and sliced)
1 Tbsp water
1 - 2 tsp Savory Flavor Shaker seasoning*

Directions

1. Preheat oven to 400 °F. Spray sheet pan with nonstick cooking spray.
2. In a small bowl, mix the oil, water, and Savory Flavor Shaker seasoning.
3. Place vegetables in a single layer on a sheet pan.
4. Drizzle mixture over vegetables and mix until coated.
5. Bake until vegetables are tender, about 20 minutes.

*recipe in Appendix

Yield: six 1/2-cup servings

Nutrients Per Serving:

Calories **109**, Protein **1.63g**, Carbohydrate **16.07g**, Dietary Fiber **4.69g**, Total Fat **4.92g**, Saturated Fat **0.69g**,
 Cholesterol **0mg**, Vitamin A **27265.06 IU**, Vitamin C **9.76mg**, Iron **0.64mg**, Calcium **58.14g**, Sodium **113.21mg**

SPINACH WITH GARLIC

Recipe

Ingredients

2 tsp olive oil (*3 tsp*)*
1 tsp garlic, chopped (*1 1/2 Tbsp*)
1 lb 5 oz spinach (*6 lb 10 oz*)
1/4 tsp nutmeg (*1 tsp*)

Directions

6. Heat oil in large skillet. Lightly sauté garlic. Do not brown.
7. Add spinach and cover. Cook until wilted. Season with nutmeg.
8. Prepare in small batches.

Yield: 10 servings

*Ingredient amounts for 50 servings in parentheses.

Nutrients Per Serving:

Calories **15**, Protein **1.72g**, Carbohydrate **2.28g**, Dietary Fiber **1.33g**, Total Fat **0.37g**, Saturated Fat **0.07g**, Cholesterol **0mg**, Vitamin A **5582.58 IU**, Vitamin C **16.82mg**, Iron **1.62mg**, Calcium **59.55mg**, Sodium **47.09mg**

DAY 1 – Lesson 2: Fruits and Vegetables

Culinary Lab #2

2 1/2 hours

Team Assignments

Team #1	Team #2
<i>Tasty Tots</i>	<i>Stir-Fry Fajita Chicken, Squash, and Corn</i>
Team #3	Team #4
<i>Roasted Fish Crispy Slaw Wrap</i>	<i>Sweet Potato and Black Bean Stew</i>

TASTY TOTS

Recipe

Ingredients

5 cups fresh sweet potatoes, peeled, coarsely shredded
2 1/2 cups canned low-sodium garbanzo beans (chickpeas), with liquid
1/2 cup fresh green onions, finely chopped
2 Tbsp canola oil
1 1/2 tsp fresh garlic, minced
1/2 tsp salt
1/4 tsp ground black pepper
1/2 tsp onion powder
1/2 tsp ground cinnamon

Preparation Time: 30 minutes
Cooking Time: 35 minutes
Yield: 36 tots
Serving Size: 6 tots

6 tots provide 3/8 cup red/orange vegetable and 3/8 cup other vegetable.*

Directions

1. Preheat oven to 350 °F.
2. Place shredded potatoes on a large baking pan sprayed with a nonstick cooking spray. Bake at 350 °F for 20 minutes or until slightly tender. Do not overcook.
3. Increase oven temperature to 400 °F.
4. In a food processor or blender, purée garbanzo beans, including the liquid, until smooth.
5. In a medium mixing bowl, combine shredded sweet potatoes, puréed garbanzo beans, green onions, oil, salt, garlic, pepper, onion powder, and cinnamon. Mix well. Cover and refrigerate for 40 – 45 minutes to make tots easier to form.
6. Spray a large baking sheet with nonstick cooking spray. Using a cookie scoop or a spoon, roll 36 tots. Place 1 inch apart on baking sheet. Lightly flatten the tops of the tots with a spoon or a fork. Bake at 400 °F for 10 – 12 minutes or until lightly brown. Serve hot.

*The legumes in this recipe contribute to the *other vegetable* subgroup and not the *meat/meat alternate* component since the beans are not visibly recognizable as legumes in the Tasty Tots recipe. This vegetable side dish with legumes is limited to the *vegetable* component because of its function as a vegetable in the meal.

Improving the nutrient content of the foods children eat by disguising nutrient-rich vegetables and fruits in the food is a great idea for people of all ages. However, it is not a menu planning principle that teaches and encourages children to recognize and choose a variety of healthy fruits and vegetables.

Recipes for Healthy Kids: Cookbook for Homes

TeamNutrition.usda.gov

Nutrients Per Serving:

Calories **172**, Protein **4g**, Carbohydrate **28g**, Dietary Fiber **5g**, Total Fat **5g**, Saturated Fat **0g**, Cholesterol **0mg**, Vitamin A **12609 IU (630 RAE)**, Vitamin C **13mg**, Iron **1mg**, Calcium **46mg**, Sodium **377mg**

TASTY TOTS

Meal Components: Red/Orange Vegetable – Other Vegetable – Grains

Ingredients	25 Servings		50 Servings		100 Servings		Directions Process #2: Same Day Service
	Weight	Measure	Weight	Measure	Weight	Measure	
*fresh sweet potatoes, peeled, coarsely shredded	6 lb	1 gal 1 qt	12 lb	2 gal 2 qt	24 lb	5 gal	1. Spread shredded sweet potatoes evenly on a sheet pan (18" x 26" x 1") lightly coated with pan release spray. 2. Bake sweet potatoes until slightly tender. DO NOT OVERCOOK. Conventional oven: 350 °F for 20 minutes Convection oven: 350 °F for 15 minutes
canned low-sodium garbanzo beans (chickpeas), with liquid	3 lb 7 oz	2 qt 1 1/2 cups (1/2 No. 10 can)	6 lb 14 oz	1 gal 3 cups (1 No. 10 can)	13 lb 12 oz	2 gal 1 1/2 qt (2 No. 10 can)	3. Purée garbanzo beans, including the liquid, in a food processor to a smooth consistency. Yields: - For 25 servings, about 1 qt 3 1/4 cups (3 lb 6 oz). - For 50 servings, about 3 qt 2 1/2 cups (6 lb 12 oz). - For 100 servings, about 7 qt 1 cup (13 lb 8 oz).
canola oil		1/2 cup		1 cup		2 cups	4. Combine sweet potatoes, puréed garbanzo beans, oil, salt, garlic, onions, pepper, onion powder, and cinnamon. Mix well. For 50 servings mix in enriched all-purpose flour to help blind the product. (Flour added as a processing aid does not contribute significantly to the nutrient analysis). Refrigerate at 40 °F for 40 – 50 minutes to make tots easier to form.
salt		2 tsp		1 Tbsp 1 tsp		2 Tbsp 2 tsp	
granulated garlic		2 tsp		1 Tbsp 1 tsp		2 Tbsp 2 tsp	
*fresh green onions, finely diced	3 oz	3/4 cup 2 Tbsp	6 oz	1 3/4 cups	12 oz	3 1/2 cup	
ground black pepper		1 tsp		2 tsp		1 Tbsp 1 tsp	
onion powder		2 tsp		1 Tbsp 1 tsp		2 Tbsp 2 tsp	
ground cinnamon		2 tsp		1 Tbsp 1 tsp		2 Tbsp 2 tsp	
enriched all-purpose flour	0	0	2/12 oz	1/2 cup	5 oz	1 cup	
							5. Using a No. 40 scoop, place mixture 1-inch apart on sheet pan (18" x 26" x 1") lined with parchment paper and lightly coated with pan release spray. For 25 servings, use 2 pans. Make 150 tots. For 50 servings, use 4 pans. Make 300 tots. For 100 servings, use 8 pans. Make 600 tots. 6. Cover tots on sheet pan with layer of parchment paper then use a second sheet pan and lightly press to flatten tots. 7. Bake until light brown: Conventional oven: 400 °F for 12 minutes Convection oven: 400 °F for 9 minutes Critical Control Point: Heat to 140 °F or higher for at least 15 seconds. 8. Critical Control Point: Hold at 135 °F or higher for hot service. 9. Serve 6 tots.

TASTY TOTS

Meal Components: Red/Orange Vegetable – Other Vegetable – Grains

Serving	Yield	Volume
6 tots provide 3/8 cup red/orange vegetable and 3/8 cup other vegetable.† †The legumes in this recipe contribute to the <i>other vegetable</i> subgroup and are not the <i>meat/meat alternate</i> component since the beans are not recognizable as legumes in the Tasty Tot recipe. This vegetable side dish with legumes is limited to the vegetable component because of its function as a vegetable in the meal. Improving the nutrient content of the foods children eat by disguising nutrient-rich vegetables and fruits in the food is a great idea for people of all ages. However, it is not a menu planning principle that teaches and encourages children to recognize and choose a variety of healthy fruits and vegetables.	25 servings: about 7 lb 5 oz	25 servings: 150 tots
	50 servings: about 14 lb 10 oz	50 servings: 300 tots
	100 servings: about 29 lb 4 oz	100 servings: 600 tots

Notes			
*See Marketing Guide for purchasing information on foods that will change during preparation or when a variation of the ingredient is available.			
Marketing Guide			
Food as Purchased for	25 servings	50 servings	100 servings
sweet potatoes	9 lb 14 oz	19 lb 12 oz	39 lb 8 oz
green onions	3 3/4 oz	7 1/2 oz	15 oz
Nutrients Per Serving			
Calories	172	Saturated Fat	0g
Protein	4g	Cholesterol	0mg
Carbohydrate	28mg	Vitamin A	12609 IU (630 RAE)
Total Fat	5g	Vitamin C	13mg
		Iron	1mg
		Calcium	46mg
		Sodium	377mg
		Dietary Fiber	5g

STIR-FRY FAJITA CHICKEN, SQUASH, AND CORN

Recipe

Ingredients

1 3/4 cups brown rice, long-grain, regular, dry
1 1/2 tsp salt-free chili-lime seasoning blend
1/4 tsp granulated garlic
1 Tbsp fresh cilantro, chopped
2 Tbsp canola oil
1 cup fresh onions, peeled, diced
4 cups cooked fajita chicken strips (16 oz)
3 1/2 cups fresh butternut squash, peeled, seeded, diced 1/2"
1/2 cup fresh red bell peppers, seeded, diced
1 cup frozen corn, thawed
1/2 cup canned diced green chilies
1/2 cup canned low-sodium diced tomatoes
1/2 tsp ground black pepper
3/4 tsp ground cumin
1/4 tsp garlic powder

Preparation Time: 30 minutes

Cooking Time: 1 hour

Yield: 6 (3/4-cup) servings stir-fry
6 (1/2 cup) servings brown rice

Directions

1. Combine brown rice and 4 1/2 cups water in a large pot and bring to a boil. Turn heat down to low. Cover and cook until water is absorbed, about 30-40 minutes. Sprinkle with 1/2 tsp salt-free seasoning blend, granulated garlic, and cilantro. Mix well. Keep warm. A rice cooker may be used with the same quantity of brown rice and water.
2. Heat canola oil in a large skillet or a wok. Cook onions for 2 minutes or until translucent.
3. Add chicken, squash, and remaining salt-free seasoning blend. Stir-fry over high heat for 10 minutes or until squash is tender.
4. Add red peppers, corn, green chilies, tomatoes, pepper, cumin, and garlic powder. Stir-fry over medium-high heat for no longer than 2 minutes so vegetables will remain crunchy. Do not overcook. Reduce heat to low and let simmer 2 minutes. Serve hot.

3/4 cup stir-fry and 1/2 cup brown rice provides 1 1/4 oz equivalent meat, 1/4 cup red/orange vegetable, 1/8 cup starchy vegetable, 1/4 cup other vegetable, and 1 oz equivalent grains.

Nutrients Per Serving:

Calories **396**, Protein **20g**, Carbohydrate **59g**, Dietary Fiber **7g**, Total Fat **10g**, Saturated Fat **2g**, Cholesterol **62mg**, Vitamin A **7347 IU (359 RAE)**, Vitamin C **44mg**, Iron **2mg**, Calcium **58mg**, Sodium **574mg**

STIR-FRY FAJITA CHICKEN, SQUASH, AND CORN

Meal Components:

Meat-Red/Orange Vegetable – Starchy Vegetable – Other Vegetable – Grains

Ingredients	25 Servings		50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	Weight	Measure	
brown rice, long-grain, regular, dry	3 lb	1 qt 3 1/2 cups	6 lb	3 qt 3 cups	12 lb	1 gal 3 1/2 qt	1. Boil water.
							2. Place 3 lb brown rice in each steam table pan (12" x 20" x 2 1/2"). - For 25 servings, use 1 pan. - For 50 servings, use 2 pans. - For 100 servings, use 4 pans.
							3. Pour water (3 quarts per steam table pan) over brown rice. Stir. Cover pans tightly.
							4. Bake: Conventional oven: 350 °F for 40 minutes Convection oven: 325 °F for 40 minutes
							5. Remove from oven and let stand covered for 5 minutes.
granulated garlic		1 tsp		2 tsp		1 Tbsp tsp	6. Sprinkle brown rice with granulated garlic and half of salt-free seasoning, reserving the other half for step 8. Mix well. Fold in cilantro. Critical Control Point: 135 °F or higher.
salt-free chili-lime seasoning blend		2 Tbsp 1 tsp		1/4 cup 2 tsp		1/2 cup 1 1/3 Tbsp	
fresh cilantro, chopped		1/4 cup		1/2 cup		1 cup	
canola oil		1/2 cup		1 cup		2 cups	7. Heat oil in a roasting pan/square head pan (20 7/8" x 17 3/8" x 7") on top of stove. Sauté onions for 2 – 3 minutes.
*fresh onions, diced	1 lb	3 cups 2 Tbsp	2 lb	1 qt 2 1/4 cups	4 lb	3 qt 1/2 cup	
frozen, cooked fajita chicken strips, thawed	4 lb	1 gal	8 lb	2 gal	16 lb	4 gal	8. Add chicken, squash, and remaining salt-free seasoning. Stir-fry over high heat for 10 minutes or until squash is tender.
*fresh butternut squash, peeled, cubed 1/2"	4 lb	3 qt 1 cup	8 lb	1 gal 2 1/2 qt	16 lb	3 gal 1 qt	
*fresh red bell peppers, diced 1/2"	1 lb	3 cups	2 lb	1 qt 2 cups	4 lb	3 qt	9. Add red peppers, corn, green chilies, tomatoes, black pepper, cumin, and garlic powder. Continue to stir-fry over medium-high heat, for no more than 7 minutes to maintain crunchiness of vegetables. DO NOT OVERCOOK.
frozen corn, thawed, drained	2 lb	1 qt 1 1/2 cups	4 lb	2 qt 3 cups	8 lb	1 gal 1/12 qt	
canned, diced green chilies	1 lb	2 cups (1/2 No. 10 can)	2 lb	1 qt (1 No. 10 can)	4 lb	2 qt (2 No. 10 cans)	
canned low-sodium diced tomatoes	1 lb 2 oz	2 1/4 cups (1/4 No. 10 can)	2 lb 4 oz	1 qt 1/2 cup (1/2 No. 10 can)	4 lb 8 oz	2 qt 1 cup (1 No. 10 can)	
ground black pepper		2 tsp		1 Tbsp 1 tsp		2 Tbsp 2 tsp	
ground cumin		1 Tbsp		2 Tbsp		1/4 cup	
garlic powder		2 tsp		1 Tbsp 1 tsp		2 Tbsp 2 tsp	10. Reduce heat to low and simmer for 2 minutes. Critical Control Point: Heat to 165 °F for at least 15 seconds.
							11. Critical Control Point: Hold for hot service at 135 °F or higher.
							12. Portion 6 fl oz spoodle (3/4 cups) stir-fry over No. 8 scoop (1/2 cup) brown rice.

STIR-FRY FAJITA CHICKEN, SQUASH, AND CORN

Meal Components:

Meat-Red/Orange Vegetable – Starchy Vegetable – Other Vegetable – Grains

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

Serving	Yield	Volume
3/4 cup (6 fl oz spoodle) stir-fry mixture over 1/2 cup (No. 8 scoop) brown rice provides 1 1/4 oz equivalent meat, 3/8 cup red/orange vegetable, 1/8 cup starchy vegetable, 1/4 cup other vegetable, and 1 oz equivalent grains.	25 Servings: about 12 lb 12 oz stir-fry about 6 lb brown rice	25 Servings: about 1 gal 2 qts stir-fry about 3 qts brown rice
	50 Servings: about 25 lb stir-fry about 12 lb brown rice	50 Servings: about 3 gal stir-fry about 1 gal 2 qts brown rice
	100 Servings: about 50 lb stir-fry about 24 lb brown rice	100 Servings: about 6 gal stir-fry about 3 gal brown rice

The grain ingredients used in this recipe must meet the Food and Nutrition Service whole grain-rich criteria.

Marketing Guide			
Food as Purchased for	25 servings	50 servings	100 servings
mature onions	1 lb 3 oz	2 lb 6 oz	4 lb 12 oz
butternut squash	4 lb 13 oz	9 lb 10 oz	2 lb 4 oz
red bell peppers	1 lb 4 oz	2 lb 8 oz	3 lb

Nutrients Per Serving			
Calories	396.34	Saturated Fat	1.69g
Protein	19.52g	Cholesterol	62.31mg
Carbohydrate	58.87g	Vitamin A	7346.86 IU (359.04 RAE)
Total Fat	10.01g	Vitamin C	44.16mg
		Iron	2.37mg
		Calcium	57.97mg
		Sodium	574.40mg
		Dietary Fiber	7.06g

ROASTED FISH CRISPY SLAW WRAP

Recipe

Ingredients

2 1/2 cups fresh red cabbage, shredded
2 cups fresh white cabbage, shredded
1 1/2 cups fresh carrots, peeled, shredded
1 cup fresh bok choy, julienne cut (shoestring strips) 1/8"
2 Tbsp fresh cilantro, chopped
3/4 cup low-fat balsamic vinaigrette dressing
1 Tbsp salt-free chili-lime seasoning blend
1 Tbsp extra virgin olive oil
6 talipia fish filets, raw, 4 oz each
1 1/2 cup fresh romaine lettuce, julienne cut "shoestring strips" 1/8"
6 whole wheat tortilla, 8"
6 slices fresh avocado, peeled, pitted, sliced
6 quarters fresh limes, quartered

Preparation Time: 50 minutes

Cooking Time: 12 minutes

Yield: six wraps

Directions

1. Preheat oven to 375 °F.
2. In a large mixing bowl, combine red and white cabbages, carrots, bok choy, cilantro, and balsamic dressing to make the slaw. Cover and refrigerate for at least 1 hour.
3. Place fish filets on a baking sheet lined with parchment paper sprayed with nonstick cooking spray. Brush fish with olive oil and sprinkle with salt-free seasoning blend. Roast uncovered at 375 °F for 12 minutes or until internal temperature reaches 145 °F or higher and fish flakes with a fork. Use a food thermometer to check the internal temperature.
4. Remove fish from oven.
5. To assemble wrap: Place 1/4 cup lettuce on tortilla. Cut fish in half and place both pieces on top of lettuce. Add 1 cup cabbage slaw and a slice of avocado. Squeeze lime on top of mixture. Roll in the form of a burrito. Cut diagonally. Serve immediately

1 wrap (two halves) provides 2 3/4 oz equivalent meat, 1/4 cup dark green vegetable, 1/4 cup red/orange vegetable, 7/8 cup other vegetable, and 1 1/2 oz equivalent grains.

1/2 wrap (one half) provides 1 1/4 oz equivalent meat, 1/8 cup dark green vegetable, 1/8 cup red/orange vegetable, 3/8 cup other vegetable, and 3/4 oz equivalent grains.

Recipes for Healthy Kids: Cookbook for Homes

TeamNutrition.usda.gov

Nutrients Per Serving (1 wrap):

Calories **342**, Protein **29g**, Carbohydrate **37g**, Dietary Fiber **6g**, Total Fat **10g**, Saturated Fat **2g**, Cholesterol **50mg**, Vitamin A **6406 IU (350 RAE)**, Vitamin C **47mg**, Iron **3mg**, Calcium **69mg**, Sodium **541mg**

ROASTED FISH CRISPY SLAW WRAP

Meal Components:

Meat/Meat Alternate – Red/Orange Vegetable – Other Vegetable – Grains

Ingredients	25 Servings		50 Servings		100 Servings		Directions Process #2: Same Day Service
	Weight	Measure	Weight	Measure	Weight	Measure	
*fresh red cabbage, shredded	1 lb 9 oz	2 qt 1/2 cup	3 lb 2 oz	1 gal 1 cup	6 lb 4 oz	2 gal 2 cups	1. Combine red cabbage, white cabbage, carrots, bok choy, cilantro, and balsamic dressing to make slaw.
*fresh white cabbage, shredded	1 lb 9 oz	1 qt 2 1/2 cups	3 lb 2 oz	3 qt 1 cup	6 lb 4 oz	1 gal 2/12 qt	2. Critical Control Point: Cool to 40 °F or lower within 4 hours. Cover and refrigerate until ready to serve.
*fresh carrots, shredded	1 lb 9 oz	1 qt 1 cup	3 lb 2 oz	2 qt 2 cups	6 lb 4 oz	1 gal 1 qt	
*fresh bok choy, julienne sliced	12 oz	2 1/2 cups	1 lb 8 oz	1 qt 1 cup	3 lb	2 qt 2 cups	
fresh cilantro, chopped		1/2 cup		1 cup		2 cups	
light Balsamic vinaigrette dressing		2 1/3 cups		1 qt 2/3 cup		2 qt 1 1/3 cups	
frozen Tilapia filets, thawed (4 oz portions)	6 lb 4 oz	25 pieces	12 lb 8 oz	50 pieces	25 lb	100 pieces	3. Place Tilapia portions on sheet pan (18" x 26" x 1") lined with parchment paper and lightly coated with pan release spray. - For 25 servings, use 1 pan. - For 50 servings, use 2 pans. - For 100 servings, use 4 pans.
extra virgin olive oil		1/4 cup		1/2 cup		1 cup	4. Brush oil on Tilapia and sprinkle with salt-free seasoning.
salt-free chili-lime seasoning blend		1/4 cup 1 Tbsp	2 oz	1/2 cup 2 Tbsp	4 oz	1 1/4 cups	
							5. Roast: - Conventional oven: 375 °F for 12 minutes. - Convection oven: 375 °F for 9 minutes. When done, fish will flake easily with a fork. Critical Control Point: Heat to 145 °F or higher for at least 15 seconds. 6. Critical Control Point: Hold at 135 °F or higher.
*fresh romaine lettuce, julienne sliced	13 oz	1 qt 2 1/4 cups	1 lb 10 oz	3 qt 1/2 cup	3 lb 4 oz	1 gal 2 1/4 qt	7. Place 1/4 cup lettuce on tortilla. Cut fish in half and place both pieces on top of lettuce. Add 8 fl oz spoodle (1 cup) slaw and one slice of avocado. Squeeze lime on top of filling. Roll in the form of a burrito and seal.
whole-grain tortillas, 8" (1.7 oz each)		25		50		100	
*fresh avocados, sliced 1/4"	7 1/2 oz	25 slices	15 oz	50 slices	1 lb 14 oz	100 slices	
*fresh limes, cut into quarters	5 oz	25 quarters (about 7 limes)	10 oz	50 quarters (about 14 limes)	1 lb 4 oz	100 quarters (about 28 limes)	
							8. Cut diagonally in half and serve.
							9. Portion 1 wrap (two halves).

ROASTED FISH CRISPY SLAW WRAP

Meal Components:

Meat/Meat Alternate – Red/Orange Vegetable – Other Vegetable – Grains

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

Serving	Yield	Volume
1 wrap (two halves) provides: 2 3/4 oz equivalent meat, 1/4 cup dark green vegetable, 1/4 cup red/orange vegetable, 7/8 cup other vegetable, and 1 1/2 oz equivalent grains.	25 Servings: about 16 lb	25 Servings: about 2 gal 25 wraps
	50 Servings: about 31 lb 8 oz	50 Servings: about 4 gal 50 wraps
1/2 wrap (one halves) provides: 1 1/4 oz equivalent meat, 1/8 cup dark green vegetable, 1/8 cup red/orange vegetable, 3/8 cup other vegetable, and 3/4 oz equivalent grains.	100 Servings: about 63 lb	100 Servings: about 8 gal 100 wraps

The grain ingredients used in this recipe must meet the Food and Nutrition Service whole grain-rich criteria.

Marketing Guide			
Food as Purchased for	25 servings	50 servings	100 servings
red cabbage	1 lb 14 oz	3 lb 12 oz	7 lb 8 oz
white cabbage	1 lb 12 oz	3 lb 8 oz	7 lb
carrots	1 lb 14 oz	3 lb 12 oz	7 lb 8 oz
bok choy	1 lb	2 lb	4 lb
romaine lettuce	1 lb 4 oz	2 lb 8 oz	5 lb
avocados	12 oz	1 lb 8 oz	3 lb
limes	7 limes	14 limes	28 limes

Nutrients Per Serving			
Calories	341.64	Saturated Fat	1.50g
Protein	28.83g	Cholesterol	50.42mg
Carbohydrate	36.67g	Vitamin A	6406.03 IU (349.68 RAE)
Total Fat	10.10g	Vitamin C	46.84mg
		Iron	2.55mg
		Calcium	69.44mg
		Sodium	540.54mg
		Dietary Fiber	5.74g

SWEET POTATO AND BLACK BEAN STEW

Recipe

Ingredients

2 Tbsp canola oil
1/2 small pepper dried New Mexican chili pepper, whole
1 1/4 cups fresh onions, peeled, diced
1 tsp ground cumin
1 1/2 cups fresh sweet potatoes, peeled, cubed 1/2"
6 cups canned low-sodium black beans, drained, rinsed
3/4 cup orange juice
1 cup low-sodium chicken stock
1 Tbsp red wine vinegar
1/4 tsp salt
1/4 tsp ground black pepper
4 cups fresh Swiss chard, no stems, chopped

Directions

1. Heat canola oil in a large pot. Cook chili pepper and onions for 1-2 minutes.
2. Add cumin and cook for 2 minutes.
3. Add sweet potatoes, black beans, orange juice, and chicken stock. Bring to a boil. Cover and reduce heat to low. Simmer for 20 minutes or until the potatoes are tender.
4. Remove chili pepper and discard.
5. Add vinegar, salt, and pepper.
6. Add Swiss chard. Cover and continue cooking until Swiss chard is tender. Serve hot.

May serve over brown rice or whole wheat couscous.

Preparation Time: 20 minutes
Cooking Time: 40 minutes
Yield: six 1-cup servings

1 cup provides:

Legume as Meat Alternate – 3 oz equivalent meat alternate, 1/4 cup red/orange vegetable, and 1/4 cup other vegetable.

OR

Legume as Vegetable – 3/4 cup legume vegetable, 1/4 cup red/orange vegetable, and 1/4 cup other vegetable.

Recipes for Healthy Kids: Cookbook for Homes

TeamNutrition.usda.gov

Nutrients Per Serving:

Calories **222**, Protein **10g**, Carbohydrate **43g**, Dietary Fiber **12g**, Total Fat **4g**, Saturated Fat **<1g**, Cholesterol **0mg**, Vitamin A **8848 IU (442 RAE)**, Vitamin C **26mg**, Iron **4mg**, Calcium **103mg**, Sodium **536mg**

SWEET POTATO AND BLACK BEAN STEW

Meal Components:

**Meat Alternate – Legume Vegetable – Red/Orange Vegetable –
Other Vegetable**

Ingredients	25 Servings		50 Servings		100 Servings		Directions Process #2: Same Day Service
	Weight	Measure	Weight	Measure	Weight	Measure	
*dried New Mexican chili peppers, whole		3		6		12	1. Sauté chili peppers and onions in oil for 2 – 3 minutes. - For 25 servings, use large stockpot. - For 50 or 100 servings, use a roasting pan/square head pan (20 7/8" x 17 3/8" x 7") on top of stove.
*fresh onions, diced	1 lb 9 oz	1 qt 1 1/2 cups	3 lb 2 oz	2 qt 3 cup	6 lb 4 oz	1 gal 1 qt	
canola oil		1/2 cup		1 cup		2 cups	
ground cumin		1 1/2 Tbsp		3 Tbsp		1/4 cup 2 Tbsp	2. Add cumin and sauté for 2 minutes.
*fresh sweet potatoes, peeled, cubed 1/2"	3 lb	2 qt 2 1/4 cups	6 lb	1 gal 1 qt	12 lb	2 gal 2 qt	3. Add sweet potatoes, black beans, orange juice, and stock. Bring to a boil.
canned low-sodium black beans, drained, rinsed OR *dry black beans, cooked (See Notes section)	12 lb 2 oz OR 12 lb 2 oz	1 gal 1 1/3 qt (3 No. 10 cans) OR 1 gal 1 1/3 qt	24 lb 4 oz OR 24 lb 4 oz	2 gal 2 2/3 qt (6 No. 10 cans) OR 2 gal 2 2/3 qt	48 lb 8 oz OR 48 lb 8 oz	5 gal 1 1/3 qt (12 No. 10 cans) OR 5 gal 1 1/3 qt	
orange juice		3 cups		1 qt 2 cups		3 qt	
low-sodium chicken stock		1 qt		2 qt		1 gal	4. Cover and reduce heat to low. Simmer for 20 minutes or until potatoes are tender.
red wine vinegar		1/4 cup		1/2 cup		1 cup	5. Remove chilies and discard. Add vinegar, salt, pepper, and Swiss chard. Cover. Critical Control Point: Heat to 140 °F or higher for at least 15 seconds.
salt		1 tsp		2 tsp		1 Tbsp 1 tsp	
ground black pepper		1 tsp		2 tsp		1 Tbsp 1 tsp	
*fresh Swiss chard, no stems, chopped 1/2" OR frozen Swiss chard, chopped	1 lb OR 12 oz	1 qt 1 cup OR 2 1/4 cups	2 lb OR 1 lb 8 oz	2 qt 2 cups OR 1 qt 1/2 cup	4 lb OR 3lb	1 gal 1 qt OR 2 qt 1 cup	
							6. Critical Control Point: Hold for hot service at 135 °F or higher. 7. Portion with 8 fl oz ladle (1 cup).

SWEET POTATO AND BLACK BEAN STEW

Meal Components:

Meat Alternate – Legume Vegetable – Red/Orange Vegetable – Other Vegetable

Notes
*See Marketing Guide for purchasing information on foods that will change during preparation or when a variation of the ingredient is available.
Special tip for preparing dry beans:
SOAKING BEANS
<u>Overnight Method</u> – Add 1 3/4 qt of cold water to every 1 lb of dry beans. Cover and refrigerate overnight. Discard the water. Proceed with recipe.
<u>Quick-Soak Method</u> – Boil 1 3/4 qt of water for each 1 lb of dry beans. Add beans and boil for 2 minutes. Remove from heat and allow to soak for 1 hour. Discard the water. Proceed with recipe.
COOKING BEANS
Once the beans have been soaked, add 1 3/4 qt water for every lb of dry beans. Boil gently, with lid tilted, until tender, about 2 hours.
Use hot beans immediately.
Critical Control Point: Hold for hot service at 135 °F or higher.
OR
Chill for later use.
Critical Control Point: Cool to 70 °F within 2 hours and to 40 °F or lower within an additional 4 hours.
1 lb dry black beans = about 2 1/4 cups dry or 4 1/2 cups cooked beans
In place of the New Mexican chilies, use California, Anaheim, or Ancho chilies. If using powdered chili, use Ancho Chili Powder and use 1 Tbsp per chili.

Marketing Guide			
Food as Purchased for	25 servings	50 servings	100 servings
mature onions	1 lb 13 oz	3 lb 10 oz	7 lb 4 oz
sweet potatoes	3 lb 12 oz	7 lb 8 oz	15 lb
dry black beans	4 lb 11 oz	9 lb 6 oz	18 lb 12 oz
Swiss chard	1 lb 1 oz	2 lb 2 oz	4 lb 4 oz

Nutrients Per Serving			
Calories	222.48	Saturated Fat	0.34g
Protein	10.35g	Cholesterol	0mg
Carbohydrate	43.48g	Vitamin A	8847.71 AU (442.39 RAE)
Total Fat	4.43g	Vitamin C	25.75mg
		Iron	3.95mg
		Calcium	103.07mg
		Sodium	578.59mg
		Dietary Fiber	12.25g

Serving	Yield	Volume
1 cup (8 fl oz ladle) provides:	25 Servings: about 16 lb 8 oz	25 Servings: about 2 gal
Legume as Meat Alternate – 3 oz equivalent meat alternate, 1/4 cup red/orange vegetable, and 1/4 cup other vegetable.	50 Servings: about 32 lb	50 Servings: about 4 gal
OR	100 Servings: about 65 lb 8 oz	100 Servings: about 8 gal
Legume as Vegetable – 3/4 cup legume vegetable, 1/4 cup red/orange vegetable, and 1/4 cup other vegetable.		
<i>Legume vegetable can be counted as either a meat alternate or as a legume vegetable but not as both simultaneously.</i>		

Product Evaluation for Fruits and Vegetables

Participants evaluate each food product as part of the tasting in this culinary lab. For each food product (row) and each evaluation category (column), circle either A (acceptable) or NA (not acceptable).

Food Product	Appearance	Taste	Texture	Eating Quality	Comments
<i>Tasty Tots</i>	<i>A or NA</i>	<i>A or NA</i>	<i>A or NA</i>	<i>A or NA</i>	
<i>Stir-Fry Fajita Chicken, Squash, and Corn</i>	<i>A or NA</i>	<i>A or NA</i>	<i>A or NA</i>	<i>A or NA</i>	
<i>Roasted Fish Crispy Slaw Wrap</i>	<i>A or NA</i>	<i>A or NA</i>	<i>A or NA</i>	<i>A or NA</i>	
<i>Sweet Potato and Black Bean Stew</i>	<i>A or NA</i>	<i>A or NA</i>	<i>A or NA</i>	<i>A or NA</i>	

SHOW SLIDE: *Day 2 Lesson 1*

DAY 2

Lesson 1: Whole Grain-Rich Foods

DAY 2 – Lesson 1: Whole Grain-Rich Foods

Classroom Instruction

1 hour

SHOW SLIDE: *Applying the DGA to Whole Grain-Rich Foods*

Americans generally eat enough total grains although refined grains are most consumed. Let's consider how the DGA applies to whole grain-rich foods.

- Focus on eating whole grains.
- Consume at least half of all grains as whole grains.
- Healthy eating patterns include a recommended intake of grains and whole grains per day based on age and gender.

SHOW SLIDES: *Daily Grain Table*

- Note: The amounts recommended in the Daily Vegetable Table are appropriate for individuals who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie needs.

SHOW SLIDE: *What's the Difference? Whole, Refined, & Enriched*

- Whole grains – include entire grain seed, usually called the kernel, which consists of bran, germ, and endosperm. Examples are buckwheat, bulgur, quinoa, whole grain barley, and whole wheat.
- Refined grains – have been milled to remove the bran and germ from grain.
- Enriched grains – grain products with B vitamins and iron added.

Trainer Tip:

- Write the words *Simple and Complex Carbohydrates* on a flip chart.
- Explain that carbohydrates serve important roles in the body and fall into two classes: simple and complex. It is important to know the difference.
- Ask, “What is the difference in simple and complex carbohydrates?” As participants respond, write the correct answers on the flip chart.
 - Complex carbohydrates (starch and fiber) are very useful in the body.
 - Simple carbohydrates (sugars) can be less valuable to health and sometimes provide nothing more than empty calories to the diet.

SHOW SLIDE: *Basic Principles of Preparing Pasta*

Basic Principles of Preparing Pasta

- Pasta shapes
 - Pasta shapes with holes or ridges, such as wagon wheels or rotini, are perfect for chunkier sauces.
 - Thin, delicate pastas, such as angel hair or vermicelli, are better served with light, thin sauces.
 - Thicker pasta shapes, such as fettuccine, work well with heavier sauces.
 - Very small shapes, such as alphabet shapes and acini di pepe, are good for soups.

SHOW SLIDE: *More Basic Principles*

- Cooking time depends on the shape of the pasta, so follow the recipe.
 - The general rule for cooking pasta in boiling water is for 1 pound of pasta, use 1 gallon of water, 1 teaspoon of salt, and 1 teaspoon of oil.
 - If pasta is in a recipe that will be cooked more, like macaroni and cheese, it should be slightly under cooked, so reduce the cooking time by about 2 minutes.

SHOW SLIDE: *More Basic Principles, cont'd.*

- Pasta gets bigger and heavier when it is cooked.
 - Generally, pasta doubles or triples in weight when it is cooked. Likewise, the volume increases 2 to 2 1/2 times. So, if 1 gallon of dry pasta is measured, the cooked pasta would measure 2 – 3 gallons.

SHOW SLIDE: *Basic Principles of Preparing Rice***Basic Principles of Preparing Rice**

- Follow the recipe for the correct amount of liquid for the kind of rice and culinary technique to be used.
- The standard ratio for cooking rice is two parts water to one part rice.
- The flavor of rice can be enhanced by using chicken, beef, or vegetable stock as the cooking liquid.

SHOW SLIDE: *More Basic Principles, cont'd.*

- Added ingredients for good flavor include onions, vegetable and fruit juices, garlic, herbs, and spices.
- Overcooked rice becomes mushy or sticky, and the grains cling together.

SHOW SLIDE: *Basic Principles of Preparing Grains***Basic Principles of Preparing Grains**

- Grain dish examples are bulgur or cracked wheat, buckwheat or kasha, and oatmeal. Corn, cornmeal, and grits are also from the grain group.
- Simmering is the most popular culinary technique for cooking grains.
- A grain product should not be stirred too much and should not be overcooked, which will result in a sticky, gummy product.
- Grain products are done when almost all the liquid has been absorbed.

Trainer Tip:

- Write the words *Fiber: Complex Carbohydrate* on a flip chart.
- Explain that neither adults nor children consume enough fiber, which is a valuable component that promotes good health in many ways. Fiber is also what gives shape and structure to vegetables, such as turnip greens, spinach, and celery.
- Ask, “What are some benefits of fiber?” As participants respond, write the correct answers on the flip chart.
 - Helps maintain the health of the digestive tract.
 - Helps prevent or control certain diseases.
- Ask, “What are the major food sources of fiber?” As participants respond, write the correct answers on the flip chart.
 - fruits
 - vegetables (particularly legumes)
 - grains
- Have teams take a few minutes to list ideas for increasing fiber in school meals. Then allow time for sharing. Summarize ideas on the flip chart.

DAY 2 – Lesson 1: Whole Grain-Rich Foods

Culinary Demonstration #3

1 hour

- *Basic Technique*
 - Grain
 - Liquid
- *Equipment*
- Demo: *Brown Rice Pilaf*
- *Pasta*
 - Various shapes and sizes
 - Cooking al dente
- Demo: *Chic Penne*

NOTES

BROWN RICE PILAF

Recipe

Ingredients

2 cups brown rice, long-grain

1 1/2 Tbsp olive oil

1/4 cup onions, minced

4 cups beef stock*

2 bay leaves

2 thyme sprigs

Directions

1. Toast brown rice over medium heat, stirring constantly, until it darkens and starts to smell nutty, about 2-3 minutes.
2. Heat the oil. Add the onion and sweat, stirring frequently, until translucent, about 5-6 minutes.
3. Add the hot stock or water. Bring to a simmer.
4. Add the bay leaves, thyme, and salt. Cover the pot, and turn the heat to simmer.
5. Cook for approximately 12-15 minutes, until the grain is tender. Uncover and use a fork to separate the grains and release the steam.

Variations: Add diced, roasted red and yellow peppers; toasted almonds; sautéed mushrooms; or fresh chopped parsley.

Yield: ten servings

*For a vegetarian option, replace beef stock with vegetable stock.

Nutrients Per Serving:

Calories **165**, Protein **4.12g**, Carbohydrate **28.9g**, Dietary Fiber **1.4g**, Total Fat **3.53g**, Saturated Fat **0.5g**, Cholesterol **1.60mg**, Vitamin A **0.08 IU**, Vitamin C **0.3mg**, Iron **<1mg**, Calcium **4.27mg**, Sodium **47.15mg**

CHIĆ PENNE

Recipe

Ingredients

3 cups penne pasta, whole wheat dry (12 oz)
1 tsp granulated garlic
2 cups fresh broccoli florets
1 cup cooked diced chicken, 1/2" pieces (4 oz)
1 1/2 cups fat-free half-and-half
1 Tbsp enriched all-purpose flour
1/8 cup low-sodium chicken broth
1 tsp salt
1/2 tsp ground black pepper
1/2 cup reduced-fat cheddar cheese, shredded (2 oz)
1/2 cup low-fat mozzarella cheese, low-moisture, part-skim, shredded (2 oz)

Preparation Time: 20 minutes
Cooking Time: 20 minutes
Yield: six 1 1/2-cup servings

1 1/2 cups provides 1 oz equivalent meat/meat alternate, 1/8 cup dark green vegetable, and 1 3/4 oz equivalent grains.

Recipes for Healthy Kids Cookbook for Homes
 TeamNutrition.usda.gov

Nutrition Per Serving:

Calories 300, Protein 19g, Carbohydrate 44g,
 Dietary Fiber 6g, Total Fat 6 g, Saturated Fat 2g,
 Cholesterol 26mg, Vitamin A 618IU (78 RAE),
 Vitamin C 17mg, Iron 2mg, Calcium 231mg,
 Sodium 418mg

Directions

1. Preheat oven to 350 °F.
2. In a large pot, bring 2 quarts water to a boil. Gradually stir in pasta and return to a boil. Cook uncovered for 8-10 minutes or until tender. Do not overcook. Drain well. Toss pasta with 1/2 teaspoon garlic.
3. Fill a medium pot with water and bring to a boil. Add broccoli florets and cook for 5 minutes. Drain well. Sprinkle with remaining garlic.
4. Transfer pasta and broccoli to a medium casserole dish (about 8" x 11") coated with nonstick cooking spray. Add chicken. Mix well.
5. In a small mixing bowl, mix 1/2 cup half-and-half with flour. Whisk to remove lumps.
6. In a medium skillet, heat chicken broth, salt, pepper, and remaining half-and-half. Stir constantly. Stir in half-and-half/flour mixture. Stir constantly and bring to a boil.
7. Reduce heat to low. Stir frequently for 5 minutes. Sauce will thicken. Add cheese and stir until cheese melts. Remove from heat. Pour sauce over broccoli/pasta mixture.
8. Cover casserole dish with lid or foil. Bake at 350 °F for 8 minutes. Heat to an internal temperature of 165 °F or higher for at least 15 seconds (use a food thermometer to check the internal temperature). Remove from oven. Serve hot.

CHIC PENNE

Meal Components:

Meat/Meat Alternate – Dark Green Vegetable – Grains

Ingredients	25 Servings		50 Servings		100 Servings		Directions Process #2: Same Day Service
	Weight	Measure	Weight	Measure	Weight	Measure	
water		1 gal 2 qt		3 gal		6 gal	1. Heat water to a rolling boil.
penne pasta, multi-grain, dry	3 lb	3 qt 3 1/3 cups	6 lb	1 gal 3 1/2 qt	12 lb	3 gal 3 qt	2. Slowly add pasta. Stir constantly, until water boils again. Cook about 8 minutes or until al dente; stir occasionally. DO NOT OVERCOOK. Drain well.
granulated garlic		1 Tbsp 1 tsp		2 Tbsp 2 tsp	3 1/2 oz	1/4 cup 1 1/3 Tbsp	3. Toss cooked pasta with garlic. - For 25 servings, add 2 tsp (reserve remaining garlic for step 5). - For 50 servings, add 1 Tbsp 1 tsp (reserve remaining garlic for step 5). - For 100 servings, add 2 Tbsp 2 tsp garlic (reserve remaining garlic for step 5). 4. Transfer pasta to steam table pan (12" x 20" x 2 1/2"). - For 25 servings, use 1 pan. - For 50 servings, use 2 pans. - For 100 servings, use 4 pans.
*fresh broccoli florets, chopped 1"	1 lb 9 oz	2 qt 3 1/4 cups	3 lb 2 oz	1 gal 1 1/2 qt	6 lb 4 oz	2 gal 3 qt	5. Cook broccoli for 5 minutes in boiling water. Drain broccoli and toss with remaining garlic.
frozen, cooked diced chicken, thawed, 1/2" pieces	1 lb	3 1/4 cups	2 lb	1 qt 2 1/2 cups	4 lb	3 qt 1 cup	6. Add broccoli and chicken to pasta. Mix well.
low-sodium chicken broth		1/2 cup		1 cup		2 cups	7. Sauce: Combine broth, salt, pepper, and milk. Bring to a boil, stir constantly. - For 25 servings, use 1 qt milk (reserve remaining milk for step 8). - For 50 servings, use 2 qt milk (reserve remaining milk for step 8). - For 100 servings, use 1 gal 2 cups milk (reserve remaining milk for step 8).
salt		1 Tbsp		2 Tbsp		1/4 cup	
ground black pepper		2 tsp		1 Tbsp 1 tsp		2 Tbsp 2 tsp	
nonfat milk		1 qt 1 1/2 cups		2 qt 3 cups		1 gal 1 1/2 qt	
enriched all-purpose flour		1/4 cup		1/2 cup	2 1/2 oz	1 cup	8. Combine remaining milk with flour and add to broth mixture. Reduce heat to low. Stir constantly for 5 minutes until sauce thickens.
reduced-fat cheddar cheese, shredded	8 oz	2 cups	1 lb	1 qt	2 lb	2 qt	9. Add cheese. Continue to stir until cheese melts.
low-fat mozzarella cheese, low moisture, part-skim, shredded	8 oz	2 cups	1 lb	1 qt	2 lb	2 qt	
							10. Pour cheese sauce evenly over pasta mixture. 11. Cover with foil and bake: - Conventional oven: 350 °F for 8 minutes - Convection oven: 350 °F for 4 minutes Critical Control Point: Hold for hot service at 135 °F or higher.
							12. Critical Control Point: Hold for hot service at 135 °F or higher.
							13. Portion two 6 fl oz spoodles (1 1/2 cups).

CHIĆ PENNE

Meal Components:

Meat/Meat Alternate – Dark Green Vegetable – Grains

Notes
*See Marketing Guide for purchasing information on foods that will change during preparation or when a variation of the ingredient is available.
For a creamier sauce, use an equal quantity of fat-free half-and-half in place of milk.

Serving	Yield	Volume
1 1/2 cups (two 6 fl oz spoodles) provides 1 oz equivalent meat/meat alternate, 1/8 cup dark green vegetable, and 1 3/4 oz equivalent grains.	25 Servings: about 16 lb 8 oz	25 Servings: about 2 gal
	50 Servings: about 32 lb	50 Servings: about 4 gal
	100 Servings: about 65 lb 8 oz	100 Servings: about 8 gal

The grain ingredients used in this recipe must meet the Food and Nutrition Service whole grain-rich criteria.

Marketing Guide			
Food as Purchased for	25 servings	50 servings	100 servings
broccoli	1 lb 9 oz	3 lb 2 oz	6 lb 4 oz

Nutrients Per Serving					
Calories	222.48	Saturated Fat	0.34g	Iron	3.95mg
Protein	10.35g	Cholesterol	0mg	Calcium	103.07mg
Carbohydrate	43.48g	Vitamin A	8847.71 AU (442.39 RAE)	Sodium	578.59mg
Total Fat	4.43g	Vitamin C	25.75mg	Dietary Fiber	12.25g

DAY 2 – Lesson 1: Whole Grain-Rich Foods

Culinary Lab #3

1 1/2 hours

Team Assignments

Team #1
<i>Chicken Alfredo with a Twist</i>

Team #2
<i>Mediterranean Quinoa Salad</i>

Team #3
<i>Chicken Curry Casserole</i>

Team #4
<i>Porcupine Sliders</i> (double this recipe)

CHICKEN ALFREDO WITH A TWIST

Recipe

Ingredients		Directions
2 1/2 cups rotini pasta, whole wheat, dry (10 oz) 2 cans low-fat, reduced-sodium cream of chicken soup (two 10 3/4-oz cans) 1 1/3 cups fat-free half-and-half 1/4 tsp ground white pepper 1/8 tsp garlic powder 1/3 cup grated parmesan cheese 3 cups cooked diced chicken, 1/2" pieces (12 oz)		<ol style="list-style-type: none"> 1. In a large pot, bring 2 quarts water to a boil. Gradually stir in pasta and return to a boil. Cook uncovered about 8-10 minutes or until tender. Do not overcook. Drain well. 2. Mix soup, half-and-half, pepper, garlic powder, parmesan cheese, and chicken in a large pot. Cook for 5 minutes over medium heat, stirring often. Heat to 165 °F or higher for at least 15 seconds. 3. Combine noodles and sauce right before serving. Serve hot.
Preparation Time:	15 minutes	Note: Keep noodles and sauce separate until serving time. Sauce will thicken upon standing. 1 cup provides 2 1/4 oz equivalent meat/meat alternate and 1 1/4 oz equivalent grains.
Cooking Time:	15 minutes	
Yield:	six 1 cup servings	

Nutrients Per Serving:

Calories **345**, Protein **30g**, Carbohydrate **41g**, Dietary Fiber **3g**, Total Fat **8g**, Saturated Fat **4g**, Cholesterol **69mg**, Vitamin A **450 IU (29 RAE)**, Vitamin C **<1mg**, Iron **2mg**, Calcium **174mg**, Sodium **572mg**

CHICKEN ALFREDO WITH A TWIST

Meal Components: Meat/Meat Alternate – Grains

Ingredients	25 Servings		50 Servings		100 Servings		Directions Process #2: Same Day Service
	Weight	Measure	Weight	Measure	Weight	Measure	
water		3 gal		6 gal		12 gal	1. Heat water to a rolling boil.
rotini pasta, whole-grain dry	2 lb	2 qt 2 3/4 cups	4 lb	5 qt 1 1/2 cups	8 lb	2 gal 2 3/4 qt	2. Slowly add pasta. Stir constantly, until water boils again. Cook about 8 minutes or until al dente; stir occasionally. DO NOT OVERCOOK. Drain well. 3. Pour into steam table pans (12" x 20" x 4"). - For 25 servings, use 1 pan. Critical Control Point: Hold pasta to 135 °F or higher.
low-fat, reduced-sodium cream of chicken soup, condensed	4 lb 11 oz	2 qt 1 3/8 cups (1 1/2 No. 3 cans)	9 lb 6 oz	1 gal 3/4 qt (3 No. 3 cans)	18 lb 12 oz	2 gal 1 1/2 qt (6 No. 3 cans)	4. Combine soup, half-and-half, pepper, garlic, parmesan cheese, and chicken. Cook over medium heat for 5 – 10 minutes, stirring often. Critical Control Point: Heat to 165 °F or higher for at least 15 seconds.
fat-free half-and-half		1 qt 2 cups		3 qt		1 gal 2 qt	
ground white pepper		1 tsp		2 tsp		1 Tbsp 1 tsp	
garlic powder		1/2 tsp		1 tsp		2 tsp	
parmesan cheese, grated	8 1/2 oz	3 cups	1 lb 1 oz	1 1/2 qt	2 lb 2 oz	3 qt	
frozen, cooked diced chicken, thawed, 1/2" pieces	3 lb 4 oz	2 qt 2 1/2 cups	6 lb 8 oz	1 gal 1 1/4 qt	13 lb	2 gal 2 1/2 qt	
							5. Combine noodles and sauce immediately before serving.
							6. Critical Control Point: Hold for hot service at 135 °F or higher.
							7. Portion with 8 fl oz spoodle (1 cup).

Notes
Keep noodles and sauce separate until serving time to maintain consistency of sauce. Sauce will thicken upon serving.

Serving	Yield	Volume
1 cup provides 2 1/4 oz equivalent meat/meat alternate and 1 1/4 oz equivalent grains.	25 Servings: about 13 lb	25 Servings: about 1 gal 2 qt 1 steam table pan
	50 Servings: about 11 lb 8 oz	50 Servings: about 3 gal 2 steam table pans
	100 Servings: about 51 lb	100 Servings: about 6 gal 4 steam table pans

The grain ingredients used in this recipe must meet the Food and Nutrition Service whole grain-rich criteria.

Nutrients Per Serving					
Calories	345	Saturated Fat	4g	Iron	2mg
Protein	30g	Cholesterol	69mg	Calcium	174mg
Carbohydrate	41g	Vitamin A	450 IU (29 RAE)	Sodium	572mg
Total Fat	8g	Vitamin C	<1mg	Dietary Fiber	3g

MEDITERRANEAN QUINOA SALAD

Recipe

Ingredients	Directions
1 cup quinoa, dry 2 cups low-sodium chicken broth 2 Tbsp lemon juice 2 Tbsp red wine vinegar 1 tsp fresh garlic, minced 1 1/2 Tbsp extra virgin olive oil 1/2 tsp salt 1/8 tsp ground white pepper 1/4 cup fresh red bell peppers, seeded, diced 2 Tbsp fresh green onions, diced 2 Tbsp fresh red onions, peeled, diced 1/2 cup fresh cherry tomatoes, halved 2 Tbsp black olives, sliced 2 Tbsp feta cheese, crumbled 1 Tbsp fresh parsley, chopped	<ol style="list-style-type: none"> 1. Rinse quinoa in a fine mesh strainer until water runs clear, not cloudy. Combine quinoa and chicken broth in a small pot. Cover and bring to a boil. Turn heat down to low and simmer until broth is completely absorbed, about 10-15 minutes. When done, quinoa will be soft and a white ring will pop out of the kernel. The white ring will only appear when it is fully cooked. Fluff with a fork. A rice cooker may be used with the same quantity of quinoa and water. Cover and refrigerate. 2. In a small mixing bowl, combine lemon juice, vinegar, garlic, olive oil, salt, and ground pepper to make dressing. 3. Combine red peppers, green onions, red onions, tomatoes, and olives in a large mixing bowl. Mix well. 4. Add dressing to vegetable mixture. Mix in cooled quinoa. Fold in feta cheese and parsley. Cover and refrigerate for about 2 hours. Serve chilled.
Preparation Time: 1 hour Cooking Time: 10-15 minutes Yield: six 3/4-cup servings	

3/4 cup provides 1/8 cup other vegetable and 1 oz equivalent grains.

Nutrients Per Serving:

Calories **166**, Protein **7g**, Carbohydrate **23g**, Dietary Fiber **3g**, Total Fat **6g**, Saturated Fat **1g**, Cholesterol **3mg**, Vitamin A **414 IU (24 RAE)**, Vitamin C **12mg**, Iron **2mg**, Calcium **42mg**, Sodium **278mg**

MEDITERRANEAN QUINOA SALAD

Meal Components: Other Vegetable – Grains

Ingredients	25 Servings		50 Servings		100 Servings		Directions Process #3: Complex Food Preparation
	Weight	Measure	Weight	Measure	Weight	Measure	
quinoa, dry	1 lb 11 oz	1 qt 1/4 cup	3 lb 3 oz	2 qt 1/2 cup	6 lb 12 oz	1 gal 1 cup	1. Rinse quinoa in a fine mesh strainer until water runs clear, not cloudy.
low-sodium chicken broth		2 qt		1 gal		2 gal	2. Combine quinoa and broth in a covered stockpot and bring to a boil. Reduce heat and simmer until water is completely absorbed, about 10 – 15 minutes. When done, quinoa will be soft and a white ring will pop out of the kernel. The white ring will appear only when it is fully cooked. Fluff. Cover and refrigerate at 40 °F.
lemon juice		1/4 cup		1/2 cup		1 cup	3. Dressing: Combine lemon juice, vinegar, garlic, oil, salt, and ground pepper. Mix well. Set aside.
red wine vinegar		1/4 cup		1/2 cup		1 cup	
fresh garlic, minced		1 Tbsp		2 Tbsp		1/4 cup	
extra virgin olive oil		1/4 cup		1/2 cup		1 cup	
salt		2 tsp		1 Tbsp 1 tsp		3 qt	
ground white pepper		1/2 tsp		1 tsp		2 tsp	
*fresh red bell peppers, diced	5 1/2 oz	1 cup	11 oz	2 cups	1 lb 6 oz	1 qt	4. Combine red peppers, green onions, red onions, tomatoes, and black olives in a large bowl. Add dressing.
*fresh green onions, diced	2 oz	1/2 cup	4 oz	1 cup	8 oz	2 cups	
*fresh red onions, diced	3 oz	1/2 cup	6 oz	1 cup	12 oz	2 cups	
*fresh cherry tomatoes, halved	11 1/2 oz	2 cups	1 lb 6 1/2 oz	1 qt	2 lb 13 oz	2 qt	
black olives, sliced	2 1/2 oz	1/2 cup	5 oz	1 cup	9 1/2 oz	2 cups	
feta cheese, crumbled	3 oz	1/2 cup	6 oz	1 cup	12 oz	2 cups	5. Mix in cooled quinoa. Fold in feta cheese and parsley.
*fresh parsley, finely chopped		1 cup		2 cups	2 1/2 oz	1 qt	6. Transfer to a steam table pan (12" x 20" x 2 1/2"). - For 25 servings, use 1 pan. - For 50 servings, use 2 pans. - For 100 servings, use 4 pans. 7. Critical Control Point: Cool to 40 °F or lower within 4 hours. Cover and refrigerate until service. 8. Portion with 6 fl oz spoodle (3/4 cup).

MEDITERRANEAN QUINOA SALAD

Meal Components: Other Vegetable – Grains

Notes		
*See Marketing Guide for purchasing information on foods that will change during preparation or when a variation of the ingredient is available.		
Serving	Yield	Volume
3/4 cup (6 fl oz spoodle) provides 1/8 cup other vegetable and 1 oz equivalent grains.	25 Servings: about 4 lb 8 oz	25 Servings: about 2 qts 1 cup 1 steam table pan
	50 Servings: about 9 lb	50 Servings: about 1 gal 2 cups 2 steam table pans
	100 Servings: about 18 lbs	100 Servings: about 2 gal 1 qt 4 steam table pans

The grain ingredients used in this recipe must meet the Food and Nutrition Service whole grain-rich criteria.

Marketing Guide			
Food as Purchased for	25 servings	50 servings	100 servings
red bell peppers	7 oz	14 oz	1 lb 12 oz
green onions	2 1/2 oz	5 oz	10 oz
red onions	3 1/2 oz	7 oz	14 oz
cherry tomatoes	11 1/2 oz	1 lb 7 oz	2 lb 14 oz
parsley	3/4 oz	1 1/2 oz	3 oz

Nutrients Per Serving			
Calories	165.87	Saturated Fat	1.21g
Protein	6.66g	Cholesterol	3.03mg
Carbohydrate	22.66g	Vitamin A	414.48 AU (24.27 RAE)
Total Fat	5.62g	Vitamin C	12.38mg
		Dietary Fiber	2.67g

CHICKEN CURRY CASSEROLE

Recipe

Ingredients

1 cup brown rice, long-grain, regular, dry
1 Tbsp canola oil
1/4 cup low-sodium chicken broth
3/4 cup fresh celery, diced
1 cup fresh onions, peeled, chopped 1/2"
1 1/4 cups fresh carrots, peeled, shredded
1 1/2 tsp curry powder
1 tsp garlic powder
1/2 tsp ground black pepper
3/4 tsp salt
1/2 cup low-fat plain yogurt
2 cups cooked fajita chicken strips, diced 1" (12 oz)

Preparation Time: 15 minutes
Cooking Time: 1 hour 5 minutes
Yield: six 1 cup servings

Directions

1. Preheat oven to 400 °F.
2. Combine brown rice and 2 1/2 cups water in a large pot and bring to a boil. Turn heat down to low. Cover and cook until water is absorbed, about 30 – 40 minutes. Fluff with a fork. Set aside. A rice cooker may be used with the same quantity of brown rice and water.
3. In a large pan, heat canola oil over medium heat for 2-3 minutes. Add celery, onions, and carrots. Cook an additional 5-7 minutes or until vegetables are tender. Add chicken broth.
4. In a large mixing bowl, combine curry powder, garlic powder, pepper, salt, and yogurt. Add vegetables, brown rice, and chicken. Mix well.
5. Pour mixture into a 9" x 9" nonstick baking pan. Bake uncovered at 400 °F for 15 minutes. Heat to an internal temperature of 165 °F or higher for at least 15 seconds (use a food thermometer to check the internal temperature). Serve hot.

1 cup provides 1 1/4 oz equivalent meat/meat alternate, 1/4 cup other vegetable, and 3/4 oz equivalent grains.

Nutrients Per Serving:

Calories **220**, Protein **14g**, Carbohydrate **26g**, Dietary Fiber **3g**, Total Fat **6g**, Saturated Fat **1g**, Cholesterol **51mg**,
 Vitamin A **3162 IU (158 RAE)**, Vitamin C **3mg**, Iron **1mg**, Calcium **65mg**, Sodium **564mg**

CHICKEN CURRY CASSEROLE

Meal Components: Meat/Meat Alternate – Other Vegetable – Grains

Ingredients	25 Servings		50 Servings		100 Servings		Directions Process #3: Complex Food Preparation
	Weight	Measure	Weight	Measure	Weight	Measure	
water		1 qt 3 cups		3 qt 2 cup		1 gal 3 qts	1. Boil water.
brown rice, long-grain, regular, dry	1 lb 8 oz	3 3/4 cups	3 lb	1 qt 3 1/2 cups	6 lb	3 qt 3 cups	2. Place 1 lb 8 oz brown rice in each steam table pan (12" x 20" x 2 1/2"). - For 25 servings, use 1 pan. - For 50 servings, use 2 pans. - For 100 servings, use 4 pans. 3. Pour boiling water (1 qt 3 cups per steam table pan) over brown rice. Stir. Cover pans tightly. 4. Bake: Conventional oven: 350 °F for 40 minutes Convection oven: 325 °F for 40 minutes 5. Remove from oven and let stand covered for 5 minutes.
canola oil		1/4 cup		1/2 cup		1 cup	6. Cook oil and broth over medium heat for 5 minutes.
low-sodium chicken broth		1 cup		2 cups		1 qt	
*fresh carrots, shredded	1 lb 1 1/2 cups	1 qt 1 cup	2 lb 3 oz	2 qt 2 cups	4 lb 6 oz	5 qt	7. Add carrots, celery, and onions. Cook for 10 minutes or until vegetables are tender. Set aside.
*fresh celery, diced	11 1/2 oz	2 1/4 cups	1 lb 7 oz	1 qt 1/2 cup	2 lb 14 oz	2 qt 1 cup	
*fresh onions, chopped 1/2"	11 oz	2 1/2 cups	1 lb 6 oz	1 qt 1 cup	2 lb 12 oz	2 qt 2 cups	
curry powder		3 Tbsp		1/4 cup 2 Tbsp	3 oz	3/4 cup	8. Combine curry, garlic, pepper, salt, and yogurt. Mix well.
garlic powder		1 1/2 Tbsp		3 Tbsp		1/4 cup 2 Tbsp	
ground black pepper		3/4 Tbsp		1 1/2 Tbsp		3 Tbsp	
salt		1 1/2 tsp		1 Tbsp		2 Tbsp	
low-fat yogurt, plain	1 lb	2 cups	2 lb	1 qt	4 lb	2 qt	
frozen, cooked fajita chicken strips, thawed, diced 1"	3 lb 2 oz	2 qt	6 lb 4 oz	1 gal	12 lb 8 oz	2 gal	9. Add vegetable mixture to rice. Fold in curry/yogurt mixture. Add chicken. Combine well. 10. Bake uncovered: Conventional oven: 400° F for 10 minutes Convection oven: 375 °F for 10 minutes Critical Control Point: Heat to 165 °F or higher for at least 15 seconds.
							11. Critical Control Point: Hold for hot service at 135 °F or higher. 12. Portion with 6 fl oz spoodle (3/4 cup).

CHICKEN CURRY CASSEROLE

Meal Components: Meat/Meat Alternate – Other Vegetable – Grains

Notes		
*See Marketing Guide for purchasing information on foods that will change during preparation or when a variation of the ingredient is available.		
Serving	Yield	Volume
3/4 cup (6 fl oz spoodle or No. 8 scoop) provides 1 1/4 oz equivalent meat/meat alternate, 1/4 cup other vegetable, and 3/4 oz equivalent grains.	25 Servings: about 10 lb 8 oz	25 Servings: about 1 gal 1 1/4 qts
	50 Servings: about 21 lb	50 Servings: about 2 gal 2 1/2 qts
	100 Servings: about 42 lb	100 Servings: about 5 gal 1 qt

The grain ingredients used in this recipe must meet the Food and Nutrition Service whole grain-rich criteria.

Marketing Guide			
Food as Purchased for	25 servings	50 servings	100 servings
carrots	1 lb 6 oz	2 lb 12 oz	5 lb 8 oz
celery	14 oz	1 lb 12 oz	3 lb 8 oz
mature onions	13 oz	1 lb 10 oz	3 lb 4 oz

Nutrients Per Serving			
Calories	220.32	Saturated Fat	1.34g
Protein	14.33g	Cholesterol	50.50mg
Carbohydrate	26.40g	Vitamin A	3161.50 IU (158.37 RAE)
Total Fat	6.47g	Vitamin C	2.56mg
		Iron	1.43mg
		Calcium	64.98mg
		Sodium	563.78mg
		Dietary Fiber	2.81g

PORCUPINE SLIDERS

Recipe

Ingredients

1/8 cup brown rice, long-grain, regular, dry
1 tsp canola oil
1 1/2 Tbsp fresh onions, peeled, diced
1/4 cup fresh celery, diced
1 1/2 tsp fresh garlic, minced
1 lb raw ground turkey, lean
1 egg, beaten
5 Tbsp dried cranberries, chopped
3/4 cup fresh baby spinach, chopped
1 tsp Worcestershire sauce
1/2 tsp salt
1/2 tsp ground black pepper
1 dash ground white pepper
6 (1 oz each) mini whole wheat rolls (small dinner roll size)

Preparation Time: 30 minutes
Cooking Time: 1 hour 20 minutes
Yield: 6 sliders

1 slider provides 2 oz equivalent meat/meat alternate and 1 oz equivalent grains.

***Double this recipe for the Culinary Lab.**

Recipes for Healthy Kids: Cookbook for Homes
 TeamNutrition.usda.gov

Nutrients Per Serving:

Calories **247**, Protein **16g**, Carbohydrate **26g**, Dietary Fiber **3g**, Total Fat **9g**, Saturated Fat **2g**, Cholesterol **85mg**, Vitamin A **540 IU (41 RAE)**, Vitamin C **2mg**, Iron **2mg**, Calcium **65mg**, Sodium **366mg**

Directions

1. Preheat oven to 350 °F.
2. Combine brown rice and 1/2 cups water in a small pot and bring to a boil. Turn heat down to low. Cover and cook until water is absorbed, about 30-40 minutes. Fluff with a fork. Cover and refrigerate until completely cooled. A rice cooker may be used with the same quantity of brown rice and water.
3. Heat canola oil in a small skillet. Add onions, celery, and garlic. Cook over medium heat for 5 minutes or until tender. Remove from heat. Cover and refrigerate until completely cooled.
4. In a medium mixing bowl, combine turkey, egg, cranberries, spinach, Worcestershire sauce, salt, peppers, brown rice, and sautéed vegetables. Mix well. Shape into six patties.
5. Line a large baking sheet with parchment paper and lightly coat with nonstick cooking spray. Place patties evenly spaced on baking sheet.
6. Bake uncovered for 20-25 minutes at 350 °F to an internal temperature of 165 °F or higher for at least 15 seconds (use a food thermometer to check the internal temperature). Do not overcook. Remove from the oven and serve on a mini whole wheat roll. Serve immediately.
7. May be served with onion, lettuce, tomatoes, ketchup, and mustard.

PORCUPINE SLIDERS

Meal Components: Meat/Meat Alternate – Grains

Ingredients	25 Servings		50 Servings		100 Servings		Directions Process #3: Complex Food Preparation
	Weight	Measure	Weight	Measure	Weight	Measure	
water		1 3/4 cups		3 1/2 cups		1 qt 3 cups	1. Combine water and brown rice in a stockpot and bring to a boil. Cover and cook until water is absorbed, about 30 – 40 minutes. Fluff. Cover and refrigerate at 40 °F.
brown rice, long-grain, regular, dry	4 3/4 oz	3/4 cup	9 1/2 oz	1 1/2 cups	1 lb 3 oz	3 cups	
canola oil		1 Tbsp		2 Tbsp		1/4 cup	2. Heat oil. Sauté onions, celery, and garlic for 5 – 7 minutes or until soft. Cover and refrigerate. Critical Control Point: Cool to 40 °F or lower within 4 hours.
*fresh onions, diced	3 oz	1/2 cup 2 Tbsp	6 oz	1 1/4 cups	12 oz	2 1/2 cups	
*fresh celery, diced	7 oz	1 1/2 cups	14 oz	3 cups	1 lb 12 oz	1 qt 2 cups	
fresh garlic, minced	1 1/4 oz	2 Tbsp	2 1/2 oz	1/4 cup	5 oz	1/2 cup	
raw ground turkey, lean	3 lb 7 3/4 oz	1 qt 3 cups	6 lb 15 1/2 oz	3 qt 2 cups	13 lb 15 oz	1 gal 3 qt	3. Combine turkey, eggs, cranberries, spinach, Worcestershire sauce, salt, peppers, brown rice, and onion mixture. Mix well.
liquid, whole egg		1 1/4 cups		2 1/2 cups		1 qt 1 cup	
dried cranberries, chopped	6 oz	1 1/4 cups	12 oz	2 1/2 cups	1 lb 8 oz	1 qt 1 cup	
*fresh baby spinach, chopped	5 oz	1 qt	10 oz	2 qt	1 lb 4 oz	1 gal	
Worcestershire sauce		1 Tbsp		2 Tbsp		1/4 cup	
salt		1 1/2 tsp		1 Tbsp		2 Tbsp	
ground black pepper		2 tsp		1 Tbsp 1 tsp		2 Tbsp 1 tsp	
ground white pepper		1/4 tsp		1/2 tsp		1 tsp	
							4. Portion into patties using a No. 8 scoop (1/2 cup) onto a parchment lined sheet pan (18" x 26" x 1") lightly coated with pan release spray. - For 25 servings, use 1 pan. - For 50 servings, use 2 pans. - For 100 servings, use 4 pans. 5. Bake: Conventional oven: 350 °F for 18 minutes Convection oven: 325 °F for 14 minutes DO NOT OVERCOOK. Critical Control Point: Heat to 165 °F or higher for at least 15 seconds.
mini whole-grain rolls (1 oz each)		25		50		100	6. Critical Control Point: Hold for hot service at 135 °F or higher.
							7. Serve on mini whole-grain rolls. 8. If desired serve with lettuce, sliced tomato, red onions, and condiments.
							9. Serve one slider.

PORCUPINE SLIDERS

Meal Components: Meat/Meat Alternate – Grains

Notes		
*See Marketing Guide for purchasing information on foods that will change during preparation or when a variation of the ingredient is available.		
Serving	Yield	Volume
One (1) slider provides 2 oz equivalent meat/meat alternate and 1 oz equivalent grains.	25 Servings: about 5 lb 12 oz	25 Servings: 25 sliders
	50 Servings: about 11 lb	50 Servings: 50 sliders
	100 Servings: about 23 lb	100 Servings: 100 sliders

The grain ingredients used in this recipe must meet the Food and Nutrition Service whole grain-rich criteria.

Marketing Guide			
Food as Purchased for	25 servings	50 servings	100 servings
mature onions	4 oz	8 oz	1 lb
celery	9 oz	1 lb 2 oz	2 lb 4 oz
baby spinach	12 oz	1 lb 8 oz	3 lb

Nutrients Per Serving			
Calories	247.00	Saturated Fat	2.22g
Protein	16.35g	Cholesterol	85.29mg
Carbohydrate	25.53g	Vitamin A	539.83 IU (40.96 RAE)
Total Fat	9.26g	Vitamin C	1.56mg
		Iron	2.06mg
		Calcium	64.79mg
		Sodium	365.57mg
		Dietary Fiber	3.14g

Product Evaluation for Whole Grain-Rich Foods

Participants evaluate each food product as part of the tasting in this culinary lab. For each food product (row) and each evaluation category (column), circle either A (acceptable) or NA (not acceptable).

Food Product	Appearance	Taste	Texture	Eating Quality	Comments
<i>Chić Penne</i>	A or NA	A or NA	A or NA	A or NA	
<i>Mediterranean Quinoa Salad</i>	A or NA	A or NA	A or NA	A or NA	
<i>Chicken Curry Casserole</i>	A or NA	A or NA	A or NA	A or NA	
<i>Porcupine Sliders</i>	A or NA	A or NA	A or NA	A or NA	

SHOW SLIDE: *Day 2 Lesson 2*

DAY 2

Lesson 2: Meat/Meat Alternates

DAY 2 – Lesson 2: Meat/Meat Alternate

Classroom Instruction

1 hour

SHOW SLIDE: *Applying the DGA to Meat*

When considering how the DGA applies to meat, it is important to choose a variety of protein foods, which include seafood, lean meat and poultry, eggs, beans and peas, soy products, and unsalted nuts and seeds.

The amount of protein needed as part of a healthy diet again depends on age, gender, and activity level. It is important to make leaner and varied selections from this food group since most Americans eat enough protein.

SHOW SLIDE: *Daily Protein Foods Table*

These daily recommendations are appropriate for individuals who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie needs.

SHOW SLIDE: *Effects of Cooking Meat and Poultry*

Meats

Cooking meat and poultry kills any bacteria that might be in the raw product; it also changes the texture, flavor, and look of the meat and poultry.

SHOW SLIDE: *Effects of Overcooking Meat, Poultry, and Fish*

- Overcooking a meat, poultry, or fish dish will cause the product to be dry and the yield to be less than the number of servings planned; the flavor of the dish will also be lost. In addition, the meat will be tough because the protein structure has been changed.
- Suggestions for reducing the fat when cooking meat/poultry:
 - Cook ground beef until done, and then drain it well using a colander. Current USDA recommendations state that ground beef should be drained but not rinsed after it is cooked. Rinsing is not recommended because it causes the meat to lose flavor and causes the temperature to drop into the danger zone.
 - Cook ground beef patties on a rack in the oven so the fat can drain off. Another option is to use a pan liner and drain the patties after cooking.
 - Trim off visible fat on any solid meat product before it is cooked. Since fat carries flavor, reduced fat recipes may need added seasonings. Follow the recipe.
- Drain off any fat and liquid from cooked meat before it is placed in the warmer or on the serving line. Do not let meat remain in the fat after cooking.
- Cool cooking liquids to be used for a sauce in the refrigerator so the fat hardens. Then, remove the fat and reheat the remaining flavored liquid to prepare a sauce, gravy, or serve as is.
- Cook chicken without the skin to reduce the fat. Poultry carries a layer of fat just under the skin. It is recommended the skin not be eaten to reduce the fat in a poultry product. This means that either the poultry product should be skinned before cooking or skinned by the customer before eating. When cooking skinless poultry, such as skinless chicken breasts, follow a recipe that includes a way to prevent the skinless pieces from drying out. This may include marinating the breasts before cooking, cooking in a sauce, or using a recipe such as oven-fried chicken.

Trainer Tip:

- Write the word *Fat* on a flip chart.
- Explain that fat is sometimes referred to as lipids and serves many roles in the body. However, the type and amount of fat consumed can have positive or negative effects on health.
- Ask, “What are some of the needed roles that fat serves in the body?” As participants respond, write the correct answers on the flip chart.
 - Serves as a backup energy source when carbohydrates are not available
 - Absorbs certain nutrients
 - Maintains the core body temperature
- Write *Saturated Fats*, *Trans Fats*, *Monounsaturated Fats*, and *Polyunsaturated Fats* on a flip chart.
- Ask, “What are some of the differences in these four types of dietary fats?” As participants respond, write the correct answers on the flip chart.
 - Saturated and *trans* fats, the bad fats, tend to be more solid at room temperature (like butter) and come from animal sources (like red meat and dairy).
 - Saturated and *trans* fats raise the level of bad (LDL) cholesterol and lower the level of good (HDL) cholesterol in your blood.
 - The main source for *trans* fats is partially hydrogenated oils.
 - Monounsaturated and polyunsaturated fats tend to be more liquid at room temperature (like olive oil) and come from plants.
 - Monounsaturated and polyunsaturated fats help reduce bad cholesterol levels in your blood. They also contribute vitamin E and other nutrients to help develop and maintain your body’s cells.

SHOW SLIDE: *Principles of Meat Cookery***Dry Heat – Roasting or Baking**

Roasting or baking involves cooking meat, poultry, or fish in the oven without any liquid and no cover on the cooking vessel.

1. *Remove all visible fat.*
2. *Season.* Follow the recipe. Add appropriate seasonings and flavorings to replace flavor lost when fat is removed. If a meat thermometer is used, place it in the thickest part of the meat, away from bone or fat. Since salt penetrates meat only about an inch and retards browning, most recipes suggest adding salt at the end of cooking. Do not add salt unless the recipe calls for it.
3. *Place in the cooking dish/pan.* Do not cover, and do not add any liquid. Place meat on a rack when appropriate so fat will drain and hot air can circulate on all sides.
4. *Roast or bake in a slow oven until the internal temperature is at least 165 °F (or a higher temperature specified in the recipe).* Follow the recipe for the oven temperature. Some recipes for large pieces of meat or poultry suggest adding a mirepoix to the pan during the last half hour of roasting. A mirepoix is a seasoning mixture of two parts onion, one part celery, and one part carrots, to which herbs and spices can be added.
5. *Remove from the oven and serve.* For large pieces of meat, like a turkey or a large roast, allow the meat to sit in a warm place for about 15 minutes before carving or slicing. This makes the meat firmer, juicier, and easier to slice. Meats should be sliced across the grain.
6. *Hold cooked meat and poultry the correct way.* If the meat or poultry will not be served immediately, it should be covered and kept in a warmer at the correct temperature or chilled in the refrigerator. Never hold a meat product at room temperature.

Dry Heat – Sautéing

Sautéing uses high heat and a small amount of fat to rapidly cook meat, poultry, and fish. Searing and stir-frying are also sautéing techniques.

1. *Prepare the meat or poultry by making sure it is dry.* If a marinade has been used, drain it thoroughly and pat the food dry. Food with a lot of moisture will steam rather than sauté.
2. *Add oil to the pan according to recipe.* A tilting braising pan is ideal for this technique. Measure the oil carefully.
3. *Heat the oil; add the meat, poultry, or fish.* The meat, poultry, or fish pieces should be added to the pan in a single layer. If the pieces are touching, the product will steam, not sauté.
4. *Cook the meat by gently turning until browned on all sides and cooked evenly.* Some recipes suggest that the cooked meat be removed from the pan and the remaining flavored juices be used to make a sauce. Follow the recipe.
5. *Hold cooked meat and poultry the correct way.* Sautéed meals should be cooked in batches just-in-time for service. Covering a sautéed food during holding causes it to steam, and the advantages of the sauté technique are lost. Serve immediately. Never hold a meat product at room temperature.

Moist Heat – Braising and Stewing

Braising and stewing are a combination of dry-heat and moist-heat cooking used for less tender cuts of meat. Braising is used for large cuts of meat. The same technique is called stewing when used for bite-sized pieces of meat, poultry, or fish.

1. *Trim fat and prepare meat according to the recipe.*
2. *Sear the meat on all sides.* Searing meat before braising or stewing adds color and flavor. Follow the recipe to use a small amount of oil or preferably, no oil. Brown the meat on all sides in a hot pan. For large pieces of meat, use a pan in the oven or a steam jacketed kettle. For smaller pieces, use a tilting braising pan, a grill, or brown in a hot oven.
3. *Remove the meat from the pan and add a mirepoix.* Some recipes call for a mirepoix to be added to the pan and cooked. Follow the recipe.

4. *Add the seared meat back to the cooking pan along with the liquid for cooking.*

When a steam jacketed kettle is used for braising or stewing, more liquid will be needed than when using a roasting pan in the oven or when using a tilting braising pan. Follow the recipe and avoid using too much liquid, which weakens the flavor of a sauce made with the liquid.

5. *Cover tightly and simmer until tender.* Follow the recipe for the temperature and time for the equipment being used. Do not allow the liquid to boil. The size of the cut of meat and the kind of meat will also influence the cooking time. Braised or stewed meats are done when they are tender.
6. *Remove the meat from the cooking liquid.* Some recipes suggest the cooking liquid be cooked an additional time to reduce the volume and concentrate the flavor. The cooking liquid may also be thickened with a roux or slurry. Preparing sauces and how to thicken using a roux or slurry is described later in this lesson.
7. *Hold cooked meat and poultry the correct way.* If the meat, poultry, or fish will not be served immediately, it should be covered and kept in a warmer at the correct temperature or chilled in the refrigerator. Never hold a meat product at room temperature.

Meat Alternates

SHOW SLIDE: *Applying the DGAs to Meat Alternates*

Beans and peas are the mature form of legumes; all of which are excellent sources of protein, as well as other nutrients, such as iron and zinc. Due to their high nutrient content, beans and peas may be considered as both a vegetable and a protein.

Trainer Tip:

- Write the words *Functions of Protein* on a flip chart.
- Explain that proteins perform many vital functions in the body.
- Ask, “What are some of the functions of protein?” As participants respond, write the correct answers on the flip chart.
 - Growth and maintenance
 - Helps maintain fluid and acid-base balance in body fluids
 - Helps fight infections and builds immunity by forming antibodies
 - Aids in blood clotting

SHOW SLIDE: *Examples of Meat Alternates*

Legumes: Beans, Peas, and Lentils

The term *dry bean* refers to bean seeds which have dried in the pods and are collected after fully maturing. When measuring dry beans, remember these amounts.

- Dry beans will expand 2 1/2-3 times their original size after cooking.
- One cup of dry beans will yield 2-3 cups of cooked beans.
- One pound of dry beans measures 2 cups.

Dry beans are available in two types of packaging.

- Dry bean packages – need soaking before cooking
- Canned beans – soaked, cooked, and recipe ready

Dry beans are oval or kidney shaped and fall into two major categories.

- Red beans – used in bean burritos, bean tostados, nachos frijoles, soups, salad bar choice, marinated salads, and main dishes such as vegetarian beans or baked beans
 - pinto
 - pink beans
 - light red kidney
 - dark red kidney
 - red beans
 - pea beans
 - black beans
- White beans – used in soups, salads, salad bar choice, or served as a vegetable
 - navy
 - small white
 - great northern
 - cannellini (white kidney bean)
 - garbanzo (chickpeas)

Peas are round and are used in side dishes, salads, casseroles, and soups.

- black-eyed peas
- split peas

Lentils are flat disks that are used in soups.

- green
- red
- yellow
- black

Bean and Legume Varieties

<i>adzuki bean</i>	<ul style="list-style-type: none"> – small, oval, burgundy red with white stripes – light, sweet, nutty flavor with firm texture – used primarily for bean paste in Asia
<i>baby or small lima bean</i>	<ul style="list-style-type: none"> – flat-shaped, creamy white-colored beans – smooth, fruity, sweet flavor; less mealy texture – popular as a vegetable side dish or added to soups and casseroles
<i>black bean</i>	<ul style="list-style-type: none"> – medium black-skinned ovals – earthy, sweet flavor with a meaty texture – often used in thick soups or with rice. – basic ingredient of many Mexican, Caribbean, and Latin American soups and side dishes
<i>black-eyed bean or black-eyed pea</i>	<ul style="list-style-type: none"> – medium size, oval shaped, with black dot on creamy skin – distinct savory flavor and light smooth texture – can be cooked without pre-soaking because of thin skins – popular in Southern cuisine and in rice dishes, such as Hoppin’ John
<i>cranberry bean</i>	<ul style="list-style-type: none"> – medium ovals with a creamy background and burgundy highlights – full, rich flavor with meaty texture – most often used in Italian bean dishes and soups
<i>dark red kidney bean</i>	<ul style="list-style-type: none"> – large, kidney-shaped bean with a deep reddish-brown color – robust full-bodied flavor and soft texture – often used in chili, in salads, and with rice
<i>garbanzo bean (also called chickpea)</i>	<ul style="list-style-type: none"> – medium size, round bean, beige color – nut-like flavor and firm texture – most often used in soups and salads – main ingredient in Middle Eastern dishes, such as hummus and falafel
<i>great northern beans</i>	<ul style="list-style-type: none"> – medium size, white color, and oval shape – mild flavor and powdery texture – most often used in soups, stews, and cassoulet
<i>large lima beans</i>	<ul style="list-style-type: none"> – flat-shaped, creamy white-colored beans – smooth flavor and sweet taste – popular as a vegetable side dish or added to soups and casseroles
<i>light red kidney beans</i>	<ul style="list-style-type: none"> – large, kidney-shaped bean – robust, full-bodied flavor and soft texture – most often used in chili; popular in salads and with rice
<i>navy beans</i>	<ul style="list-style-type: none"> – small white ovals – mild, delicate flavor and refined texture – used in pork and beans or baked beans, also used in soups and stews – great when pureed
<i>pinto beans</i>	<ul style="list-style-type: none"> – medium ovals, mottled beige and brown color – earthy flavor and powdery texture – often used in refried beans and other Tex-Mex and Mexican bean dishes

SHOW SLIDES: *Preparing Dry Beans and Peas***PREPARING DRY BEANS AND PEAS**1. *Sort and examine.*

Scoop and spread the dry beans in a metal pan, examine, remove foreign matter, and then pour that batch in another container. Go through this process until all the beans or peas have been examined scoop by scoop.

2. *Wash thoroughly.*

Use a colander to wash the dry beans and remove all traces of dirt. Discard any damaged seeds or debris.

3. *Soak.*

All dry beans must be soaked in water to soften the bean and remove tannins, phytic acid, trypsin inhibitors, and flatulence-causing sugars (oligosaccharides).

Soaking Methods:

- Quick Hot Soak
 - Cover beans with water, and bring to a boil.
 - Simmer for 2–3 minutes, then remove from heat.
 - Cover the pot, and soak for 1 hour until beans expand two to three times their dry size. Drain and discard the liquid, then proceed with the recipe.
- Overnight Cold Soak:
 - Cover beans with water, and refrigerate overnight (12 hours).
 - Drain and discard the liquid, then proceed with the recipe.

4. *Measure the liquid and add soaked beans.*

Follow the recipe for the amount of liquid.

SHOW SLIDE: *Preparing Dry Beans and Peas, cont'd.*

5. *Bring to a boil, and then reduce heat to simmer until the beans are done.* (Beans are done when they can be mashed easily with a fork or spoon.) Properly stored and soaked beans will be tender and ready to use after simmering for 45-60 minutes. Add acidic foods, such as tomatoes, to the beans after they are tender because they tend to toughen the skin.
6. *Follow the recipe to use the cooked beans and peas.*

Remember, canned, cooked dry beans or peas can be used instead of cooking the dry type.

SHOW SLIDE: *Purposes to Use Eggs***Eggs**

Proper handling of eggs includes storing them away from strong odors, including foods like fish, apples, cabbage, and onions. Shell eggs should be stored in their case. Also remember to rotate eggs first-in/first-out.

Eggs can be used for a variety of purposes.

- Thicken a food, such as egg custards, quiches, or egg and cheese pies
- Add color, in yellow cakes and egg custard
- Provide moisture in cookies or brownies
- Form an emulsion – a mixture of substances that do not ordinarily mix, like oil and water (Eggs hold such a mixture together. Mayonnaise is an emulsion.)
- Add flavor, like in bread and sauces
- Add nutritive value, such as protein and important vitamins and minerals

SHOW SLIDE: *General Egg Preparation*

General Egg Preparation

- Scrambled eggs need to be cooked until firm throughout with no visible liquid egg remaining.
- Cook scrambled eggs in small batches no larger than 3 quarts according to rate of service, until firm throughout and until there is no visible liquid egg remaining.
- Always cook eggs and egg dishes before placing on steam table.

SHOW SLIDE: *More Egg Preparation*

- Do not combine eggs that have been held in a steam table pan with a fresh batch of eggs. Always use a fresh steam table pan.
- Do not add raw egg mixture to a batch of cooked scrambled eggs held on a steam table.
- Greenish color appears around the yolk when the eggs have been overcooked or allowed to cool slowly in the cooking water. Hard-cooked eggs in the shell should be cooked for the minimum length of time to make them solid and then cooled in cold running water or ice water to prevent the green color.

SHOW SLIDE: *Tips for Cooking Cheese***Cheese**

Remember that when cheese melts, it is done. Tough, rubbery cheese is overcooked. Hard cheese, like cheddar or parmesan, gets soft when heated, and then melts. If heating is continued, the fat in the cheese separates, and a tough, rubbery curd forms in long strings. This rubbery curd is the cheese protein that is overcooked. As the cheese cools, it becomes hard. To prevent this from happening, several things can be done.

- Grate or grind the cheese before it is added to other ingredients. This technique helps the cheese to melt before it is overheated.
- Use processed cheese or aged, natural cheese for blending in mixtures rather than mild natural cheese.
- If adding cheese as a topping to a product that must be cooked for a long time, it should be added during the last 10 minutes.
- Cook cheese at 350 °F or less. It melts between 300 °F and 335 °F so it should not be cooked in a hot oven or for a long time.

SHOW SLIDE: *How to Make a Cheese Sauce***How to Make a Cheese Sauce**

1. *Make a roux.*
Melt the fat, and then add the flour and seasonings. Stir until the flour and fat are combined.
2. *Cook over medium heat stirring continuously; the recipe will give an estimated time.*
A roux should be cooked at a moderate temperature and stirred continuously to avoid lumps. A white roux should be cooked only long enough to cook the flour and avoid a pasty taste.
3. *Slowly add heated milk to the flour mixture, stirring continuously.*
Cook until smooth and thickened.
4. *Add grated cheese to the white sauce.*
Stir over low heat until cheese melts.

DAY 2 – Lesson 2: Meat/Meat Alternates

Culinary Demonstration #4

1 hour

- *Meat Basics*
 - Why?
 - flavor
 - moisture
 - How?
 - What?
 - beef
 - turkey
 - chicken
 - pork
 - Equipment
- Demo: *Dirty Brown Rice*
- Demo: *Fiesta Wrap*
- Demo: *Parts of an Egg*

NOTES

DIRTY BROWN RICE

Recipe

Ingredients	Directions
3 cups cooked brown rice, long-grain 1 lb lean ground turkey 1/2 cup bell pepper, chopped 1/2 tsp minced garlic 1/2 tsp garlic powder 1/4 cup fresh parsley, chopped 1 tsp low-sodium Cajun Flavor Shaker* 2 green onions 1/3 cup chicken stock, low-sodium	<ul style="list-style-type: none"> • Place ground turkey into a skillet over medium heat. Cook and stir until almost crispy, golden, and brown. • Stir in green pepper and let cook until soft. Drain fat, if necessary. • Stir in cooked brown rice, garlic, parsley flakes, Cajun seasoning, black pepper, green onions, and beef stock. • Bring mixture to a simmer, and cook until the liquid is absorbed, about 10 minutes. Season to taste with additional Cajun seasoning, if necessary.

Yield: six 1/2 cup servings

***Note:** The brown rice will need to be prepared ahead of time, as will the Cajun Flavor Shaker seasoning. Recipe for the Cajun Flavor Shaker seasoning is in the Appendix.

Nutrients Per Serving:

Calories **252**, Protein **15.79g**, Carbohydrate **23.82g**, Dietary Fiber **2.25g**, Total Fat **10.48g**, Saturated Fat **2.77g**, Cholesterol **59.19mg**, Vitamin A **402.51 IU**, Vitamin C **13.75mg**, Iron **1.69mg**, Calcium **42.58mg**, Sodium **54.50mg**

FIESTA WRAP

Recipe

Ingredients

1/4 cup quinoa, dry
2 1/4 cups canned low-sodium black beans, drained, rinsed
1/4 cup fresh red bell pepper, seeded, diced
1/4 cup fresh red onions, peeled, diced
1/2 cup fresh carrots, peeled, shredded
1/4 cup reduced-fat white cheddar cheese, shredded (1 oz)
1 tsp chili powder
1 1/4 tsp ground cumin
1 1/4 tsp fresh lime juice
6 whole wheat tortillas, 6"
1 Tbsp canola oil

Preparation Time: 15 minutes
Cooking Time: 25 minutes
Yield: 6 wraps

If desired serve with fresh diced tomatoes, corn salsa, lettuce, and/or salsa.

Recipes for Healthy Kids: Cookbook for Homes
TeamNutrition.usda.gov

Nutrients Per Serving:

Calories **175**, Protein **7g**, Carbohydrate **27g**, Dietary Fiber **5g**, Total Fat **5g**, Saturated Fat **<1g**, Cholesterol **2mg**, Vitamin A **1465 IU (77 RAE)**, Vitamin C **12mg**, Iron **2mg**, Calcium **62mg**, Sodium **346mg**

Directions

- Preheat oven to 325 °F.
- Rinse quinoa in a fine mesh strainer until water runs clear, not cloudy. Combine quinoa and 3/4 cup water in a small pot. Cover and bring to a boil. Turn heat down to low and simmer until water is completely absorbed, about 10-15 minutes. When done, quinoa will be soft and a white ring will pop out of the kernel. The white ring will appear only when it is fully cooked. Fluff with a fork and set aside. A rice cooker may be used with the same quantity of quinoa and water.
- Place black beans in a large mixing bowl. Lightly mash beans by squeezing them using gloved hands (at least 50% of the beans should appear whole). Be careful not to over-mash beans.
- To make filling, add to the mashed beans the quinoa, red peppers, red onions, carrots, cheese, chili powder, cumin, and lime juice.
- For each wrap, place 1/2 cup of filling on the bottom half of tortilla and roll in the form of a burrito. The wrap may also be folded in half like a taco.
- Brush filled wraps lightly with canola oil and place on a baking sheet. Bake for 10 minutes at 325 °F. Wraps will be lightly brown. Serve hot.

FIESTA WRAP

Meal Components: Meat Alternate – Legume Vegetable – Grains

Ingredients	25 Servings		50 Servings		100 Servings		Directions Process #3: Complex Food Preparation
	Weight	Measure	Weight	Measure	Weight	Measure	
quinoa, dry	6 1/2 oz	1 cup	13 oz	2 cups	1 lb 10 oz	1 qt	1. Rinse quinoa in a fine mesh strainer until water runs clear, not cloudy.
water		2 cups		1 qt		2 qt	2. Combine quinoa and water in a covered stock pot, and bring to a boil. Reduce heat to low and simmer until water is completely absorbed, about 10 – 15 minutes. When done, quinoa will be soft and a white ring will pop out of the kernel. The white ring will only appear when it is fully cooked. Fluff. Set aside.
canned low-sodium black beans, drained, rinsed OR *dry black beans, cooked (See Notes Section)	3 lb 6 oz OR 3 lb 6 oz	2 qt (7/8 No. 10 can) OR 2 qt	6 lb 12 oz OR 6 lb 12 oz	1 gal (1 3/4 No. 10 cans) OR 1 gal	13 lb 8 oz OR 13 lb 8 oz	2 gal (3 1/2 No. 10 cans) OR 2 gal	3. Place half of the black beans in a large bowl and lightly hand mash, using gloved hands. Some beans should remain whole. - For 25 servings, mash to yield about 1 qt 2 1/2 cups. - For 50 servings, mash to yield about 3 qt 1 cup. - For 100 servings, mash to yield about 1 gal 2 1/2 qt.
*fresh carrots, shredded	5 1/2 oz	1 1/3 cups	11 oz	2 2/3 cups	1 lb 6 oz	1 qt 1 1/3 cups	Filling: 4. Combine quinoa, mashed beans, carrots, cheese, red peppers, onions, chili powder, cumin, lime juice, and salt. Mix thoroughly.
reduced-fat white cheddar cheese, shredded	3 oz	1 cup	6 oz	2 cups	12 oz	1 qt	
*fresh red bell peppers, diced	5 1/2 oz	1 cup	11 oz	2 cups	1 lb 6 oz	1 qt	
*fresh red onions, diced	5 1/2 oz	1 cup	11 oz	2 cups	1 lb 6 oz	1 qt	
chili powder		1 Tbsp		2 Tbsp		1/4 cup	
ground cumin		1 1/2 Tbsp		3 Tbsp		1/4 cup 2 Tbsp	
lime juice		1 1/2 Tbsp		3 Tbsp		1/4 cup 2 Tbsp	
salt		0		2 tsp		1 Tbsp 1 tsp	
whole-wheat tortillas, 6" (0.9 oz each)		25		50		100	5. Using a No. 8 scoop (1/2 cup), spread filling on bottom third of tortilla. Roll in the form of a burrito and seal. If preferred, spread filling on half the tortilla and fold in half like a taco.
canola oil		1/4 cup		1/2 cup		1 cup	6. Brush filled wraps lightly with oil and place seam side down on sheet pan (18" x 26" x 1"). - For 25 servings, use 1 pan. - For 50 servings, use 2 pans. - For 100 servings, use 4 pans.
							7. Bake until golden brown: Conventional oven: 325 °F for 15 minutes Convection oven: 300 °F for 10 minutes Critical Control Point: Heat to 140°F for at least 15 seconds. 8. Critical Control Point: Hold for hot service at 135 °F or higher. 9. If desired serve with fresh diced tomatoes, corn salsa, lettuce, and/or salsa.
							10. Serve one wrap.

FIESTA WRAP

Meal Components: Meat Alternate – Legume Vegetable – Grains

Notes		Marketing Guide			
*See Marketing Guide for purchasing information on foods that will change during preparation or when a variation of the ingredient is available.		Food as Purchased for	25 servings	50 servings	100 servings
Special tip for preparing dry beans:		dry black beans	14 oz	1 lb 12 oz	3 lb 8 oz
SOAKING BEANS		carrots	6 oz	13 1/4 oz	1 lb 10 1/2 oz
<u>Overnight Method</u> – Add 1 3/4 qt of cold water to every 1 lb of dry beans. Cover and refrigerate overnight. Discard the water. Proceed with recipe.		red bell peppers	6 oz	13 3/4 oz	1 lb 11 1/2 oz
<u>Quick-Soak Method</u> – Boil 1 3/4 qt of water for each 1 lb of dry beans. Add beans and boil for 2 minutes. Remove from heat and allow to soak for 1 hour. Discard the water. Proceed with recipe.		red onions	6 1/4 oz	12 1/2 oz	1 lb 9 oz
COOKING BEANS		Nutrients Per Serving			
Once the beans have been soaked, add 1 3/4 qt water for every lb of dry beans. Boil gently, with lid tilted, until tender, about 2 hours.		Calories	175.48	Saturated Fat	0.63g
Use hot beans immediately.		Protein	6.86g	Cholesterol	1.91mg
Critical Control Point: Hold for hot service at 135 °F or higher.		Carbohydrate	26.93g	Vitamin A	1465.09 IU (77.28 RAE)
OR		Total Fat	5.07g	Vitamin C	11.98mg
Chill for later use.					
Critical Control Point: Cool to 70 °F within 2 hours and to 40 °F or lower within an additional 4 hours.		Serving	Yield	Volume	
1 lb dry black beans = about 2 1/4 cups dry or 4 1/2 cups cooked beans		1 wrap provides:			
		Legume as Meat Alternate – 2 oz equivalent meat alternate, and 1 oz equivalent grains.	25 Servings: about 5 lb (filing)	25 Servings: about 2 qt 2 cups (filing) 25 wraps	
		OR			
		Legume as Vegetable – 1/4 cup legume vegetable and 1 oz equivalent grains.	50 Servings: about 12 lb (filing)	50 Servings: about 1 gal 2 qt (filing) 50 wraps	
		<i>Legume vegetable can be counted as either a meat alternate or as a legume vegetable but not as both simultaneously.</i>	100 Servings: about 23 lb 8 oz (filing)	100 Servings: about 3 gal (filing) 100 wraps	

DAY 2 – Lesson 2: Meat/Meat Alternates

Culinary Lab #4

2 hours

Team Assignments

Team #1
<i>Tuscan Smoked Turkey and Bean Soup</i>

Team #2
<i>Lentils of the Southwest</i> (double this recipe)

Team #3
<i>Eagle Pizza</i>

Team #4
<i>Vegetable Chili Boat</i>

TUSCAN SMOKED TURKEY AND BEAN SOUP

Recipe

Ingredients

1/3 cup fresh onions, peeled, diced 1/2"
1/3 cup fresh celery, diced
1/3 cup fresh carrots, peeled, diced
1 1/2 cups fresh kale, no stems, chopped
2 1/4 tsp canned low-sodium tomato paste
1 Tbsp fresh garlic, minced
4 1/4 cups low-sodium chicken stock
1 3/4 cups canned low-sodium navy beans, drained, rinsed
1/2 tsp salt
1/8 tsp ground black pepper
1 cup smoked turkey breast, 1/4" pieces (5 oz)
2 tsp fresh thyme, chopped
2 tsp fresh basil, chopped
2 tsp fresh parsley, chopped

Preparation Time: 30 minutes
Cooking Time: 50 minutes
Yield: six 1 cup servings

Directions

1. Place onions, celery, carrots, kale, tomato paste, and garlic in a large pot coated with nonstick cooking spray. Cook over medium-high heat. Stir frequently. Cook until vegetables are softened and onion are translucent.
2. Add chicken stock, beans, salt, and pepper.
3. Reduce temperature to low heat. Cover and simmer for 20 minutes. Stir occasionally.
4. Add turkey, thyme, basil, and parsley. Stir well. Simmer a minimum of 10 minutes. Serve hot.

1 cup provides:

Legume as Meat Alternate: 1 1/2 oz equivalent meat/meat alternate, 1/8 cup red/orange vegetable, and 1/8 cup other vegetable.

OR

Legume as Vegetable: 1/2 oz equivalent meat, 1/4 cup legume vegetable, 1/8 cup red/orange vegetable, and 1/8 cup other vegetable.

Legume vegetable can be counted as either a meat alternate or as a legume vegetable but not as both simultaneously.

Nutrients Per Serving:

Calories **135**, Protein **15g**, Carbohydrate **14g**, Dietary Fiber **4g**, Total Fat **3g**, Saturated Fat **<1g**, Cholesterol **21mg**, Vitamin A **3058 IU (153 RAE)**, Vitamin C **7mg**, Iron **2mg**, Calcium **62mg**, Sodium **525mg**

TUSCAN SMOKED TURKEY AND BEAN SOUP

Meal Components:

Meat/Meat Alternate – Legume Vegetable – Red/Orange Vegetable – Other Vegetable

Ingredients	25 Servings		50 Servings		100 Servings		Directions Process #2: Same Day Service
	Weight	Measure	Weight	Measure	Weight	Measure	
*fresh onions, diced 1/2"	8 oz	1 1/2 cups 1 Tbsp	1 lb	3 cups 2 Tbsp	2 lb	1 qt 2 cups	1. Place onions, celery, carrots, kale, tomato paste, and garlic in a large stockpot. Sweat vegetable mixture over medium-high heat. Stir frequently. Cook until vegetables are softened and onions are translucent.
*fresh celery, diced	6 oz	1 1/4 cups	12 oz	2 1/2 cups	1 lb 8 oz	1 qt 1 cup	
*fresh kale, no stems, coarsely chopped	8 oz	1 qt 2 1/4 cups	1 lb	3 qt 1/2 cup	2 lb	1 gal 2 1/4 qt	
canned low-sodium tomato paste	4 1/2 oz	1/2 cup (1/4 No. 2 1/2 can)	9 oz	1 cup (1/3 No. 2 1/2 can)	1 lb 2 oz	2 cups (1/3 No. 2 1/2 can)	
fresh garlic, minced		1/4 cup		1/2 cup		1 cup	
low-sodium chicken stock		1 gal		2 gal		4 gal	2. Add stock, beans, salt, and pepper. 3. Reduce temperature to low heat. Cover and simmer for 20 minutes. Stir occasionally.
canned low-sodium navy beans, drained, rinsed OR *Dry navy beans, cooked (See Notes Section)	2 lb 14 oz OR 2 lb 14 oz	1 qt 3 2/3 cups (3/4 No. 10 can) OR 1 qt 3 2/3 cups	5 lb 12 oz OR 5 lb 12 oz	3 qt 3 1/3 cups (1 1/2 No. 10 cans) OR 3 qt 3 1/3 cups	11 lb 8 oz OR 11 lb 8 oz	1 gal 3 3/4 qt (3 No. 10 cans) OR 1 gal 3 3/4 qt	
salt		2 tsp		1 Tbsp 1 tsp		2 Tbsp 2 tsp	
ground black pepper		1/2 tsp		1 tsp		2 tsp	
smoked turkey breast, 1/4" pieces	1 lb 6 oz	1 qt	2 lb 12 oz	2 qt	5 lb 8 oz	1 gal	4. Add turkey, parsley, thyme, and basil. Stir well. Simmer a minimum of 10 minutes. Critical Control Point: Heat to 165 °F or higher for at least 15 seconds.
*fresh parsley, chopped		2 Tbsp		1/4 cup		1/2 cup	
fresh thyme, finely chopped		2 Tbsp		1/4 cup		1/2 cup	
fresh basil, finely chopped		2 Tbsp		1/4 cup		1/2 cup	
							5. Critical Control Point: Hold for hot service at 135 °F or higher. 6. Portion with 8 fl oz spoodle (1 cup).

TUSCAN SMOKED TURKEY AND BEAN SOUP

Meal Components:

Meat/Meat Alternate – Legume Vegetable – Red/Orange Vegetable – Other Vegetable

Notes
*See Marketing Guide for purchasing information on foods that will change during preparation or when a variation of the ingredient is available.
Special tip for preparing dry beans:
SOAKING BEANS
<u>Overnight Method</u> – Add 1 3/4 qt of cold water to every 1 lb of dry beans. Cover and refrigerate overnight. Discard the water. Proceed with recipe.
<u>Quick-Soak Method</u> – Boil 1 3/4 qt of water for each 1 lb of dry beans. Add beans and boil for 2 minutes. Remove from heat and allow to soak for 1 hour. Discard the water. Proceed with recipe.
COOKING BEANS
Once the beans have been soaked, add 1 3/4 qt water for every lb of dry beans. Boil gently, with lid tilted, until tender, about 2 hours. Use hot beans immediately.
Critical Control Point: Hold for hot service at 135 °F or higher.
OR
Chill for later use.
Critical Control Point: Cool to 70 °F within 2 hours and to 40 °F or lower within an additional 4 hours.
1 lb dry navy beans = about 2 1/4 cups dry or 5 7/8 cups cooked beans

Marketing Guide			
Food as Purchased for	25 servings	50 servings	100 servings
mature onions	10 oz	1 lb 4 oz	2 lb 8 oz
celery	7 1/4 oz	14 1/2 oz	1 lb 13 oz
carrots	7 1/4 oz	14 1/2 oz	1 lb 13 oz
kale	12 oz	1 lb 8 oz	3 lb
dry Navy beans	1 lb 5 oz	2 lb 10 oz	5 lb 4 oz
parsley	1/2 oz	1 oz	2 oz
Nutrients Per Serving			
Calories	134.55	Saturated Fat 0.67g	Iron 2.28mg
Protein	14.51g	Cholesterol 20.68mg	Calcium 61.62mg
Carbohydrate	13.62g	Vitamin A 3058.35 IU (152.89 RAE)	Sodium 524.69mg
Total Fat	2.83g	Vitamin C 7.00mg	Dietary Fiber 3.66g

Serving	Yield	Volume
1 cup (8 fl oz ladle) provides:	25 Servings: about 12 lb 12 oz	25 Servings: about 1 gal 2 qt
Legume as Meat Alternate: 1 1/2 oz equivalent meat/meat alternate, 1/8 cup red/orange vegetable, and 1/8 cup other vegetable.	50 Servings: about 25 lb 8 oz	50 Servings: about 3 gal
OR Legume as Vegetable: 1/2 oz equivalent meat, 1/4 cup legume vegetable, 1/8 cup red/orange vegetable, and 1/8 cup other vegetable. <i>Legume vegetable can be counted as either a meat alternate or as a legume vegetable but not as both simultaneously.</i>	100 Servings: about 50 lb	100 Servings: about 6 gal

LENTILS OF THE SOUTHWEST

Recipe

Ingredients

1/2 cup lentils, green or brown, dry
1 tsp extra virgin olive oil
2 Tbsp fresh onions, peeled, diced
1 tsp fresh garlic, minced
1 tsp ground cumin
1 tsp ground red chili pepper
1/2 tsp chili powder
1/2 cup canned low-sodium diced tomatoes
1/2 tsp salt
2 Tbsp fresh cilantro, chopped

Preparation Time: 15 minutes
Cooking Time: 50 minutes
Yield: six 1/4 cup servings

***Double this recipe for the Culinary Lab.**

Directions

1. In a small pot, combine the lentils and 1 1/4 cups water. Bring to a boil over high heat. Reduce the heat to low and cook uncovered until tender, about 30 minutes.
2. Heat olive oil in a medium skillet. Add onions and garlic. Cook for 3-5 minutes or until tender. Stir in cumin, red chili pepper, and chili powder. Reduce heat to low and cook 2 minutes.
3. Add onion/garlic mixture to cooked lentils. Add 1/4 cup plus 2 tablespoons water. Stir in tomatoes and salt. Bring to a boil over high heat. Reduce heat to low and simmer, uncovered, for 20 minutes.
4. Just before serving, stir in cilantro. Serve hot.

1 cup provides:

Legume as Meat Alternate: 1 oz equivalent meat alternate.

OR

Legume as Vegetable: 1/4 cup legume vegetable.

Legume vegetable can be counted as either a meat alternate or as a legume vegetable but not as both simultaneously.

Nutrients Per Serving:

Calories **69**, Protein **5g**, Carbohydrate **11g**, Dietary Fiber **4g**, Total Fat **<1g**, Saturated Fat **<1g**, Cholesterol **0mg**, Vitamin A **251 IU (10 RAE)**, Vitamin C **3mg**, Iron **2mg**, Calcium **15mg**, Sodium **142mg**

LENTILS OF THE SOUTHWEST

Meal Components: Meat Alternate – Legume Vegetable

Ingredients	25 Servings		50 Servings		100 Servings		Directions Process #2: Same Day Service
	Weight	Measure	Weight	Measure	Weight	Measure	
*lentils, brown or green, dry	15 oz	2 1/4 cups	1 lb 14 oz	1 qt 1/2 cup	3 lb 12 oz	2 qt 1 cup	1. Rinse lentils and sort out any unwanted materials. Drain well.
water		1 qt 1/4 cup		2 qt 1/2 cup		1 gal 1 cup	2. Combine lentils and water in a stock pot. Bring to a boil. Reduce heat and simmer, uncovered, until lentils are tender, about 30 – 40 minutes.
*fresh onions, diced	4 oz	3/4 cup 2 Tbsp	8 oz	1 3/4 cups	1 lb	3 1/2 cups	3. Sauté onions and garlic in oil for 5 minutes or until tender. Stir in cumin, red chili pepper, and chili powder. Cook for 2 – 3 minutes over low heat.
fresh garlic, minced		1 Tbsp		2 Tbsp		1/4 cup	4. Combine onions and garlic with cooked lentils. Add water. - For 25 servings, add 1 1/2 cups water. - For 50 servings, add 3 cups water. - For 100 servings, add 1 qt 2 cups water. 5. Stir in tomatoes and salt. Bring to a boil. Reduce heat and simmer uncovered for 20 minutes. Critical Control Point: Heat to 140 °F or higher for at least 15 seconds.
extra virgin olive oil		1 Tbsp		2 Tbsp		1/4 cup	
ground cumin		1 Tbsp 1 tsp		2 Tbsp 2 tsp		1/3 cup	
ground red chili pepper		1 Tbsp		2 Tbsp		1/4 cup	
chili powder		1 1/2 tsp		1 Tbsp		2 Tbsp	
canned low-sodium diced tomatoes OR *fresh tomatoes, diced	12 oz OR 12 oz	1 1/2 cups (1/8 No. 10 can) OR 1 1/2 cups	1 lb 8 oz or 1 lb 8 oz	3 cups (1/4 No. 10 can) OR 3 cups	3 lb OR 3 lb	1 qt 2 cups (1/2 No. 10 can) OR 1 qt 2 cups	
salt		1 1/2 tsp		1 Tbsp		2 Tbsp	
fresh cilantro, finely chopped		1 1/2 cups	2 oz	3 cups	4 oz	1 qt 2 cups	6. Stir in cilantro before serving.
							7. Critical Control Point: Hold for hot service at 135 °F or higher. 8. Portion with 2 fl oz ladle (1/4 cup).

LENTILS OF THE SOUTHWEST

Meal Components: Meat Alternate – Legume Vegetable

Notes		
*See Marketing Guide for purchasing information on foods that will change during preparation or when a variation of the ingredient is available.		
Serving	Yield	Volume
1/4 cup (2 fl oz ladle) provides: Legume as Meat Alternate: 1 oz equivalent meat alternate. OR Legume as Vegetable: 1/4 cup legume vegetable. <i>Legume vegetable can be counted as either a meat alternate or as a legume vegetable but not as both simultaneously.</i>	25 Servings: about 4 lb	25 Servings: about 2 qt
	50 Servings: about 9 lb	50 Servings: about 1 lb 6 oz
	100 Servings: about 17 lb	100 Servings: about 2 gal 1 qt

Marketing Guide							
Food as Purchased for		25 servings		50 servings		100 servings	
dry lentils, brown or green		15 oz		1 lb 14 oz		3 lb 12 oz	
mature onions		6 oz		12 oz		1 lb 6 oz	
tomatoes		14 oz		1 lb 12 oz		3 lb 8 oz	
Nutrients Per Serving							
Calories	68.66	Saturated Fat	0.11g		Iron	1.84mg	
Protein	4.56g	Cholesterol	0mg		Calcium	15.21mg	
Carbohydrate	10.96g	Vitamin A	251.11 IU (10.38 RAE)		Sodium	141.83mg	
Total Fat	0.92g	Vitamin C	2.80mg		Dietary Fiber	4.16g	

EAGLE PIZZA

Recipe

Ingredients

1/2 cup fresh spinach, julienne cut (shoestring strips)
1/2 cup fresh romaine lettuce, julienne cut (shoestring strips)
2 1/4 tsp salt-free seasoning (Mrs. Dash)*
1 3/4 cups canned low-sodium refried beans, fat-free
3/4 cup fresh green bell pepper, seeded, diced
3/4 cup fresh onions, peeled, diced
1 1/4 cups canned low-sodium corn, drained, rinsed
6 whole grain tostada shells
6 Tbsp reduced-fat Mexican cheese blend, shredded (1 1/2 ounce)
1 cup fresh carrots, peeled, shredded
1/2 cup low-sodium salsa, mild
1/2 cup fat-free sour cream

Preparation Time: 25 minutes
Cooking Time: 10 minutes
Yield: 6 tostada pizzas

*Can substitute salt-free taco seasoning blend. Recipe follows.

Directions

1. Preheat oven to 350 °F.
2. Combine spinach and lettuce in bowl and set aside.
3. In a medium mixing bowl, combine salt-free chili-lime seasoning blend and refried beans. Set aside.
4. In a small skillet, coated with nonstick cooking spray, cook green peppers, onions, and corn for 3-4 minutes. Set aside.
5. For each pizza, placed 1/4 cup of bean filling on tostada shell. Spread mixture evenly using the back of a spoon. Top with 1/3 cup sautéed vegetable mixture. Lightly sprinkle 1 Tbsp of cheese on top.
6. Place tostadas on a large baking sheet coated with nonstick cooking spray. Bake until cheese is melted, about 2 minutes.
7. Remove tostadas from oven. Top each tostada with:
 - About 1 Tbsp spinach/lettuce mixture
 - About 2 1/2 Tbsp carrots
 - About 1 Tbsp salsa
 - About 1 Tbsp sour cream
 Serve immediately.

Recipes for Healthy Kids: Cookbook for Homes

TeamNutrition.usda.gov

Nutrients Per Serving:

Calories **206**, Protein **9g**, Carbohydrate **32g**, Dietary Fiber **6g**, Total Fat **6g**, Saturated Fat **2g**, Cholesterol **7mg**, Vitamin A **3227 IU (177 RAE)**, Vitamin C **20mg**, Iron **2mg**, Calcium **173mg**, Sodium **290mg**

EAGLE PIZZA

Recipe

Directions, continued

.....

If desired, use 2 1/4 teaspoon salt-free taco seasoning blend in place of salt-free chili-lime seasoning

Salt-Free Taco Seasoning Blend:

1 tsp dried onion
1 tsp chili powder
1/2 tsp cumin
1/2 tsp crushed red pepper
1/2 tsp garlic powder
1/4 tsp oregano
1/2 tsp cornstarch*

Combine all ingredients. Store in airtight container.

*If using immediately, do not add cornstarch.

1 tostada pizza provides:

Legume as Meat Alternate: 1 1/4 oz equivalent meat alternate, 1/8 cup red/orange vegetable, 1/8 cup starchy vegetable, 1/8 cup other vegetable, and 1/2 oz. equivalent grains.

OR

Legume as Vegetable: 1/4 oz equivalent meat alternate, 1/8 cup legume vegetable, 1/8 cup red/orange vegetable, 1/8 cup starchy vegetable, 1/8 cup other vegetable, and 1/2 oz. equivalent grains.

Legume vegetable can be counted as either a meat alternate or as a legume vegetable but not as both simultaneously.

EAGLE PIZZA

Meal Components:

**Meat Alternate – Legume Vegetable – Red/Orange Vegetable –
Starchy Vegetable – Other Vegetable – Grains**

Ingredients	25 Servings		50 Servings		100 Servings		Directions Process #2: Same Day Service
	Weight	Measure	Weight	Measure	Weight	Measure	
*fresh spinach, julienne sliced	2 1/2 oz	2 cups	5 oz	1 qt	10 oz	2 qt	1. Combine lettuce and spinach in bowl. Set aside.
*fresh romaine lettuce, julienne sliced	4 oz	2 cups	8 oz	1 qt	10 oz	2 qt	
salt-free chili-lime seasoning blend OR salt-free taco seasoning blend		3 Tbsp OR 3 Tbsp		1/4 cup 2 Tbsp OR 1/4 cup 2 Tbsp		3/4 cup OR 3/4 cup	2. Mix salt-free seasoning and beans. Set aside.
canned low-sodium refried beans, fat-free	3 lb 14 oz	1 qt 2 3/4 cups (1/2 No. 10 can)	7 lb 12 oz	3 qt 1 1/2 cups (1 1/4 No. 10 cans)	15 lbs 8 oz	1 gal 2 3/4 cups (2 1/4 No. 10 can)	
*fresh green bell peppers, diced	1 lb	3 cups	2 lb	1 qt 2 cups	4 lb	3 qt	3. Sauté green peppers, onions, and corn for 3 – 4 minutes in a pan coated with pan release spray. Set aside.
*fresh onions, diced	1 lb	3 cups 2 Tbsp	2 lb	1 qt 2 1/4 cups	4 lb	3 qt	
canned low-sodium corn, drained, rinsed	1 lb 11 oz	3 3/4 cups (1/2 No. 10 can)	3 lb 6 oz	1 qt 2 cups (1 No. 10 can)	6 lbs 12 oz	3 qt (2 No. 10 can)	
tostada shells (round) (0.5 oz each)		25		50		100	4. Portion beans with No. 16 scoop (1/4 cup) on each tostada shell. Spread evenly.
reduced-fat Mexican cheese blend, shredded	8 oz	2 cups	1 lb	1 qt	2 lb	2 qt	5. Top with 1/3 cup vegetable mixture. Sprinkle with 1 Tbsp cheese.
							6. Place tostadas on a sheet pan (18" x 26" x 1") lightly coated with pan release spray. - For 25 servings, use 2 pans. - For 50 servings, use 4 pans. - For 100 servings, use 8 pans. Bake until cheese is melted: Conventional oven: 350 °F for about 5 minutes Convection oven: 350 °F for about 3 minutes Critical Control Point: Heat to 140 °F or higher for at least 15 seconds.
							7. Critical Control Point: Hold for hot service at 135 °F or higher.
*fresh carrots, shredded	12 oz	3 3/4 cups	1 lb 8 oz	1 qt 3 1/2 cups	3 lb	1 gal 3 cups	8. Top each tostada with: 1. 1 Tbsp 1 tsp spinach/lettuce mixture 2. 2 Tbsp carrots 3. 1 Tbsp salsa 4. 1 Tbsp sour cream Serving Suggestion: Serve toppings an individual soufflé cups
low-sodium salsa, mild	12 oz	1 1/2 cups	1 lb 8 oz	3 cups	3 lb	1 qt 2 cups	
fat-free sour cream	12 oz	1 1/2 cups	1 lb 8 oz	3 cups	3 lb	1 qt 2 cups	
							9. Serve one tostada pizza.

EAGLE PIZZA

Meal Components:

**Meat Alternate – Legume Vegetable – Red/Orange Vegetable –
Starchy Vegetable – Other Vegetable – Grains**

Notes

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

SALT FREE TACO SEASONING BLEND

<u>For 25 servings:</u>	<u>For 50 servings:</u>
1 Tbsp dried onion	2 Tbsp dried onion
1 Tbsp chili powder	2 Tbsp chili powder
1 1/2 tsp cumin	1 Tbsp cumin
1/2 tsp crushed red pepper	1 Tbsp crushed red pepper
1/2 tsp garlic powder	1 Tbsp garlic powder
3/4 tsp oregano	1/2 tsp oregano
1/2 tsp cornstarch*	1 Tbsp cornstarch*

<u>For 100 servings:</u>
4 Tbsp dried onion
4 Tbsp chili powder
2 Tbsp cumin
2 Tbsp crushed red pepper
2 Tbsp garlic powder
1 Tbsp oregano
2 Tbsp cornstarch*

Combine all ingredients. Store in airtight container.

*If using immediately, do not add cornstarch.

TIP: Prepare one tostada pizzas using exact measurements and use it as a guide to assemble remaining pizzas.

The grain ingredients used in this recipe must meet the Food and Nutrition Service whole grain-rich criteria.

Marketing Guide			
Food as Purchased for	25 servings	50 servings	100 servings
spinach	3 oz	6 oz	12 oz
romaine lettuce	6 1/4 oz	12 1/2 oz	1 lb 9 oz
green bell peppers	1 lb 4 oz	2 lb 8 oz	5 lb
mature onions	1 lb 2 oz	2 lb 4 oz	4 lb 8 oz
carrots	1 lb 1 oz	2 lb 2 oz	4 lb 4 oz
Nutrients Per Serving			
Calories	205.96	Saturated Fat 2.16g	Iron 1.78mg
Protein	8.86g	Cholesterol 6.85mg	Calcium 172.57mg
Carbohydrate	32.20g	Vitamin A 3226.56 IU (177.20 RAE)	Sodium 289.72mg
Total Fat	5.69g	Vitamin C 20.38mg	Dietary Fiber 5.99g
Serving	Yield	Volume	
1 tostada pizza provides:	25 Servings: about 12 lb	25 Servings: 25 tostada pizzas	
Legume as Meat Alternate: 1 1/4 oz equivalent meat alternate, 1/8 cup red/orange vegetable, 1/8 of the cup starchy vegetable, 1/2 cup other vegetable, and 1/2 oz equivalent grains.	50 Servings: about 23 lb 8 oz	50 Servings: 50 tostada pizzas	
OR	100 Servings: about 48 lb	100 Servings: 100 tostada pizzas	
Legume as Vegetable: 1/4 oz equivalent meat alternate, 1/4 cup legume vegetable, 1/8 cup red/orange vegetable, 1/8 cup starchy vegetable, 1/2 cup other vegetable, and 1/2 oz equivalent grains.			
<i>Legume vegetable can be counted as either a meat alternate or as a legume vegetable but not as both simultaneously.</i>			

VEGETABLE CHILI BOAT

Recipe

Ingredients

2 1/2 tsp canola oil
1/2 cup fresh onion, peeled, diced
1/2 cup fresh green bell pepper, seeded, diced
1/2 cup canned low-sodium pinto beans, drained, rinsed
1/2 cup canned low-sodium kidney beans, drained, rinsed
1 cup canned low-sodium black beans, drained, rinsed
1 1/2 Tbsp chili powder
1 1/3 cups canned low-sodium diced tomatoes
1 cup low-sodium chicken stock
1 dash hot sauce
1/4 cup canned low-sodium tomato paste
18 chips low-sodium tortilla chips (about 3 oz)
1/4 cup reduced-fat cheddar cheese, shredded (1 oz)
1/4 cup low-fat mozzarella cheese, low moisture, part skim, shredded (1 oz.)

Directions

1. Heat canola oil in a large pot over medium-high heat. Add onions and green peppers. Cook for 2-3 minutes or until tender. Add beans and stir to coat. Add chili powder. Stir. Cook for 1 minute for flavors to blend.
2. Add tomatoes, chicken stock, and hot sauce. Bring to a boil. Simmer uncovered for 10 minutes. Add tomato paste and mix well. Cook uncovered for an additional 10 minutes. Bring to a rolling boil for at least 15 seconds. Reduce heat to low and simmer to keep warm.
3. Combine cheddar and mozzarella cheeses (the cheese is a garnish).
4. Place 3/4 cup chili in a bowl. Top with 3 chips and sprinkle with about 1 Tbsp of cheese blend. Serve hot.

Preparation Time: 20 minutes
Cooking Time: 25 minutes
Yield: six 3/4 cup servings

Nutrients Per Serving:

Calories **141**, Protein **7g**, Carbohydrate **21g**, Dietary Fiber **5g**, Total Fat **4g**, Saturated Fat **1g**, Cholesterol **4mg**, Vitamin A **1226 IU (64 RAE)**, Vitamin C **14mg**, Iron **2mg**, Calcium **118mg**, Sodium **159mg**

VEGETABLE CHILI BOAT

Recipe

3/4 cup provides:

Legume as Meat Alternate: 3/4 oz equivalent meat alternate, 1/4 cup red/orange vegetable, 1/4 cup other vegetable, and 1/4 oz. equivalent grains.

OR

Legume as Vegetable: 1/4 oz. equivalent meat alternate, 1/8 cup legume vegetable, 1/4 cup red/orange vegetable, 1/8 cup other vegetable, and 1/4 oz. equivalent grains.

Legume vegetable can be counted as either a meat alternate or as a legume vegetable but not as both simultaneously.

VEGETABLE CHILI BOAT

Meal Components:

**Meat Alternate – Legume Vegetable – Red/Orange Vegetable –
Other Vegetable – Grains**

Ingredients	25 Servings		50 Servings		100 Servings		Directions Process #2: Same Day Service
	Weight	Measure	Weight	Measure	Weight	Measure	
canola oil		3 Tbsp		1/4 cup 2 tsp		3/4 cup	1. Heat oil. – For 25 servings, use a large stockpot. – For 50 and 100 servings, use a roasting pan/square head pan (20 7/8" x 17 3/8" x 7") on top of the stove.
*fresh onions, diced	11 1/4 oz	2 1/3 cups	1 lb 2/3 cup	1 qt 2/3 cup	2 lb 13 oz	2 qt 1 1/3 cups	2. Sauté onions and green peppers for 2 – 4 minutes add beans and chili powder. Stir well. Cook for 1 – 2 minutes.
*fresh green bell peppers, diced	8 1/4 oz	1 1/2 cups	1 lb 1/2 oz	1 qt 2/3 cup	2 lb 13 oz	1 qt 2 cups	
canned low-sodium pinto beans, drained, rinsed OR *dry pinto beans, cooked (See Notes Section)	10 1/2 oz OR 10 1/2 oz	1 1/2 cups (1/4 No. 10 can) OR 1 1/2 cups	1 lb 5 1/2 oz OR 1 lb 5 1/2 oz	3 cups (1/2 No. 10 can) OR 3 cups	2 lb 10 oz OR 2 lb 10 oz	1 qt 2 cups (1 1/8 No. 10 can) OR 1 qt 2 cups	
canned low-sodium kidney beans, drained, rinsed OR *dry kidney beans, cooked (See Notes Section)	10 3/4 oz OR 10 3/4 oz	1 1/2 cups (1/4 No. 10 can) OR 1 1/2 cups	1 lb 5 1/2 oz OR 1 lb 5 1/2 oz	3 1/3 cups (1/2 No. 10 can) OR 3 1/3 cups	2 lb 11 oz OR 2 lb 11 oz	1 qt 2 2/3 cups (1 1/8 No. 10 can) OR 1 qt 2 2/3 cups	
canned low-sodium black beans, drained, rinsed OR *dry black beans, cooked (See Notes Section)	1 lb 3 oz OR 1 lb 3 oz	2 1/4 cups (1/3 No. 10 can) OR 2 1/4 cups	2 lb 6 oz OR 2 lb 6 oz	1 qt 1/2 cup (2/3 No. 10 can) OR 1 qt 1/2 cup	4 lb 12 oz OR 4 lb 12 oz	2 qt 1 cup (1 1/3 No. 10 can) OR 2 qt 1 cup	
chili powder	2 1/2 oz	1/4 cup 2 Tbsp	5 oz	3/4 cup	10 oz	1 1/2 cups	
canned low-sodium diced tomatoes	1 lb 5 1/2 oz	2 1/4 cups (1/4 No. 10 can)	2 lbs 11 oz	1 qt 1 cup (1/2 No. 10 can)	5 lbs 6 oz	2 qt 2 cups (1 No. 10 can)	3. Add diced tomatoes, stock, and hot sauce. Bring to a boil over medium-high heat. Reduce heat. Simmer uncovered for 10 minutes.
low-sodium chicken stock		1 qt 1/3 cup		2 qt 2/3 cup		1 gal 1 1/3 cups	
hot sauce		1 tsp		2 tsp		1 Tbsp 1 tsp	
canned low-sodium tomato paste	9 oz	1 cup (1/3 No. 2 1/2 can)	1 lb 2 oz	2 cup (2/3 No. 2 1/2 can)	2 lb 4 oz	1 qt (1/3 No. 10 can)	4. Add tomato paste and mix well. Cook for an additional 10 minutes. Critical Control Point: Heat to 135 °F or higher for at least 15 seconds.
							5. Pour into serving pans. 6. Critical Control Point: Hold for hot service at 135 °F or higher.
reduced-fat cheddar cheese, shredded	3 1/2 oz	1 cup	7 oz	2 cups	14 oz	1 qt	7. Combine cheddar and mozzarella cheeses.
low-fat mozzarella cheese, low-moisture, part-skim, shredded	3 1/2 oz	1 cup	7 oz	2 cups	14 oz	1 qt	
low-sodium tortilla chips	9 oz	62 chips	1 lb 2 oz	124 chips	2 lb 4 oz	248 chips	
							8. Portion with 6 fl oz ladle (3/4 cup) into an 8 oz paper boat or bowl. Garnish with 2 – 3 chips and 1 Tbsp cheese blend.

VEGETABLE CHILI BOAT

Meal Components:

**Meat Alternate – Legume Vegetable – Red/Orange Vegetable –
Other Vegetable – Grains**

Notes
*See Marketing Guide for purchasing information on foods that will change during preparation or when a variation of the ingredient is available.
Special tip for preparing dry beans:
SOAKING BEANS
<u>Overnight Method</u> – Add 1 3/4 qt of cold water to every 1 lb of dry beans. Cover and refrigerate overnight. Discard the water. Proceed with recipe.
<u>Quick-Soak Method</u> – Boil 1 3/4 qt of water for each 1 lb of dry beans. Add beans and boil for 2 minutes. Remove from heat and allow to soak for 1 hour. Discard the water. Proceed with recipe.
COOKING BEANS
Once the beans have been soaked, add 1 3/4 qt water for every lb of dry beans. Boil gently, with lid tilted, until tender, about 2 hours.
Use hot beans immediately.
Critical Control Point: Hold for hot service at 135 °F or higher.
OR
Chill for later use.
Critical Control Point: Cool to 70 °F within 2 hours and to 40 °F or lower within an additional 4 hours.
1 lb dry pinto beans = about 2 3/8 cups dry or 5 1/4 cups cooked beans
1 lb dry kidney beans = about 2 1/2 cups dry or 6 1/4 cups cooked beans
1 lb dry black beans = about 2 1/4 cups dry or 4 1/2 cups cooked beans

The grain ingredients used in this recipe must meet the Food and Nutrition Service whole grain-rich criteria.

Marketing Guide			
Food as Purchased for	25 servings	50 servings	100 servings
mature onions	13 oz	1 lb 10 oz	3 lb 4 oz
green bell peppers	11 oz	1 lb 6 oz	2 lb 12 oz
dry pinto beans	3 oz	6 oz	12 oz
dry kidney beans	7 oz	14 oz	1 lb 12 oz
dry black beans	8 oz	1 lb	2 lb
Nutrients Per Serving			
Calories	141.07	Saturated Fat 1.16g	Iron 1.73mg
Protein	7.26g	Cholesterol 4.28mg	Calcium 117.93mg
Carbohydrate	20.72g	Vitamin A 1226.43 IU (63.57 RAE)	Sodium 159.49mg
Total Fat	4.20g	Vitamin C 14.13mg	Dietary Fiber 5.04g
Serving	Yield	Volume	
3/4 cup (6 fl oz ladle) provides:	25 Servings: about 9 lb	25 Servings: about 1 gal 2 cups	
Legume as Meat Alternate: 3/4 oz equivalent meat alternate, 1/4 cup red/orange vegetable, 1/8 cup other vegetable, and 1/4 oz equivalent grains.	50 Servings: about 18 lb	50 Servings: about 2 gal 1 qt	
OR	100 Servings: about 36 lb	100 Servings: about 4 gal 2 qt	
Legume as Vegetable: 1/4 oz equivalent meat alternate, 1/8 cup legume vegetable, 1/4 cup red/orange vegetable, 1/8 cup other vegetable, and 1/4 oz equivalent grains.			
<i>Legume vegetable can be counted as either a meat alternate or as a legume vegetable but not as both simultaneously.</i>			

Product Evaluation for Meat/Meat Alternate

Participants evaluate each food product as part of the tasting in this culinary lab. For each food product (row) and each evaluation category (column), circle either A (acceptable) or NA (not acceptable).

Food Product	Appearance	Taste	Texture	Eating Quality	Comments
<i>Tuscan Smoked Turkey and Bean Soup</i>	<i>A or NA</i>	<i>A or NA</i>	<i>A or NA</i>	<i>A or NA</i>	
<i>Lentils of the Southwest</i>	<i>A or NA</i>	<i>A or NA</i>	<i>A or NA</i>	<i>A or NA</i>	
<i>Eagle Pizza</i>	<i>A or NA</i>	<i>A or NA</i>	<i>A or NA</i>	<i>A or NA</i>	
<i>Vegetable Chili Boat</i>	<i>A or NA</i>	<i>A or NA</i>	<i>A or NA</i>	<i>A or NA</i>	

Appendix

Assessment (Pre- and Post-)	151
Assessment Answers.....	153
Chef Prep Checklist	155
Common Conversions.....	157
<i>Dietary Guidelines</i> Activity.....	159
<i>Dietary Guidelines</i> Activity Master.....	161
Equipment Needs	
Culinary Demonstrations	163
Large Needs	164
Small Needs	165
Grocery List	169
Handouts	
<i>Basic Principles of Seasoning</i>	177
<i>Flavor Shakers</i>	179
<i>Knife Skills</i>	181
<i>Knife Cuts</i>	183
Logistics.....	185
Product Evaluation form (blank)	187
Station Setup	189
Toolkit.....	191
References.....	193

Pre- and Post-Assessment

Choose the correct answer.

1. Quality standards for foods include all of the following except:
 - a. appearance
 - b. cooking method
 - c. service temperature
 - d. texture or consistency
2. Culinary techniques are not important for school nutrition professionals.
 - a. True
 - b. False
3. Which of the following terms or phrases mean “everything is in its place”?
 - a. bâtonnet
 - b. chiffonade
 - c. mise en place
 - d. organizational structure
4. When reducing the fat in baked products, which of the following is true?
 - a. Replace some of the fat with fruit purées.
 - b. Leave out as much as half of the fat; quality will not be affected.
 - c. Never reduce the amount of fat in a USDA recipe since it has already been adjusted to the lowest amount of fat possible.
 - d. Baked products are so low in fat that modification is a waste of time.
5. The fat content can be lowered in school meals, but the taste will be unacceptable.
 - a. True
 - b. False
6. Which of the following is not true about spices?
 - a. They are parts of aromatic plants.
 - b. They are dried grasses.
 - c. They give flavors of their own.
 - d. They are sometimes sweet.
7. When is it important to slightly under cook pasta?
 - a. Pasta should never be under cooked.
 - b. only when the recipe calls for it
 - c. if the dish will be held on the serving line
 - d. when it is part of a recipe that will be cooked more


8. Culinary techniques for preparing meat include:
 - a. using a selection of prime cuts only
 - b. using dry heat methods of cooking for all cuts
 - c. using moist heat methods of cooking for all cuts
 - d. sauté and stir-fry without added fat
9. Fat can be lowered in school meals by offering meat alternates.
 - a. True
 - b. False
10. Which of the following is true about the *Dietary Guidelines for Americans*?
 - a. They do not support including whole grain rich foods.
 - b. They recommend choosing calorie dense foods and beverages.
 - c. The *Dietary Guidelines* have not changed since the 2010 edition.
 - d. They suggest limiting calories from added sugars and saturated fats.
11. Which of the following statements is not true regarding the preparation of grains?
 - a. Simmering is the most popular culinary technique for cooking grains.
 - b. A grain product should be stirred constantly to prevent overcooking.
 - c. A grain product that has been overcooked will result in a sticky, gummy product.
 - d. Grain products are done when almost all the liquid has been absorbed.
12. If cooked meat and poultry will not be served immediately, it should be held at room temperature.
 - a. True
 - b. False
13. When preparing dry beans, why is it important to soak them in water?
 - a. to produce a healthy bean stock
 - b. to remove all traces of dirt and debris
 - c. to season the beans
 - d. to soften them and to remove tannins and flatulence-causing sugars
14. Which method involves dipping food into boiling water for a very short time?
 - a. blanching
 - b. braising
 - c. roasting
 - d. sautéing
15. Eggs can be used to:
 - a. form an emulsion
 - b. reduce the sodium content in a recipe
 - c. make a roux
 - d. reduce the fat when cooking meat and poultry

Pre- and Post-Assessment Answers

- 1) **b** – cooking method
- 2) **b** – false
- 3) **c** – mise en place
- 4) **a** – replace some of the fat with fruit purées
- 5) **b** – false
- 6) **b** – They are dried grasses.
- 7) **d** – when it is part of a recipe that will be cooked more
- 8) **d** – sauté and stir fry without added fat
- 9) **a** – true
- 10) **d** – They suggest limiting calories from added sugars and saturated fats.
- 11) **b** – A grain product should be stirred constantly to prevent overcooking.
- 12) **b** – false
- 13) **d** – to soften them and remove tannins and flatulence-causing sugars
- 14) **a** – blanching
- 15) **a** – form an emulsion

Chef Prep Checklist

Day 1 – Kitchen Set-up

Task	
Arrange food stuff on sheet pans	
- Produce, dairy, meats – place on sheet pans in refrigerator	
- Dry goods – set up on rolling cart	
- Paper goods – set up on rolling cart	
- Gloves, hairnets, aprons (if using)	
Workstation Set-up	
Each station:	
- 4 cutting boards	
- 4 chef knives	
- 2 paring knives	
- 1 peeler	
- measuring cups/spoons	
- trash container for vegetables parings	
- small bowl – for herb/spice demo	
- cleaning rags	
Miscellaneous cooking utensils – set aside	
- whips	
- spatula	
- mixing spoons	
- colander	
- strainer	
- grater	

Day 2 – Lab Set-up

Task	✓
Knife Skills Demo	
- Wash carrots and celery.	
- Place damp rag or paper towel under each cutting board to reduce slipping.	
Place at each cutting board:	
- onion	
- carrot	
- celery stalk	
- bowl of flour for measuring	
- paper plate to weigh flour	
Herb and Spices Demo	
- Place a sprig of each fresh herb on a tray for discussion.	
- Place assorted spices on a tray for discussion.	
- Other seasoning ingredients: vinegar, orange juice, Worcestershire sauce, lemon, carrot/onion/celery mirepoix, etc	
Fruit and Vegetable Demo (on trays)	
- Assemble ingredients for roasting carrots	
- Assemble ingredients for spinach	
- Assemble melons and oranges	
Set up recipe ingredients	
- rice pilaf	
- <i>Chic ' Penne</i>	
- <i>Dirty Rice</i>	
- <i>Fiesta Wrap</i>	
Recipe Prep	
- Cook rice for <i>Dirty Rice</i>	
- Cook quinoa for <i>Fiesta Wraps</i>	

Common Conversions

Fluid Ounces

1 fluid ounce	=	2 tablespoons			
8 fluid ounces	=	1 cup			
16 fluid ounces	=	2 cups	=	1 pint	
32 fluid ounces	=	4 cups	=	1 quart	= 2 pounds
128 fluid ounces	=	16 cups	=	4 quarts	= 8 pounds

Teaspoons & Tablespoons

3 teaspoons	=	1 tablespoons
2 tablespoons	=	1/8 cup
4 tablespoons	=	1/4 cup
5 1/3 tablespoons	=	1/3 cup

Tablespoons & Cups

8 tablespoons	=	1/2 cup
10 2/3 tablespoons	=	2/3 cup
12 tablespoons	=	3/4 cup
16 tablespoons	=	1 cup

Cups to Gallons

8 fluid ounces	=	1 cup
2 cups	=	1 pint
4 cups	=	1 quart
4 quarts	=	1 gallon

Dietary Guidelines Activity

Cut strips apart and pass out one strip per group.

Follow healthy eating patterns.

Focus on variety, nutrient density, and amount.

Limit added sugars, saturated fats, and sodium intake.

Make healthier food and beverage choices.

Support healthy eating patterns.

Follow healthy eating patterns.

Focus on variety, nutrient density, and amount.

Limit added sugars, saturated fats, and sodium intake.

Dietary Guidelines Activity Master

Cut strips apart and pass out one strip per group.

Follow healthy eating patterns.

Focus on variety, nutrient density, and amount.

Limit added sugars, saturated fats, and sodium intake.

Make healthier food and beverage choices.

Support healthy eating patterns.

Follow healthy eating patterns.

Focus on variety, nutrient density, and amount.

Limit added sugars, saturated fats, and sodium intake.

Equipment Needs

Culinary Demonstrations		
Item	Quantity	✓
Colander	1	
Mixing bowl, large	1	
Scale, analog	1	
Scale, digital	1	
Sheet pan, full size	4	
Spider strainer	1	
Steamtable pan, full size 4"	2	
Steamtable pan, full size 2"	3	
Stock pot, medium	4	

Large Equipment		
Item	Quantity	✓
Dishwashing facilities	1	
Food processor or large blender	1	
Ovens	4	
Pot and pan sink	1	
Range-top cooking space	1	
Steamer	1	
Tilting skillet (if possible)	1	

Overall Small Equipment List				
Item	Lab 2	Lab 3	Lab 4	✓
Can opener	4	4	4	
Colander		4	4	
Fine mesh strainer		1		
Food Processor	1	1		
Fork	1	1		
Grater box, sharp	2	1		
Ladle, 2 oz	1		2	
Mixing bowl, small	1	1		
Mixing bowl, medium	3		1	
Mixing bowl, large		2		
Muffin tins, 24 cup			1	
Peelers	2		2	
Sauté pan, small	1			
Sauté pan, medium			3	
Sauté pan, large		2		
Scoop, # 6	1			
Scoop, # 8	2	1	2	
Scoop, # 12		1		
Sheet pan, 13"x18"x1"		1	1	
Sheet pan, 18"x26"x1"		1		
Spatula, serving	1			
Spoon, large	1	1		
Steamtable pan, full size 4"	1	2	2	
Steamtable pan, full size 2"	2	3	1	
Stock pot, small	2	3		
Stock pot, medium		2	2	
Wire whisk	2			
Zester	1			

Small Equipment List by Team LAB #2					
Item	Team 1	Team 2	Team 3	Team 4	✓
Can openers	1	1	1	1	
Food Processor	1				
Fork				1	
Grater(s), sharp	1		1		
Ladle, 2oz			1		
Mixing bowl, small			1		
Mixing bowl, medium	1	2			
Peelers	2				
Sauté pan, small		1			
Scoop, # 6	1				
Scoop, # 8	2				
Spatula, serving				1	
Spoon, large	1				
Steamtable pan, full size 4"		1			
Steamtable pan, full size 2"			1	1	
Stock pot, small				2	
Wire whisk		1		1	
Zester		1			

Small Equipment List by Team LAB #3					
Item	Team 1	Team 2	Team 3	Team 4	✓
Can openers	1	1	1	1	
Colander	1	1	1	1	
Fine mesh strainer	1				
Food Processor		1			
Fork				1	
Grater(s), sharp		1			
Mixing bowl, small		1			
Mixing bowl, large			1	1	
Sauté pan, large	1	1			
Scoop, # 8	1				
Scoop, # 12		1			
Sheet pan, 13"x18"x1"				1	
Sheet pan, 18"x26"x1"		1			
Spoon, large		1			
Steamtable pan, full size 4"	2				
Steamtable pan, full size 2"		1	1	1	
Stock pot, medium	1			1	
Stock pot, small		1	1	1	

Small Equipment List by Team LAB #4					
Item	Team 1	Team 2	Team 3	Team 4	✓
Can openers	1	1	1	1	
Colander	1	1	1	1	
Grater(s), sharp					
Ladle, 2oz		1		1	
Mixing bowl, medium			1		
Muffin tins , 24 cup			1		
Peelers		1	1		
Sauté pan, medium		1	1	1	
Scoop, # 8	1			1	
Sheet pan, 13"x18"x1"		1			
Steamtable pan, full size 4"	2				
Steamtable pan, full size 2"				1	
Stock pot, medium		1		1	

Grocery List

Fresh Produce							
Item Needed	Demo	Lab 1	Lab 2	Lab 3	Lab 4	Total to Purchase	✓
Avocado		1				1 whole	
Basil					2 tsp	1 small container	
Bell Pepper, Green	1/2 cup				3/4 cup 1/2 cup	3 whole peppers	
Bell Pepper, Red	1/4 cup		1/2 cup	1/4 cup		2 whole peppers	
Bok Choy			1 cup			1/2 lb (whole)	
Broccoli Florets	2 cups			2 cups		3/4 lb (heads)	
Butternut Squash			3 1/2 cups			2 lb (whole)	
Cabbage, green			2 cups			1/2 lb (whole)	
Cabbage, red			2 1/2 cups			1/4 lb (whole)	
Cabbage, white			2 cups			1/2 lb (whole)	
Carrots, whole	3 cups	8 lb				14 lb (whole)	
Carrots, shredded	1/2 cup		1 1/2 cups	1 1/4 cups	1/3 cup 1 cup		
Celery (fresh, trimmed)		1 stalk per participant		3/4 cup 1/2 cup	1/3 cup	10 1/2 lb (bunches)	
Cilantro			1 Tbsp 2 Tbsp		4 Tbsp	3 bunches	
Garlic	1 tsp 1/2 tsp		1 1/2 tsp	1 tsp 3 tsp	1 Tbsp 1 tsp	3 heads of garlic	
Kale					1 1/2 cups	1 bunch	
Lemons (for juice)				2 Tbsp		2 lemons	

Fresh Produce							
Item Needed	Demo	Lab 1	Lab 2	Lab 3	Lab 4	Total to Purchase	✓
Lettuce, romaine			1 1/2 cups		1/2 cup	1 head	
Limes (for juice)			6 quarters			2 limes	
Melons (variety)	3					3	
Onion, green (scallion)	2 onions		1/2 cup	2 Tbsp		1 bunch	
Onion, yellow	1 whole 2 cups 1/4 cup	1 per participant	1 cup 1 1/4 cups	1 cup 1 1/2 Tbsp	1/3 cup 2 Tbsp 3/4 cup 1/2 cup	2 – 5 lb bags	
Onions, Red	1/4 cup			2 Tbsp		1 onion	
Oranges	6					6 whole oranges	
Parsley	1/4 cup			1 Tbsp	2 tsp	2 bunches	
Pepper, chili, dried,			1/2 pepper			1 pepper	
Potatoes, baker		1 per participant				5 lb	
Potatoes, sweet	2 cups		1 1/2 cups 5 cups			5 lb	
Spinach, fresh, partly trimmed	1 lb 5 oz			1 1/2 cup	1/2 cup	3 lb	
Swiss chard, fresh, trimmed			4 cups			1 lb	
Tomatoes, cherry				1/2 cup		1 container (0.25 lb)	
Thyme, fresh	2 sprigs				2 tsp	1 container	

*Food safety best practices indicate that any pre-washed, bagged greens are ready for consumption/use and do not need to be washed again; however, remember to follow state or local health department requirements for handling fresh produce.

Meats							
Item Needed	Demo	Lab 1	Lab 2	Lab 3	Lab 4	Total to Purchase	✓
Chicken, fajita strips	12 oz		16 oz	4 oz 12 oz		4 lb	
Talipia, frozen			24 oz			1 package IQF (2.25 lb)	
Turkey breast, smoked					1 cup	0.5 pound	
Turkey, ground	16 oz			2 lb		3 lb	
Dairy							
Cheese, cheddar, low-fat, shredded				1/2 cup	1/4 cup	0.25 lb	
Cheese, white cheddar, low-fat, shredded	1/4 cup					0.25 lb	
Cheese, feta, crumbled				2 Tbsp		1 oz	
Cheese, Mexican, low-fat, shredded					6 Tbsp	3 oz	
Cheese, mozzarella, low-fat, shredded				1/2 cup	1/4 cup	0.25 lb	
Cheese, parmesan	1/3 cup					0.25 lb (3 oz)	
Eggs				2 egg	10	1 dozen	
Half-and-half, fat-free	1 1/3 cups			1 1/2 cups		1 qt	
Orange juice			3/4 cup			8 oz	
Sour cream, fat-free					1/2 cup	8 oz	
Yogurt, low-fat, plain				1/2 cup		8 oz	

Canned Goods							
Item Needed	Demo	Lab 1	Lab 2	Lab 3	Lab 4	Total to Purchase	✓
Beans, black, low-sodium	2 1/4 cups		6 cups		1 cup	7 – 15.5 oz cans	
Beans, garbanzo			2 1/2 cups			3 – 15 oz cans	
Beans, green	2 cans	5 cans				7 – 14.5 oz cans	
Beans, kidney					1/2 cup	1 – 15.5 oz can	
Beans, Navy, low-sodium					1 3/4 cups	2 – 14 oz cans	
Beans, pinto, low-sodium					1/2 cup	1 – 15.5 oz can	
Beans, refried, low-sodium, low-fat					1 3/4 cups	1 – 16 oz can	
Broth/stock, beef, low-sodium	1/3 cup					1 can (3 oz)	
Broth/stock, vegetable	1 quart					1 quart	
Broth/stock, chicken, low-sodium	4 1/3 cups		1 cup	2 cups 1/4 cup 1/8 cup	4 1/4 cups 1 cup	104 oz (3.25 qt)	
Chilies, green, diced			1/2 cup			1 – 8 oz jar/can	
Corn, whole kernel, low-sodium					1 1/4 cups	1 – 15.25 oz can	
Olives, black, sliced				2 Tbsp		1 small can (1 oz)	
Salsa, low-sodium					1/2 cup	1 small jar (4 oz)	
Soup, cream of chicken, low-sodium	2 cans					2 cans	
Tomatoes, low-sodium, diced			1/2 cup		1 cup 1 1/3 cups	2 – 28 oz cans	
Tomato paste, low-sodium					2 1/4 tsp 1/4 cup	3 oz	

Seasoning and Spices							
Item Needed	Demo	Lab 1	Lab 2	Lab 3	Lab 4	Total to Purchase	✓
Bay leaf	2 leaves					1 small container	
Cajun seasoning, low-sodium	1 tsp					0.2 oz	
Chili powder	1 tsp				1 tsp 1 tsp 1 1/2 Tbsp	2 oz	
Cinnamon			1/2 teaspoon			0.1 oz	
Cloves, ground	for flavor shakers					1 container	
Cumin	1 1/4 tsp		3/4 tsp 1 tsp		2 tsp 1/2 tsp	1 oz	
Curry powder				1 1/2 tsp		0.25 oz	
Dill weed	for flavor shakers					1 container	
Dressing, balsamic vinaigrette			3/4 cup			6 oz	
Garlic, granulated			1/4 tsp	1 tsp		0.25 oz	
Garlic powder	1/8 tsp 1/2 tsp		1/4 tsp	1 tsp	1/2 tsp	0.5 oz	
Ginger, ground	for flavor shakers					1 container	
Hot sauce					dash	small bottle	
Mrs. Dash			1 1/2 tsp 1 Tbsp		2 1/4 tsp	1 container	
Nutmeg, ground	for flavor shakers					1 container	
Onion powder			1/2 tsp			0.1 oz	
Oregano, dried					1/4 tsp	0.1 oz	
Paprika	for flavor shakers					1 container	
Parsley flakes	1/2 tsp					0.2 oz	
Pepper, black			1/4 tsp 1/2 tsp	1/2 tsp 1 tsp	1/8 tsp	0.5 oz	

Seasoning and Spices							
Item Needed	Demo	Lab 1	Lab 2	Lab 3	Lab 4	Total to Purchase	✓
Pepper, cayenne	for flavor shakers					1 container	
Pepper, red			1 tsp		1/2 tsp	0.25 oz	
Pepper, white	1/4 tsp			1/8 tsp 1/4 tsp		0.2 oz	
Sage	for flavor shakers					1 container	
Salt	1/4 tsp 1/4 tsp 1 tsp		1/2 tsp 1/4 tsp	1 tsp 1 tsp 3/4 tsp	1/2 tsp 1/2 tsp	1.5 oz	
Frozen Foods							
Corn, whole kernel			1 cup			0.5 lb	
Bread Items							
Tortilla chips					18 chips	1 small bag	
Tortillas, whole wheat, 8"	6		6			12 – 8" tortillas, whole wheat	
Tostada shells					6	1 package	
Rolls/slider buns, whole wheat				12		12 buns	

Dry Goods							
Item Needed	Demo	Lab 1	Lab 2	Lab 3	Lab 4	Total to Purchase	✓
Cornstarch					1/4 tsp	1 small package	
Cranberries, dry				1/2 cup + 2 Tbsp		0.25 lb	
Flour, all-purpose		At least 1 cup per participant		1 Tbsp		3 – 5 lb bags	
Lentils, green or brown					1 cup	1.25 lb	
Pasta, penne, whole wheat				12 oz		0.5 lb	
Pasta, rotini, whole wheat	10 oz					0.25 lb	
Quinoa, dry, prewashed				1 cup	1/4 cup	0.5 lb	
Rice, brown, long grain, regular	2 cups 1 cup (3 cups cooked)		1 3/4 cups	1 cup 1/4 cup		1.25 lb	
Staples							
Nonstick spray						2 cans	
Oil, canola	1 Tbsp		2 Tbsp 2 Tbsp 2 Tbsp 1 Tbsp	1 tsp 1 Tbsp	2 1/2 tsp	1 small jar	
Oil, extra virgin olive	2 Tbsp 2 tsp 1 1/2 Tbsp		1 Tbsp	1 1/2 Tbsp	2 tsp	1 small jar/bottle	
Vinegar, red wine			1 Tbsp	2 Tbsp		1 small bottle	
Worcestershire sauce				2 tsp		1 small bottle	

Paper Goods		
Item Needed	Total to Purchase	✓
Alcohol swabs (to sanitize meat thermometers)	1 box	
Aluminum foil	1 large roll	
Bags, zip top, food storage – gallon size	100	
Bags, zip top, food storage – quart size	100	
Bleach	1 small bottle	
Cups, 16 oz	120	
Cups, 2 or 3 oz	300	
Dish detergent	1 small bottle	
Dish towels, disposable	24	
Food storage containers, plastic		
Forks, plastic	500	
Gloves – for dishwashing	2 pair	
Knives, plastic	250	
Napkins	500	
Paper towels	6 rolls	
Plates, paper (dessert size)	250	
Plastic cling wrap	1 large roll	
Spoons, plastic	500	

BASIC PRINCIPLES OF SEASONINGS

The 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. Successful child nutrition assistants' creativity in seasoning foods is not limited to spices.

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

Seasoning foods include bell peppers (all colors), shallots, carrots, celery, garlic, leeks, onions, and hot chili peppers such as jalapeno.

Additional Seasonings

Other seasonings include juices: apple, lemon, lime, orange, pineapple; orange and lemon zest, vegetable stock, olive oil, hot sauce, soy sauce (use low-sodium), and Worcestershire sauce.

General Tips for Enhancing Flavor During Food Preparation

- 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 herbs at the beginning. Adequate time should be allowed for the dried herbs to absorb enough moisture to release the flavor.
- In slow-cooking foods such as soups or stews, add herbs in the final 45 to 60 minutes of cooking. Whole spices or herbs (bouquet garni) are best suited for long-cooking recipes and should be removed before the food is served.
- 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 tsp per pint or pound of a food product. When using garlic or pepper, start with only 1/8 tsp.
- Use two times as much of a fresh herb or spice as of the dried form. For example: 2 tsp of fresh basil = 1 tsp dried whole leaf basil.
- Use twice as much of a dried leaf herb as of the ground form. For example: 1/2 tsp dried thyme leaves = 1/4 tsp ground thyme.
- Using 1 to 3 Tbsp of 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 to 100 servings. Increase the spice or herb by 25% for each additional 100 servings.

FLAVOR SHAKERS

Blend #1 – Savory

(great on potatoes)

- 2 Tbsp dried dill weed
- 1 Tbsp garlic powder
- 1 Tbsp onion powder
- 1 Tbsp paprika
- 1 Tbsp dried parsley
- 1 Tbsp dried sage

Blend #2 – Southwestern

(great on vegetables and french fries)

- 2 Tbsp chili powder
- 2 Tbsp cumin
- 1 Tbsp crushed red pepper
- 1 Tbsp onion powder
- 1 Tbsp granulated garlic

Blend #3 – Cajun

(great on vegetables)

- 2 Tbsp black pepper
- 1 Tbsp cayenne pepper
- 1 Tbsp paprika
- 1 Tbsp onion powder
- 1 Tbsp garlic powder

Blend #4 – Fall Blend

(great on squash and carrots)

- 2 Tbsp cinnamon
- 1 Tbsp ground cloves
- 1 Tbsp ground ginger
- 1 Tbsp nutmeg

Additional Shaker Ideas

- low-sodium lemon pepper
- crushed red pepper flakes
- grated Parmesan cheese and dried parsley
- course ground black pepper and granulated garlic

Olson, D. (2014). *Flavor shakers for childcare*. Retrieved from https://www.educateiowa.gov/sites/files/ed/documents/1415_np_lt_flavorshakers_CACFP.pdf

Knife Skills

Holding the Knife

There are various ways to hold a knife based on the way your knife and hand fit each other. However, the grip is determined by the task being performed. When greater control is needed for delicate cutting or shaping, more fingertips than fist are used. A firmer grip that allows more leverage is needed for coarser chopping and cutting tasks. There are four basic grips for holding a chef's knife.

1. Use all four fingers to grip the handle and place the thumb gently, but firmly, against the spine of the blade.
2. Use all four fingers to grip the handle and place the thumb gently, but firmly, against the side of the blade.
3. Hold the handle with three fingers while resting the index finger flat against one side of the blade and the thumb pressed on the opposite side. This grip provides additional stability and control.
4. Hold the handle overhand, like an upside down fist, with the knife in a vertical position. This grip is used with a boning knife for meat fabrication tasks.

The Guiding Hand





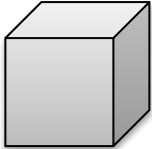


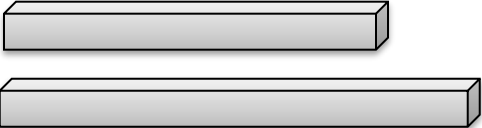
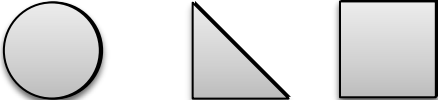


The hand not holding the knife, known as the guiding hand, is used to hold whatever is being cut. It controls the food you are cutting and keeps it from slipping as you cut. Your guiding hand also makes it easier to control the size of the cuts.

- The classic position for the guiding hand is when the fingertips are tucked slightly under and holding the food. The thumb is held back from the fingertips. The blade of the knife rests flat against the knuckles of the guiding hand. This position prevents the fingers from being cut.
- For some cuts, like tournées or flutes, or when peeling and trimming foods, your guiding hand holds the food in the air above the cutting surface and turns the food against the blade. It is vital the food, your hands, and the knife handle are very dry.
- Other cutting techniques, such as butterflying meat or slicing a bagel, require the guiding hand to be placed on top of the food. This position keeps the food from slipping while the cut is made into the food parallel or at an angle to the cutting surface. To ensure a safe cut with this position, the guiding hand should be held flat on the upper surface of the food with little pressure.

The Culinary Institute of America's Food and Beverage Institute. (n.d.) "Knife skills."

Foodservice learning solutions toolkit. Retrieved November 21, 2016 from <https://facsu.edu/uploads/1-58315-324-1.pdf>

Knife Cuts

<u>Type of Cut</u>	<u>Size</u>	<u>Example</u>
fine brunoise	1/16" x 1/16" x 1/16"	
brunoise	1/8" x 1/8" x 1/8"	
small dice	1/4" x 1/4" x 1/4"	
medium dice	1/3" x 1/3" x 1/3"	
large dice	3/4" x 3/4" x 3/4"	
fine julienne	1/16" x 1/16" x 1" or 2"	
julienne/allumette	1/8" x 1/8" x 1" or 2"	
bâtonnet	1/4" x 1/4" x 2" or 2-1/2"	
paysanne	1/2" x 1/2" x 1/8"	
tourné	2" length with 7 sides	 end view  side view

Logistics

Classroom Space

The space should:

- Accommodate 30 people. A space for 30 people provides space for the participants and any guests, as well as tables and chairs.
- Be located close to the kitchen (culinary lab).
- Contain:
 - five tables, preferably round, which will accommodate four people comfortably,
 - 30 chairs,
 - LCD projector, and
 - podium or space for classroom instructor to use during lecture.

Kitchen (Culinary Lab) Area

The space should contain:

- A minimum of 6' of workspace for each team.
- Area for chef demonstrations conveniently located so all of the participants can easily see the demonstration. (Demonstration table with an overhead tilt mirror is preferred.)
- Lab ingredients station with 3' of work area.
- Refrigerated storage space for fresh fruits, vegetables, dairy products, and meats.
- A limited amount of freezer storage space.
- Dry storage space for canned goods and supplies.
- Adequate handwashing facilities with soap and towels.
- Access to restroom facilities.

Product Evaluation

For each food product (row) and each evaluation category (column), circle either A (acceptable) or NA (not acceptable).

Food Product	Appearance	Taste	Texture	Eating Quality	Comments
	A or NA	A or NA	A or NA	A or NA	
	A or NA	A or NA	A or NA	A or NA	
	A or NA	A or NA	A or NA	A or NA	
	A or NA	A or NA	A or NA	A or NA	

Station Setup

Item	Qty per Station	✓
Cutting board	2	
Disposable gloves	1 box	
Dish towels	2	
Damp towel or mat to secure cutting board(s)	2	
Garbage cans w/liners		
*Knives – chef’s	2	
*Knives – paring	2	
*Measuring cup – 1/4 cup	1 set (minimum)	
*Measuring cup – 1/3 cup		
*Measuring cup – 1/2 cup		
*Measuring cup – 1 cup		
Sanitizing bucket w/sanitizing solution	1	
*Scales, 32 oz, weighing in 1/4 oz increments	1	
*Spatula, heat resistant	1	
*Spatula, regular	1 (minimum)	
Spoons, large (2 solid & 1 slotted, preferred)	3	
*Thermometer	1	
Wire whisk	1	

Each station needs access to the following items.

Can openers	2 or 3	
Colander or strainer	1 or 2	
Dry measuring cups, metal	2 or 3 sets	
Liquid measuring cups: pint, quart, gallon	2 or 3 sets	
Scales, 5 lb, weighing by 1/2 oz increments	2	

*These items are shipped from ICN.

Trainer Tips:

- Quality, metal dry measuring cups result in greater accuracy.
- Consistency among types of materials used at each station is important. (For example: if Station 1 has Store X metal dry measuring cups, each station should have these same cups.)

Training Tool Kit

Healthy Cuisine for Kids

Supplies Needed: (order in advance using assigned account number)

Participant materials needed: (one per participant)

- Culinary Manual (printed in full color, double-sided, and stapled)
- Presentation (printed 3 to a page, double-sided, and stapled)
- *Culinary Techniques Spices* poster
- *Basics at a Glance* poster
- *Cooling Food Safely* resource
- *MyPlate at School* poster
- note cards
- flip chart markers
- 10 page protectors
- return shipping label and packing tape

<p style="text-align: center;"><u>Additional Materials Needed</u></p> <ul style="list-style-type: none"> • aprons • cutting boards • First Aid kits (needs to include finger cots) • French knives, set • 6 boxes gloves: 1 small, 2 medium, 2 large, and 1 x-large • hairnets 	<p style="text-align: center;"><u>Host Training Site Asked to Provide</u></p> <ul style="list-style-type: none"> • lab kitchen supplies • LCD projector • flip chart 		
<p style="text-align: center;"><u>Standard Materials to go with Every ICN Training</u></p> <table style="width: 100%;"> <tr> <td style="vertical-align: top;"> <p><u>For Site Contact</u></p> <ul style="list-style-type: none"> • letter to site contact • evaluations • self-addressed envelope (to return evaluations) <p><u>For Participants</u></p> <ul style="list-style-type: none"> • table tents (or card stock to be used as table tents) </td><td style="vertical-align: top;"> <p><u>For Consultant</u></p> <ul style="list-style-type: none"> • letter to consultant • sign-in roster • self-addressed envelope • training presentation report • ICN ground rules • blue painter's tape • flip chart markers </td></tr> </table>		<p><u>For Site Contact</u></p> <ul style="list-style-type: none"> • letter to site contact • evaluations • self-addressed envelope (to return evaluations) <p><u>For Participants</u></p> <ul style="list-style-type: none"> • table tents (or card stock to be used as table tents) 	<p><u>For Consultant</u></p> <ul style="list-style-type: none"> • letter to consultant • sign-in roster • self-addressed envelope • training presentation report • ICN ground rules • blue painter's tape • flip chart markers
<p><u>For Site Contact</u></p> <ul style="list-style-type: none"> • letter to site contact • evaluations • self-addressed envelope (to return evaluations) <p><u>For Participants</u></p> <ul style="list-style-type: none"> • table tents (or card stock to be used as table tents) 	<p><u>For Consultant</u></p> <ul style="list-style-type: none"> • letter to consultant • sign-in roster • self-addressed envelope • training presentation report • ICN ground rules • blue painter's tape • flip chart markers 		

References

- Institute of Child Nutrition. (2006). *Competencies, knowledge, and skills of effective school nutrition assistants and technicians*. Retrieved from <http://theicn.org/documentlibraryfiles/PDF/20080716085837.pdf>
- Institute of Child Nutrition. (2006). *Competencies, knowledge, and skills of effective school nutrition managers*. Retrieved from <http://theicn.org/documentlibraryfiles/PDF/20090310022657.pdf>
- Institute of Child Nutrition. (2013). *Culinary techniques for healthy school meals*. University, MS: Author
- Institute of Child Nutrition. (2016) *Basic culinary math*. University, MS: Author
- Olson, D. (2014). *Flavor shakers for childcare*. Retrieved from https://www.educateiowa.gov/sites/files/ed/documents/1415_np_lt_flavorshakers_CACFP.pdf
- United States Department of Agriculture. (2015). *Professional standards for school nutrition professionals*. Washington, DC: Author.
Available on the USDA website: <https://professionalstandards.nal.usda.gov/>
- United States Department of Agriculture, Food and Nutrition Service. (2012). *Recipes for healthy kids*. Washington, DC: Author.
- United States Department of Agriculture, Food and Nutrition Service. (2012). *Food buying guide for child nutrition programs*. Washington, DC: Author.
- United States Department of Agriculture, Food and Nutrition Service. (2013). *NSLP USDA foods fact sheets*. Washington, DC: Author.
- United States Department of Agriculture and United States Department of Health and Human Services. (2015). *Dietary guidelines for Americans, 2015*, 8th ed., Washington, DC: Author.



The University of Mississippi
School of Applied Sciences
800-321-3054
www.theicn.org