

# From Concept to Cafeteria

Standardized Recipes for Program Success

**Presented by:**

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Welcome to the SNA Conference! Thank you for joining us today!

My name is Stephen Bewley and I am the Community Nutrition Programs Lead Specialist and I am joined today by Amy Richardson, Culinary Training Specialist. We work at the Virginia Department of Education.



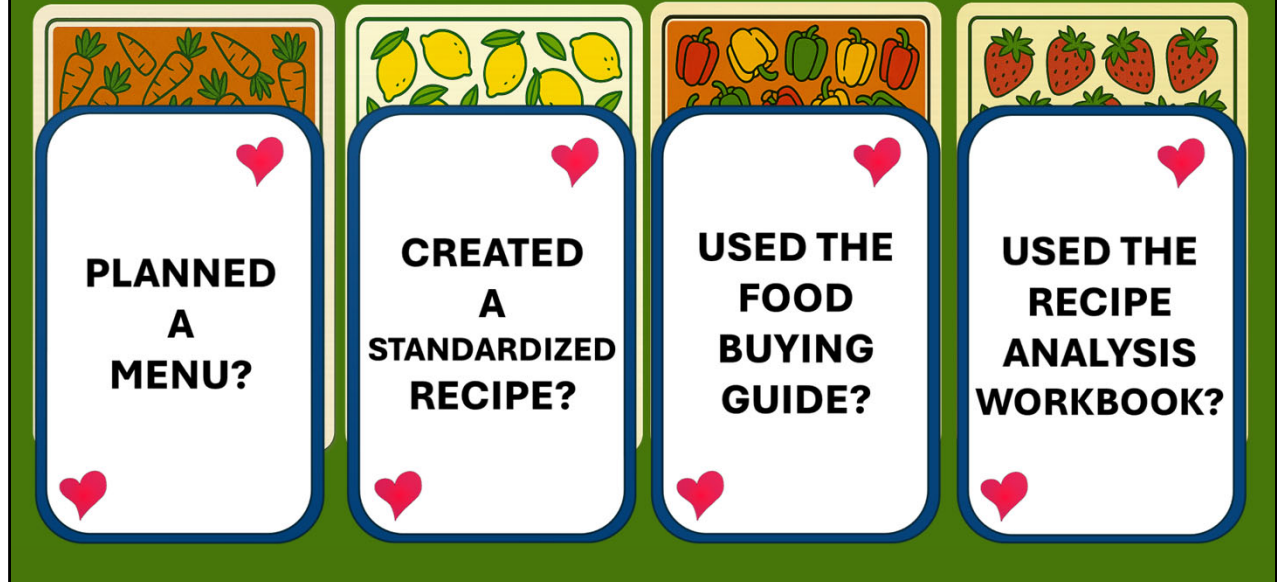
## In this Presentation:

- Factors affecting menu planning
- USDA Recipe Standardization Guide
- Food Buying Guide for Child Nutrition Programs
- Calculating Meal Pattern Contributions in the Recipe Analysis Workbook
- Menu Planning for Scratch Cooking

In this presentation we hope to spark discussion, find new recipe inspiration and explore recipe resources to assist you in the recipe standardization process.

- First, we will talk about factors that affect your menu planning.
- Then we will cover the highlights of the USDA Recipe Standardization Guide.
- We will explore the Food Buying Guide for Child Nutrition Programs.
- Then we'll deep-dive into the Recipe Analysis Workbook tool and practice with your own recipes.
- And finally, we will wrap up the session by exploring how to incorporate more scratch recipes into your menu.

## Who is in the room?



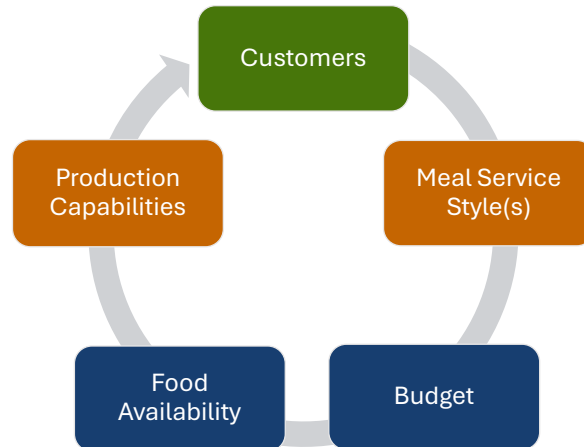
Before we get started, we would like to know who we have with us. Who are the Aces in the room? Have you ever...

Presenter: Ask audience to raise their hand as you call out each category.

- Planned a menu
- Created a standardized recipe
- Used the Food Buying Guide, or
- Used the Recipe Analysis Workbook



# Factors Affecting Menu Planning



Before we jump right into recipes, it's important to remember that successful menu planning starts with assessing and understanding the following:

- your customers,
- your type of foodservice (or meal service styles),
- your budget (or financial limitations),
- food availability,
- and your production capabilities.

Presenter: Discuss with audience. Questions to ask:

1. Would you add anything to this list?
2. Does anything have a heavier weight for you when Menu Planning? Or is this a balancing act?

Let's take a deeper dive into each one of these factors.



## Customers

- Age
- Nutritional needs
- Food habits and customs
- Individual preference

The menu planner must consider the makeup of the group to be served such as age, nutritional needs, food habits and customs, and individual preferences. This is especially important if your foodservice offers limited food choices such as one or two entrée options. You might be planning menus to meet the needs of most students, with some flexibility to satisfy everyone. Menus and recipes should also reflect guidance in the Dietary Guidelines for Americans and meal pattern requirements for Child Nutrition Programs.

You may notice that your customers are increasingly more knowledgeable about different types of foods and cuisines. Finding recipes that are meatless, halal-friendly, or ethnically diverse are trending.

**[Ask]** What types of trends are you seeing amongst your customers? How have you seen your customers or customer preferences change over the years? Allow a few audience members to share experiences.



## Meal Service Styles

- Traditional/Cafeteria
- Grab n' go
- Meals in the classroom
- Vending machines
- Mix of many service styles

Schools can offer a variety of meal service styles ranging from traditional meals in the cafeteria to grab n' go, transporting meals to classrooms, to reimbursable meals available in vending machines, or a mix of any of the above.

**[ASK for examples]** What types of meal service styles do you implement and how does this affect the types of recipes you use? Are there any styles you would add to this list?



## Budget

- Food
- Labor
- Supplies
- Equipment/equipment repairs
- Technology
- Marketing
- Indirect costs

The budget plays a critical role in planning menus. Costs of food, labor, supplies, equipment/equipment repairs, technology, marketing, and indirect costs for must be considered in relation to projected income and expenses. We have always found the ICN Financial Management Information System (FMIS) a very helpful resource.

You may find yourself having to balance more expensive popular menu options with less expensive ones to balance the costs of your offerings if you get a return on participation.

[theicn.org/icn-resources-a-z/financial-management-information-systems/](http://theicn.org/icn-resources-a-z/financial-management-information-systems/)



## Food Availability

- Commodities
  - USDA Foods
  - DoD Fresh Fruit and Vegetable Program
- Foods your vendors carry
- Seasonality of foods
- Locally grown or produced foods

When planning menus it's important to understand how the foods available to you through the commodity programs – USDA Foods and DoD Fresh - can help you save on food costs. It's also helpful to work with your vendors about available products. Further, while most foods are available year-round, there may be differences in quality and price. Peak seasons for fresh fruits and vegetables should be known when planning menus. Our office can also provide Harvest of the Month materials to maximize the seasonality of fresh produce. Seasonal price differences may also occur for non-produce items. You are probably noticing growing efforts of Farm to School and the buzz around sourcing locally grown or produced foods. Purchasing locally sourced foods has many benefits: including giving customers access to nutritious, high-quality foods, good stewardship of SFA funds, financial support of local food producers, community engagement, and opportunities to increase food-related education for students.

**[Ask]** Do you have a recent example of how you successfully started offering something new taking into consideration food availability?



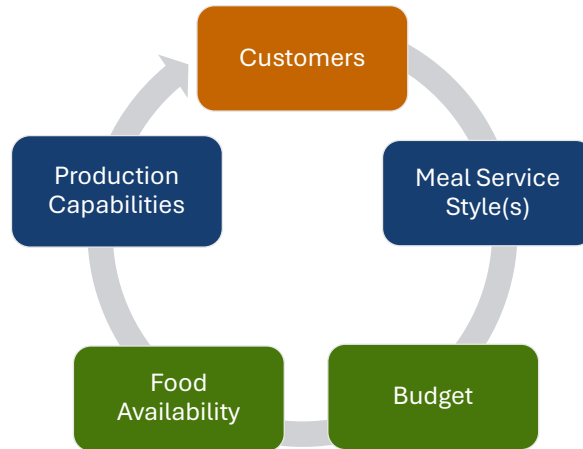
## Production Capabilities

- Central kitchen
- Finishing kitchens
- Self prep
- Space
- Equipment
- Number and experience of employees

Last, but not least, menu planning must consider your production capabilities. Are you operating a central kitchen or dreaming of a day you have one? Are any of your kitchens having to operate as a finishing kitchen? Or are all your schools onsite self prep? Production capability considerations also include your available space – what are your storage and preparation areas like? What type of equipment do you have? How many staff are you able to employ and what is their skill level? And do you know your meals per labor hour targets to help you stay within budget?



# Factors Affecting Menu Planning



By knowing these factors and how they play into your specific operation will be key when setting out the other big task of finding or developing recipes that fit your operational needs.

## Where do you find recipe inspiration?

Examples:

- VDOE website
- USDA Team Nutrition
- ICN Child Nutrition Recipe Box
- ICN Child Nutrition Sharing Site
- Social media
- Popular/trending restaurants
- Staff
- Students and families
- Vendors
- Chef Ann Lunchbox



After considering all the factors that are affecting your menu planning, you're ready to start planning your menus. Let's say you already have a starting place and perhaps good, popular recipes, but are needing to change some things up.

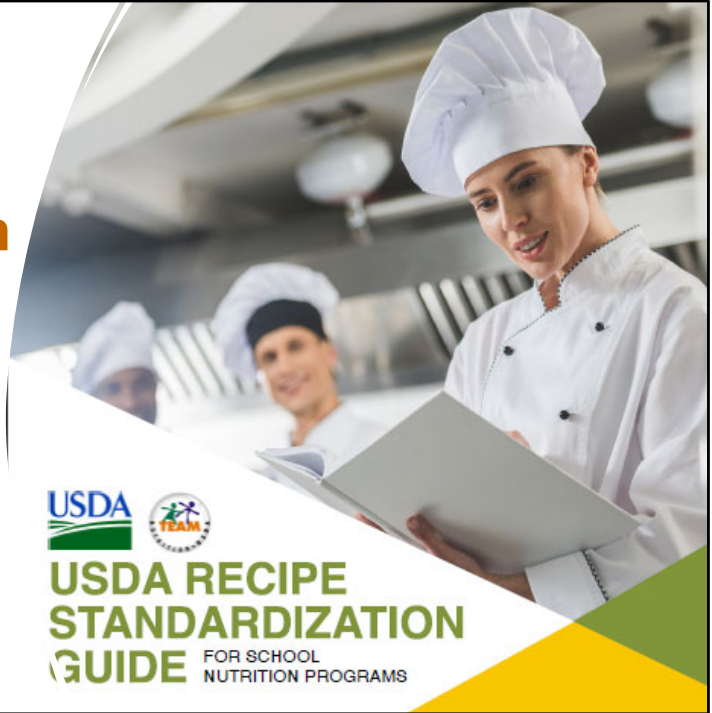
**[Ask]** Where do you find recipe inspiration for your menus?

Allow 1-2 minutes for audience to share ways in which they have success in finding new and customer approved recipes.

Presenters facilitate discussions and can use examples to prompt audience.

# USDA Recipe Standardization Guide

For School Nutrition Programs



The USDA Recipe Standardization Guide for School Nutrition Programs is a “how-to” guide on recipe standardization for school nutrition recipe developers. In this next section we will discuss the benefits and importance of standardized recipes, the parts of a standardized recipe, and what the guide details as the Three Phase Approach to the recipe standardization process.

By a show of hands, who has seen, used, or attended a webinar or training on the USDA Recipe Standardization Guide or the VDOE recipe development process?

## Top 10: Benefits of Standardized Recipes

**Consistent Food Quality**

**Efficient Purchasing**

**Predictable Yield**

**Inventory Control**

**Customer Satisfaction**

**Labor Cost Control**

**Consistent Nutrient  
Content**

**Employee Confidence**

**Food Cost Control**

**Success on ARs**

Why do we use standardized recipes?

Activity with Audience: Ask audience to help name the benefits of using standardized recipes.

1. Consistent Food Quality
2. Predictable Yield
3. Customer Satisfaction
4. Consistent nutrient content
5. Food cost control
6. Efficient purchasing procedures
7. Inventory control
8. Labor cost control
9. Increased employee confidence
10. Success on Administrative Reviews

# Anatomy of a Standardized Recipe



United States Department of Agriculture

State-Developed Recipe



Serving Size & Meal Pattern  
Contribution Statement

## Chicken Lo Mein

This first place winning Lo Mein recipe is sweet, savory, and delicious. **Recipe Title & Description**

**Recipe Project Name:** Fiscal Year 2021 Cohort A Team Nutrition Training Grant for School Meal Recipe Development  
*Iowa Department of Education*

**Preparation Time:** 1 hour  
**Cook Time:** 45 minutes

**NSLP/SBP crediting information:**  
1 cup provides 1/4 cup red/orange vegetable, 1/4 cup dark green vegetable, 1/4 cup other vegetable, 1/4 cup additional vegetable, 1 1/4 oz equivalent meats/meat alternates, 2 1/4 oz equivalent grains. **Preparation & Cook Time**

Consistently producing high-quality food that satisfies your customers and meets requirements for reimbursable meals is not an easy task. A standardized recipe has been tested for use in your kitchen(s). It produces consistently good results and yields when the preparer uses the same procedures, equipment, and quality and quantity of ingredients. For a standardized recipe to meet those needs, it must include the correct information.

This recipe on the USDA website was part of the FY 2021 Team Nutrition Training Grant for School Meal Recipe Development, and it does a great job including this information. Let's take a closer look.

- Include a recipe title name and description should accurately describe the recipe. The title should be descriptive of the product and easily understood by everyone working in the operation and your customers. You could even develop a catchy name as part of your marketing strategy! Here's some tips: Use language that focuses on the recipes' flavors and/or textures. You could use age-appropriate names for each grade level or use words that focus on a regional or new or unfamiliar flavor.
- Preparation and Cook Time: Preparation and cook times help the production team or individual preparing the recipe manage their time. This information also helps the menu planner develop cycle menus. Understanding the amount of time each recipe takes to prepare will help the menu planner identify which recipes work well, for a production point of view, on which days. Include time for chopping or dicing ingredients, preparing individual servings, placing items on a baking sheet, etc.
- Serving Size and Meal Contribution Statement. Provide the amount of a single portion in volume and/or weight. Give this information in a practical amount, such as 1/2 cup, 1 slice, 2 squares, etc. The contribution statement should identify which NSLP/SBP meal component(s) the ingredients in the recipe toward meats/meat alternates, vegetables (including subgroups), fruits, and/or grains. If an ingredient may be credited toward more than one meal component, include both crediting statements
- A nice clear image. Use pictures not only to educate those preparing of the presentation expectations, but to inform and entice your customers. **[Ask]** Does anyone in the audience use menu boards or post pictures of food online for students and parents/caregivers?

# Anatomy of a Standardized Recipe

INGREDIENTS	50 SERVINGS		100 SERVINGS		DIRECTIONS
	Weight	Measure	Weight	Measure	
Chicken breast, boneless, skinless	8 lb 8 oz		17 lb		<ol style="list-style-type: none"> <li>Bake chicken for 40-45 minutes at 350 °F. <b>Critical Control Point:</b> Heat until chicken reaches 165 °F or higher for at least 15 seconds.</li> <li>Rough chop chicken. <b>Critical Control Point:</b> Hold at 135 °F or higher until ready to serve.</li> <li>Bring a pot of water to a boil. Add whole wheat noodles and cook for 10-12 minutes. Drain. Rinse with cold water. <b>Critical Control Point:</b> Hold below 41 °F or above 135 °F.</li> <li>Cut bell peppers, onion, carrots, broccoli, green onions, and garlic.</li> </ol>
Whole wheat soba or spaghetti noodles, dry	6 lb 4 oz		12 lb 8 oz		
*Bell pepper, small dice	1 lb 2 oz	2 qt	2 lb 4 oz	1 gal	
*Onions, small dice	1 lb 14 oz	2 qt	3 lb 12 oz	1 gal	
*Carrot, small dice	2 lb 7 oz	2 qt	4 lb 14 oz	1 gal	
Garlic cloves, minced	1 ½ oz	¼ cup	3 oz	½ cup	

- A clear description of all the **ingredients** going into the recipe. This assists with a clear understanding of ingredients to purchase and preparation. The ingredient name should include the name of the product, product type/form (fresh, frozen, canned), and any preparation technique(s) (peeled, grated, minced, diced). Be sure to indicate size for preparation techniques, such as slicing and dicing (e.g., “½ inch slices” or “¼ inch diced”). List the ingredients in the order they are used when preparing the recipe. You can also include alternative ingredients that can be substituted for a listed recipe ingredient.
- And list the units of measure for each ingredient. USDA recipes include both weight and volume. Weights provide the most accurate information for the Recipe Analysis Workbook and nutrient analysis. You want to avoid using packaging to describe the amount of a product, such as “1 package.” Also very important that quantities are listed in their most straightforward units of measure, such as here 1 lb 2 oz instead of 18 oz. USDA recipes for schools have standardized recipes based on 50 and 100 servings. Additional math is needed to adjust recipes for smaller or larger serving amounts.
- Preparation directions. Very important these are clearly written. Your directions can also include information on alternative preparation methods and helpful cooking tips. For example, what is the cooking temperature and time for a convection vs. conventional oven. Or what to look for when testing for “doneness.”

## Food Safety Guidelines

- Include procedures designed to ensure the safe production and service of food. Indicate Hazard Analysis **Critical Control Point** (HACCP) information, if appropriate. Include the appropriate cooking temperature for any ingredients that require cooking and/or chilling and a final holding temperature. As applicable, include information about food allergens or developmental considerations (e.g., choking hazards for young children).

# Anatomy of a Standardized Recipe

**CHICKEN LO MEIN**  
**NUTRITION INFORMATION**  
 For 1 cup (1 cup spoodle) and 2 Tbsp chow mein noodles

NUTRIENTS	AMOUNT
Calories	397
<b>Total Fat</b>	<b>9 g</b>
Saturated Fat	2 g
Cholesterol	23 mg
<b>Sodium</b>	<b>436 mg</b>
<b>Total Carbohydrate</b>	<b>62 g</b>
Dietary Fiber	8 g
Total Sugars	11 g
Added Sugars included	N/A
<b>Protein</b>	<b>21 g</b>
Vitamin A	N/A
Vitamin C	N/A
Vitamin D	N/A
Calcium	72 mg
Iron	4 mg
Potassium	N/A

N/A=data not available.

Nutrition information from nutrient analysis

*MARKETING GUIDE		
Food as Purchased for	50 Servings	100 Servings
Broccoli florets	4 lb	8 lb
Carrots	2 lb 10 oz	5 lb 4 oz
Green onions	7.7 oz	15.4 oz
Onion	2 lb 2 oz	4 lb 4 oz
Bell pepper	1 lb 6 oz	2 lb 12 oz

Marketing guide

NOTES
*See Marketing Guide for purchasing information on foods that will change during preparation or when a variation of the ingredients is available.
Cooking Process #2: Same Day Service

Notes

YIELD/VOLUME	
50 Servings	100 Servings
About 33 lb 12 oz	About 66 lb 11 oz

Yield

On USDA Standardized Recipes you will also find provided:

**Nutrient Analysis** In this section, identify the nutrients provided per serving. The purpose of the nutrient analysis is to determine compliance with school meal regulatory requirements for calories, saturated fat, and sodium and to monitor levels of these dietary components in school meals.

**Marketing Guide** Use The Food Buying Guide for Child Nutrition Programs to determine the amount of product needed (as purchased) to yield the edible portion required for the recipe.

**Recipe notes** can include any other helpful information you want to point out. What equipment is used, the service style (self-serve, grab and go, made-to-order, etc.) Here they list notes on the marketing guide and HACCP cooking process.

Provide the Yield – this is amount of the finished or processed product (weight and volume, and number of servings available at the completion of the production).

# Recipe Standardization Process

1. Recipe Verification

2. Product Evaluation

3. Quantity Adjustment



For the purpose of time today, I am only going to do an overview of the Recipe Standardization Process. The USDA Recipe Standardization Guide lays out a detailed three-phase approach that is worthy of its own training!

The first phase is the recipe verification phase, followed by the evaluation phase, then adjusting it for quantity. A recipe may go through these phases several times before becoming standardized at the necessary quantity for an operation. Plan for how your teams can work together on the standardization process. And plan for how students and other customers can give their input during the evaluation phase.

Let's say you found a recipe or have some inspiration from a trendy eatery that you want to bring to your operation. To make this recipe work for you, you'll need to standardize it! Once a recipe has been standardized for an operation, the standardization process should not have to be repeated unless changes occur in the availability of ingredients or equipment.

# Recipe Verification Phase

Identifying the recipe

Sourcing the ingredients

Writing and reviewing the recipe

Preparing a small batch quantity

Verifying the yield

Recording changes



Here's what you have in mind, a beautiful meal that rivals with the competition of a local fast-casual restaurant. To your surprise, your older students are having meal delivered from local restaurants instead of dining with you. Does this sound familiar to anyone?? Let's change those students' minds (and wallet) and have them coming to you for those meals!

First, the recipe verification phase consists of several steps:

- Identifying the recipe – Chicken Lo Mein from our example earlier
- Sourcing the ingredients – it will have ingredients like pasta, chicken, fresh peppers, onions, carrots
- Then you will write and review the recipe in detail
- Prepare a small batch quantity
- Verify the yield
- And record changes

In the recipe verification phase, you will determine the component contribution toward meal pattern requirements. In the next section Amy will walk through calculating the component contribution for this example recipe. The food buying guide calculator will also help you determine how much you will need to plan and purchase for a desired serving size.

# Product Evaluation Phase

Informal Evaluation

VS

Formal Evaluation



Product evaluation follows the recipe verification phase and is a must-do part of the process. It will help you determine the acceptability of the information and provide you with information that can be used to further improve the recipe.

Recipe evaluation should include the manager, foodservice staff members, and customers – which can include students, teachers, administrators, and parents.

Two types of evaluation occur in the evaluation phase: informal and formal. The recipe needs to pass the informal evaluation before it goes on to the formal evaluation.

**ASK:** Can anyone tell me the difference between informal and formal evaluation as described in the Recipe Standardization Guide?

In informal evaluation, the recipe development team conducts a taste test  
In formal evaluation, a taste test is conducted with program stakeholders

# Quantity Adjustment Phase

## Factor Method

### Step 1: Identify the factor

Divide the desired yield by the current yield  
Example: Desire 150 servings; currently 50 servings  
 $150/50 = 3$

### Step 2: Multiply each ingredient by the factor

Example:  
50 servings: 2qts water  
 $2\text{qts} \times 3$   
 $= 6\text{ qts Of water}$

### Step 3: Simplify the Measurements

6 qts of water = 1 gallon + 2qts

Once a recipe is accepted, you need to adjust it for quantity production. Adjusting the recipe for quantity production entails scaling the recipe to reflect the number of servings you will use in your program. As your team completes recipe standardization, you may find modifications necessary to create the quality and quantity required. Always test and standardize recipes before including them in your program menus!

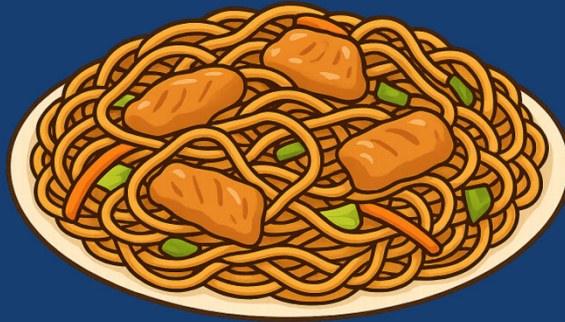
You may have a software program that adjust recipes, but it's important for staff members to know how to do quantity adjustment. There are several ways to increase or decrease the ingredients in a standardized recipe, otherwise known as scaling a recipe. One of the most common ways to scale in school nutrition programs is using the factor method.

Here is a 3-step process for the factor method:

- First, determine the factor. The factor is determined by dividing the desired yield in servings (225) by the current yield in servings (100);  $225/100 = 2.25$ . Your factor is 2.25
- Next, multiply each ingredient by the factor. Careful here, you may find that herbs, spices, leavening agents, thickening agents, and liquids may not increase or decrease proportionately. The best method to determine these quantities of these ingredients is to prepare the recipe. Let's multiply the factor by 1 lb. 8oz of cheese in our 100 servings to get the amount for 225 servings. Convert to decimal then multiply. 1.5 lbs.  $\times 2.25 = 3.375$  lbs. cheese.
- Last, change the amount into more common measurements, if necessary. 3.375 lbs. of cheese = 3 lbs. 6 oz.

# Activity 1

- Identify Factor
- Convert Chicken Lo Mein Recipe



Hand out first activity sheet

# Activity Answer

Ingredient to Serve 100	Weight	Measure	Converted Weight to Serve 250	Converted Measure to Serve 250
Chicken	17lbs		42lbs 8oz	
Whole Wheat Soba or Spaghetti Noodle (dry)	12lbs 8oz		31lbs 4oz	
Bell Pepper	2lbs 4oz		5lbs 10oz	
Onions, small dice	3lbs 12oz		9lbs 6oz	
Carrot, small dice	4lbs 14oz		12lbs 3oz	
Garlic cloves, minced	3oz		7lbs 8oz	
Green onion, small slice	5lbs 2oz		12lbs 13oz	
Vegetable oil		2 cups		5 cups

Go over answers to the activity

## Activity 2

- Identify your top three ingredients
- Identify your top three recipes
- Identify new recipe ideas



### Second Activity Worksheet

## CULINARY INSTITUTE OF CHILD NUTRITION SPICE BLENDS

The numbers referenced in each ingredient represent a ratio part.

<b>CHILI</b> 	<b>JERK</b> 	<b>POULTRY</b> 
<b>BASIC BBQ RUB</b> 	<b>ITALIAN</b> 	<b>BASIC CURRY</b> 
<b>SOUTHWEST</b> 	<b>RANCH</b> 	<b>CAJUN</b> 
<b>TACO</b> 	<b>GARAM MASALA</b> 	<b>ALL PURPOSE</b> 

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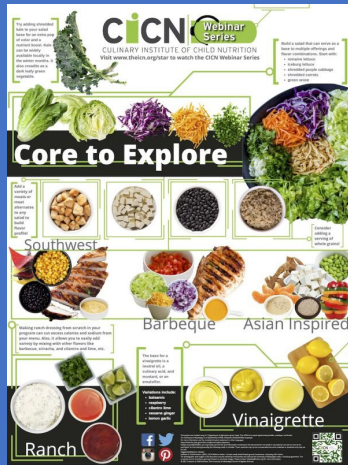
## CULINARY INSTITUTE OF CHILD NUTRITION FRESH HERBS

<b>BASIL</b> Sweet, Peppery, Light Citrusy Flavors  <b>Best Used In:</b> Pesto, Marinades, Salads, Sandwiches, Soups, Stews, and more. <b>Health/Heat Alternatives:</b> Parsley, Mint, Oregano	<b>CILANTRO</b> Citrusy, Fresh  <b>Best Used In:</b> Salsas, Soups, Stews, and more. <b>Health/Heat Alternatives:</b> Parsley, Mint, Oregano	<b>DILL</b> Lemony, Sweet, Citrusy Flavors  <b>Best Used In:</b> Pickles, Sauces, Dressings, and more. <b>Health/Heat Alternatives:</b> Parsley, Mint, Oregano	<b>MINT</b> Sweet, Peppery  <b>Best Used In:</b> Salads, Soups, Stews, and more. <b>Health/Heat Alternatives:</b> Parsley, Oregano
<b>OREGANO</b> Pungent, Peppery, Earthy, Bitter  <b>Best Used In:</b> Marinades, Salads, Sandwiches, Soups, Stews, and more. <b>Health/Heat Alternatives:</b> Parsley, Mint, Basil	<b>PARSLEY</b> Fresh, Bright, Citrusy, Mild, Sweet  <b>Best Used In:</b> Salads, Soups, Stews, and more. <b>Health/Heat Alternatives:</b> Basil, Mint, Oregano	<b>ROSEMARY</b> Woody, Pungent, Lemony, Pine, Bitter  <b>Best Used In:</b> Marinades, Salads, Sandwiches, Soups, Stews, and more. <b>Health/Heat Alternatives:</b> Parsley, Mint, Oregano	<b>THYME</b> Earthy, Sweet, Peppery  <b>Best Used In:</b> Salads, Soups, Stews, and more. <b>Health/Heat Alternatives:</b> Parsley, Oregano

<b>PURCHASING TIP</b>  Work with your vendor to see if you can purchase herbs by the bunch versus by the case.	<b>PRO TIP</b>  If you have access to fresh herbs, puree them with a little water and freeze the mixture for later use as a flavor booster.	<b>STORAGE TIP</b>  Trim the stem ends and either wrap in a damp paper towel or store upright in a plastic herb jar with a little water at the base.
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**CICN** CULINARY INSTITUTE OF CHILD NUTRITION  
800-321-3034

CICN Spice Blends and Fresh Herb Resources



Just to show a few more of the infographics available from CICN

# Resources and Q & A

## USDA Recipe Standardization Guide for School Nutrition Programs

- [theicn.org/cicn/usda-recipe-standardization-guide-for-school-nutrition-programs/](https://theicn.org/cicn/usda-recipe-standardization-guide-for-school-nutrition-programs/)

## CICN Flavor Enhancement Infographics

- [theicn.org/cicn/flavor-enhancement/](https://theicn.org/cicn/flavor-enhancement/)

## ICN Financial Management Information System (FMIS)

- [theicn.org/icn-resources-a-z/financial-management-information-systems/](https://theicn.org/icn-resources-a-z/financial-management-information-systems/)

## VDOE Standardized Recipe Template and Style Guide

- [www.doe.virginia.gov/programs-services/school-operations-support-services/school-nutrition/training-resources](https://www.doe.virginia.gov/programs-services/school-operations-support-services/school-nutrition/training-resources)

## Knife Skills for Fresh Produce

- [www.doe.virginia.gov/home/showpublisheddocument/65881/638942320310000000](https://www.doe.virginia.gov/home/showpublisheddocument/65881/638942320310000000)

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Here are a few of the resources we mentioned today. All of these resources will be provided again at the end of today's session.

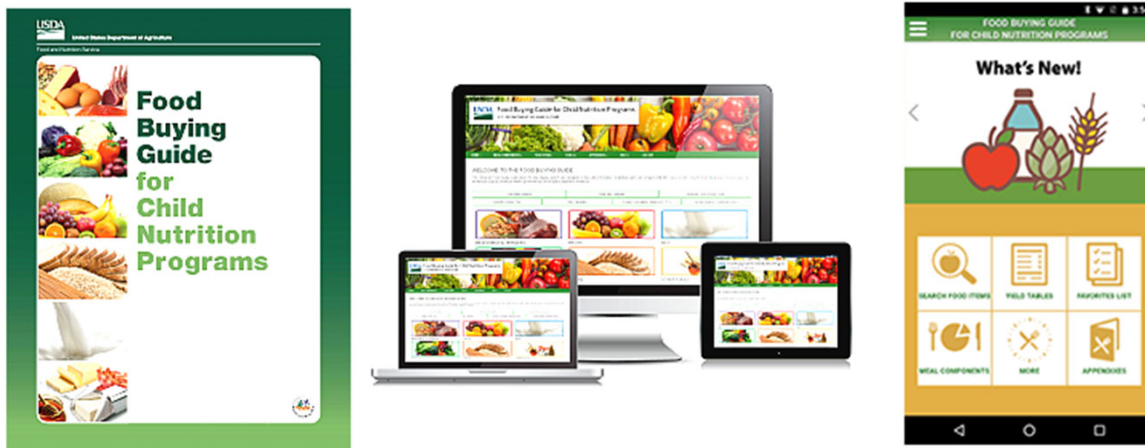
Q & A

## Using the USDA Food Buying Guide in Recipe Development



Next, we'll talk about using the USDA Food Buying Guide in recipe development.

# USDA Food Buying Guide



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The USDA Food Buying Guide is available in PDF, website or mobile app format.

The Guide is the essential resource for food yield information for all child nutrition programs. The Food Buying Guide assists directors and site operators with:

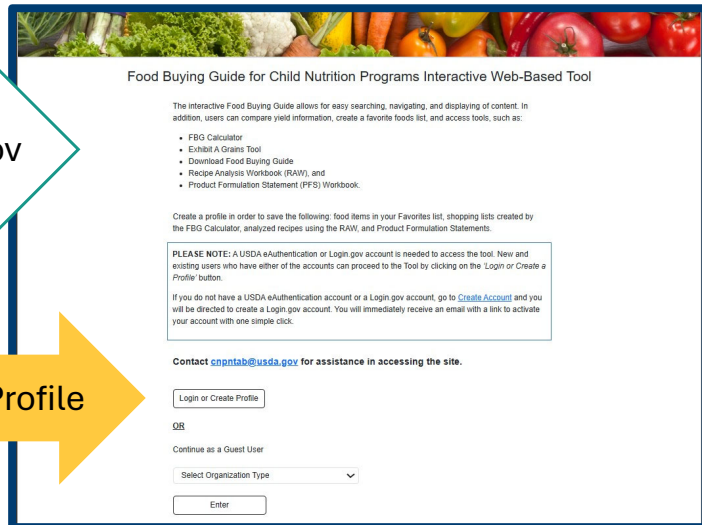
- Purchasing the correct amounts of foods for Child Nutrition Programs,
- Converting whole ingredients into serving sizes, and
- Determining the contribution that each food makes toward meal pattern requirements.

The Food Buying Guide is available as an interactive web-based tool, a mobile app, and downloadable PDF on the USDA Food and Nutrition Service website.

# Log in to the Food Buying Guide

foodbuyingguide.fns.usda.gov

Login or Create Profile



The screenshot shows the login page for the Food Buying Guide. At the top, there is a banner image of various fresh vegetables. Below the banner, the title reads "Food Buying Guide for Child Nutrition Programs Interactive Web-Based Tool". The page contains several sections: a brief introduction, a list of available tools (FBG Calculator, Exhibit A Grams Tool, Download Food Buying Guide, Recipe Analysis Workbook (RAW), and Product Formulation Statement (PFS) Workbook), instructions on how to create a profile, a "PLEASE NOTE" section regarding USDA eAuthentication or Login.gov accounts, and a "Contact" section with the email [cnptab@usda.gov](mailto:cnptab@usda.gov). At the bottom, there are two main options: "Login or Create Profile" and "Continue as a Guest User". The "Continue as a Guest User" option includes a dropdown menu for "Select Organization Type" and an "Enter" button.

First, you will need to log in to the Food Buying Guide. Visit [foodbuyingguide.fns.usda.gov](http://foodbuyingguide.fns.usda.gov).




**ASK:** who has been to the Food Buying Guide before?

To access the Recipe Analysis Workbook, you need an account with Login.gov, it is not accessible through the guest login.

# Log in to the Food Buying Guide

**Login** ?

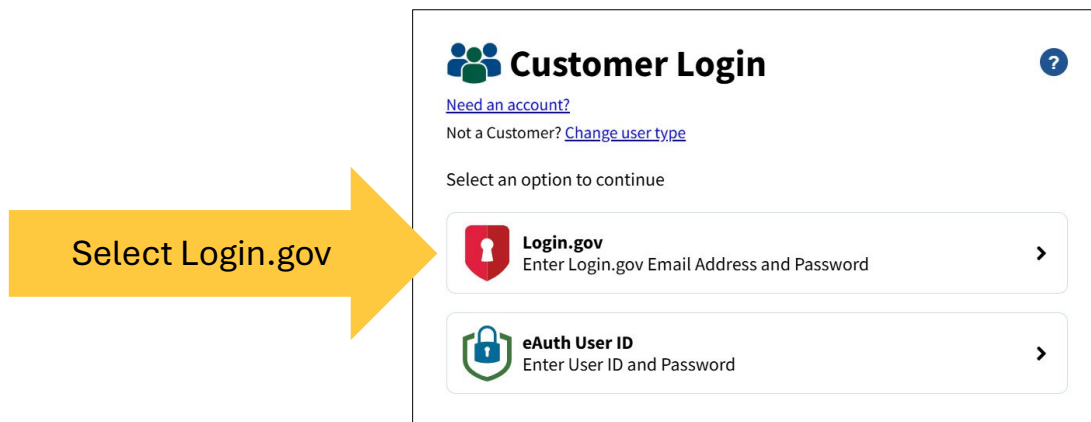
Select your user type to continue. To view help information, use the "?" symbol.

-  **Customer**  
Public citizens accessing USDA agency resources online
-  **USDA Employee/Contractor**  
Federal employees and contractors working for USDA >
-  **Other Federal Employee/Contractor**  
Non-USDA federal agency employees and contractors >

Select Customer

Then, select Customer.

# Log in to the Food Buying Guide



Next, you will select the Login.gov button.

**ASK:** How many people have a Login.gov account?

# Log in to the Food Buying Guide

USDA eAuthentication is using Login.gov to allow you to sign in to your account safely and securely.

[Sign in](#) [Create an account](#)

**Sign in for existing users**

Email address

Password

Show password

[Submit](#)

[Sign in with your government employee ID](#)

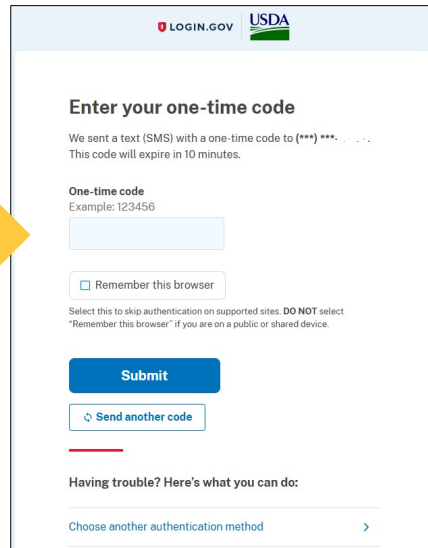
If you need an account

Sign in with email & password

If you need a Login.gov account you can sign up from this screen. If already have an account, go ahead and login.

# Log in to the Food Buying Guide

Enter authentication code



The screenshot shows the USDA LOGIN.GOV authentication interface. At the top, there are logos for LOGIN.GOV and USDA. The main heading is "Enter your one-time code". Below this, a message states: "We sent a text (SMS) with a one-time code to (\*\*\*) (\*\*\*) (\*\*\*) . This code will expire in 10 minutes." Underneath, there is a section for "One-time code" with an example "Example: 123456" and a text input field. A checkbox labeled "Remember this browser" is present. A note below the checkbox reads: "Select this to skip authentication on supported sites. DO NOT select 'Remember this browser' if you are on a public or shared device." There are two buttons: a blue "Submit" button and a "Send another code" button with a refresh icon. At the bottom, there is a link: "Having trouble? Here's what you can do:" followed by "Choose another authentication method" with a right-pointing arrow.

The final step is to enter the one-time code that was sent to you via your eAuthentication preferences, usually text or email.


After this step, you should land at the homepage of the Food Buying Guide. If you do not, we recommend trying a different browser.

HOME PAGE \* MEAL COMPONENTS \* FOOD ITEMS \* TOOLS \* APPENDICES \* HELP \* WELCOME AMY RICHARDSON \*


## WELCOME TO THE FOOD BUYING GUIDE

The Interactive Food Buying Guide allows for easy display, search, and navigation of food yield information. In addition, users can compare yield information, create a favorite foods list, and access tools, such as the Recipe Analysis Workbook (RAW) and the Product Formulation Statement Workbook.


Food Items Search	Food Item Favorites	Download Food Buying Guide
Exhibit A Grains Tool	FBG Calculator	Recipe Analysis Workbook (RAW)




MEATS/MEAT ALTERNATES




FRUITS




MILK



VEGETABLES



GRAINS



OTHER FOODS

### Quick overview of the Food Buying Guide and navigation (5 min)

- Home Page > Resource Center > Tables
  - Guide to metric conversions
    - Helpful for nutrition analysis
  - Guide to volume equivalents for liquids
- Tools – interactive
  - Determining creditable grains/breads
  - Does my product meet the whole grain-rich criteria?
  - When to use a preparation yield
- Appendixes
  - Using the “Additional information” column
  - CN labeling program
    - *(note VDOE led session about documentation, Friday 2-3 pm)*
  - The food purchasing process
  - Resources
- Help
  - Training videos for the web-base tool and the mobile app
- Searching for food items

What’s included and what’s not included

- USDA foods are usually included, manufacturers foods are not included
- FBG includes resources for determining meal pattern contribution (meat/meat alternate, grains, fruits, vegetables and milk)
- FBG does not include resources for nutrient analysis (determining calories, fat, sodium, added sugar, etc.)

#### Quick overview - Searching for foods

- Vegetables
  - Explanation of columns dropdown
  - Search broccoli

HOME PAGE ▾ MEAL COMPONENTS ▾ FOOD ITEMS ▾ TOOLS ▾ APPENDIXES ▾ HELP ▾ WELCOME AMY RICHARDSON ▾

## Training Video

**Chapter 1: Introduction**

Registered User Training

USDA Food and Nutrition Service  
Food Buying Guide for Child Nutrition Programs  
Interactive Web-based Tool

USDA is an equal opportunity provider, employer, and lender.

00:00 05:46 CC

**FBG Interactive Web-based Tool**

- [Chapter 1: Introduction](#) (last updated on 6/05/2025)
- [Chapter 2: Navigating via Home Page Buttons](#) (last updated on 5/04/2023)
- [Chapter 3A: FBG Calculator](#) (last updated on 2/14/2024)
- [Chapter 3B: Recipe Analysis Workbook](#) (last updated on 6/05/2024)
- [Chapter 3C: Product Formulation Statement](#) (last updated on 3/28/2019)
- [Chapter 3D: Exhibit A Grains Tool](#) (last updated on 10/05/2023)
- [Chapter 4: Navigating via Top Navigation Menu](#) (last updated on 8/15/2024)
- [Training Video Transcript](#) (last updated on 6/05/2025)

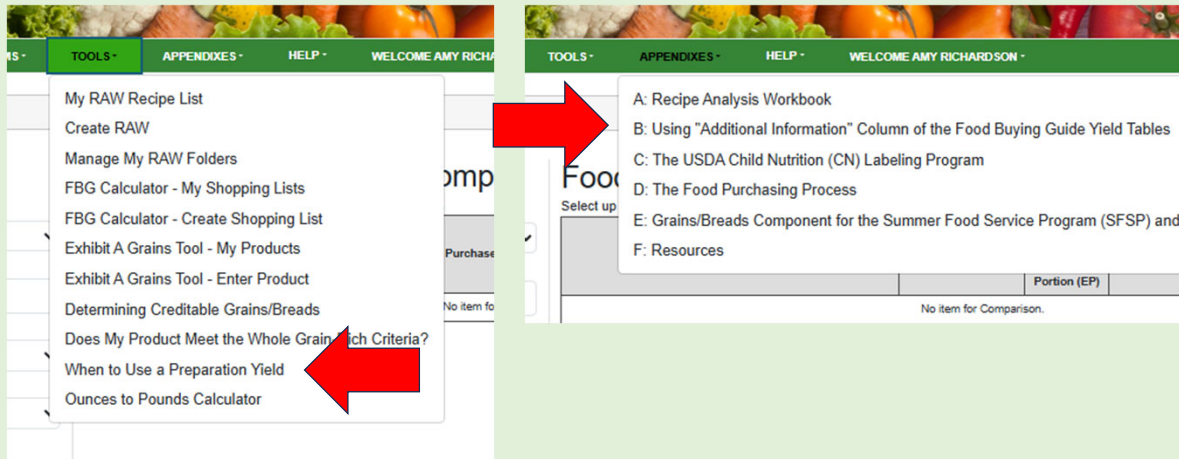
**FBG Mobile App**

- [Chapter 1: Introduction](#) (last updated on 6/16/2022)
- [Chapter 2: Food Item Information](#) (last updated on 6/16/2022)
- [Chapter 3: FBG Calculator](#) (last updated on 6/16/2022)
- [Chapter 4: Exhibit A Grains Tool](#) (last updated on 6/16/2022)
- [Training Video Transcript](#) (last updated on 6/16/2022)

USDA

- Training videos for the web-based tool and the mobile app

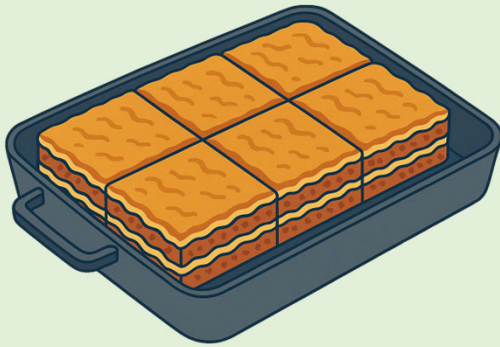
# Determining Preparation Yields



- Determining Preparation Yields
  - Web demo: Interactive Flow-chart (Tools > When to use a preparation yield)
  - Web demo: Using "Additional Information" column of the Food Buying Guide Yield Tables (Appendixes > B. Using...)

Activity: practice sheet

## Determining Food Yields



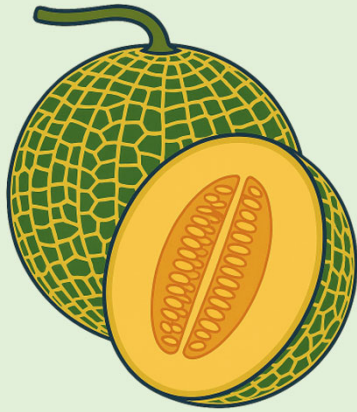
Purchase ingredients to make a recipe.



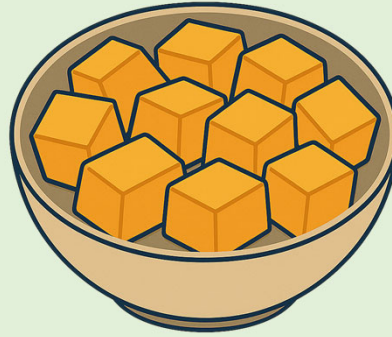
Make a recipe to use certain ingredients.

- Starting point for creating a recipe
  - Do you want the recipe to credit a specific amount?
    - Such as 1 M/MA or  $\frac{1}{2}$  cup of vegetable.
  - Do you want to use a specific amount of food?
    - Whole cases or cans?
    - Even number of bulk sizes (pizza slices, pans of lasagna)

## AP vs. EP



As Purchased



Edible Portion

Does your recipe use As Purchased or Edible Portion?

- As Purchased is the amount you order from your distributor, such as 25 lbs. of cantaloupe. It comes in whole with the rinds and seeds.
- Edible Portion is the amount you have after you've removed the rind and seeds and chopped into the desired size.

We can use the Food Buying Guide to determine how much Edible Portion we need for a recipe and how much we need to purchase. Let's look at the Food Buying Guide.

(switch to LIVE)

- Raw Fruits and Vegetables (cantaloupe example)
  - Rinds and seeds
- Cooked Fruits and Vegetables
  - Loss during preparation phase and loss during cooking phase
- Meats
  - 5 lbs. precooked chicken ≠ 5 lbs. raw chicken, cooked

So let's say that you're cooking a vegetable. You'll need to know the AP, or how much to purchase. The EP, or how much you will have after breaking it down. And you will also need to know the yield after cooking to be able to credit the vegetable towards your meal pattern.

## Activity – Forecasting Using the FBG

Determine how much fresh cantaloupe to purchase to serve 250 students.

Search Results

Meal Component	Category / Subcategory	Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Add to Compare	Add to Favorites
Fruits	Fruit and Fruit Juice CANTALOUPE ★	Cantaloupe, fresh <sup>3</sup> Whole, 18 Count (5-inch diameter, about 30 oz) <a href="#">Footnote</a>	Pound	5.73	1/4 cup cubed or diced fruit	<a href="#">Add</a>	<a href="#">Add</a>
Fruits	Fruit and Fruit Juice CANTALOUPE ★	Cantaloupe, fresh <sup>3</sup> Whole, 15 Count (5-3/4-inch diameter, about 40 oz) <a href="#">Footnote</a>	Pound	6.74	1/4 cup cubed or diced fruit	<a href="#">Add</a>	<a href="#">Add</a>
Fruits	Fruit and Fruit Juice CANTALOUPE	Cantaloupe, frozen Melon balls, Unsweetened	Pound	8.70	1/4 cup fruit	<a href="#">Add</a>	<a href="#">Add</a>
Fruits	Fruit and Fruit Juice FRUIT, MIXED	<a href="#">Fruit, Mixed, chilled</a> (may include: honeydew melon, cantaloupe, watermelon, grapes, etc.)	Gallon (97.7 oz)	64.00	1/4 cup fruit and liquid	<a href="#">Add</a>	<a href="#">Add</a>

Okay, now that we've covered some basics. Let's look at how we can use the Food Buying Guide to forecast how much we need for a recipe.

*(hand out worksheet #1 Forecasting Using the Food Buying Guide)*

The first set is a basic 1 ingredient cantaloupe recipe for our fruit and veggie bar. In the example we are going to use the 18-count melons

## Activity – Forecasting Using the FBG

Determine how much fresh cantaloupe to purchase to serve 250 students.

- **Example:** 18-count size cantaloupe = 5.73 ( $\frac{1}{4}$  cup) servings per pound.  
 $250 \div 5.73 = 43.63$  lbs. needed for 250 ( $\frac{1}{4}$  cup) servings, cubed.  
**87.265 lbs.** needed for 250 ( $\frac{1}{2}$  cup) servings, cubed.
- 15-count size = **75 lbs.** needed for 250 ( $\frac{1}{2}$  cup) servings, cubed.
- Does melon size matter when forecasting servings?  
**YES!**

In the example, we did the math to figure out that we're going to need 87.265 lbs. of whole cantaloupe

- 15 count cantaloupe = 6.74 ( $\frac{1}{4}$  cup) servings per lb.
- $250 \div 6.74 = 37.09$  lbs. needed for 250 ( $\frac{1}{4}$  cup) servings
- $37.09 \times 2 = 74.18$  lbs. needed for 250 ( $\frac{1}{2}$  cup) servings.
- We will order at least **75 lbs.**

## Activity – Forecasting Using the FBG

Determine how many servings you will get out of a 25 lb. case of zucchini.

Search Results

Meal Component	Category / Subcategory	Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Add to Compare	Add to Favorites
Vegetables	Other Vegetables SQUASH, SUMMER	<a href="#">Squash, summer, fresh</a> Zucchini, Whole	Pound	11.90	1/4 cup raw vegetable sticks (about 3 sticks, 1/2 inch by 3 inch sticks)	<a href="#">Add</a>	<a href="#">Add</a>
Vegetables	Other Vegetables SQUASH, SUMMER	<a href="#">Squash, summer, fresh</a> Zucchini, Whole	Pound	12.70	1/4 cup raw, cubed vegetable	<a href="#">Add</a>	<a href="#">Add</a>
Vegetables	Other Vegetables SQUASH, SUMMER	<a href="#">Squash, summer, fresh</a> Zucchini, Whole	Pound	7.60	1/4 cup cubed, cooked, drained vegetable	<a href="#">Add</a>	<a href="#">Add</a>
Vegetables	Other Vegetables SQUASH, SUMMER	<a href="#">Squash, summer, fresh</a> Zucchini, Whole	Pound	13.10	1/4 cup raw, sliced vegetable	<a href="#">Add</a>	<a href="#">Add</a>
Vegetables	Other Vegetables SQUASH, SUMMER	<a href="#">Squash, summer, fresh</a> Zucchini, Whole	Pound	10.20	1/4 cup sliced, cooked, drained vegetable	<a href="#">Add</a>	<a href="#">Add</a>
Vegetables	Other Vegetables SQUASH, SUMMER	<a href="#">Squash, summer, frozen</a> Zucchini, Sliced	Pound	7.00	1/4 cup cooked, drained vegetable	<a href="#">Add</a>	<a href="#">Add</a>

Next we'll look at the yield difference between raw and cooked zucchini.

Type into the search bar: zucchini. You will see all the results and we are going to select 1/4 cup raw, sliced vegetable and 1/4 cup sliced, cooked, drained vegetable. And for the third question, you will select 1/4 cup raw, cubed vegetable.

## Activity – Forecasting Using the FBG

Determine how many servings you will get out of a 25 lb. case of zucchini.

- Zucchini slices, raw = 163 (½ cup) servings from 25 lbs.
- Zucchini slices, cooked = 127 (½ cup) servings from 25 lbs.
- Your vegetarian lasagna recipe calls for 6 cups of raw cubed zucchini.  
How many lbs. of whole zucchini will you need? 2 lbs.

Factors that could affect the yield of fresh fruits and vegetables:

Knife skills, removing too much rind, scooping too much flesh with seeds, poor quality/waste, incorrect serving utensil.

- Zucchini slices, raw = 13.10 (1/4 cup) servings per lb. ÷ by 2 = 6.55 (1/2 cup) servings. x 25 lbs. = 163 (1/2 cup) servings
- Zucchini slices, cooked = 10.20 (1/4 cup) servings per lb. ÷ by 2 = 5.10 (1/2 cup) servings. x 25 lbs. = 127 (1/2 cup) servings
- Zucchini raw, cubed = 12.70 (1/4 cup) servings per lb. ÷ by 4 = 3.175 (1 cup) servings per lb.; 6 cups ÷ 3.175 = 1.89 lbs. So, we're going need 2 lbs. of whole zucchini to produce 6 cups of raw cubed zucchini for our recipe.

What are some factors that affect the yield of fresh fruit and vegetables?

- Knife skills, removing too much rind, scooping too much flesh with seeds, poor quality/waste, incorrect serving utensil.

## Bonus Challenge – Forecasting Using the FBG

Meal Component	Category / Subcategory	Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Add to Compare	Add to Favorites
Vegetables	Other Vegetables BEANS, GREEN	Beans, Green, fresh Trimmed, Whole Ready-to-use	Pound	22.00	1/4 cup whole, raw vegetable	<a href="#">Add</a>	<a href="#">Add</a>
Vegetables	Other Vegetables BEANS, GREEN	Beans, Green, fresh Trimmed, Whole Ready-to-use	Pound	12.40	1/4 cup whole, cooked, drained vegetable	<a href="#">Add</a>	<a href="#">Add</a>
Vegetables	Other Vegetables BEANS, GREEN	Beans, Green, fresh Trimmed, Whole Ready-to-use	Pound	16.40	1/4 cup cut, raw vegetable	<a href="#">Add</a>	<a href="#">Add</a>
Vegetables	Other Vegetables BEANS, GREEN	Beans, Green, fresh Trimmed, Whole Ready-to-use	Pound	11.20	1/4 cup cut, cooked, drained vegetable	<a href="#">Add</a>	<a href="#">Add</a>
Vegetables	Other Vegetables BEANS, GREEN	Beans, Green, fresh Untrimmed, Whole	Pound	11.10	1/4 cup whole, cooked vegetable	<a href="#">Add</a>	<a href="#">Add</a>
Vegetables	Other Vegetables BEANS, GREEN	Beans, Green, canned Cut, Includes USDA Foods (Low sodium)	No. 10 Can (101 oz)	45.30	1/4 cup heated, drained vegetable	<a href="#">Add</a>	<a href="#">Add</a>
Vegetables	Other Vegetables BEANS, GREEN	Beans, Green, canned Cut, Includes USDA Foods (Low sodium)	No. 10 Can (101 oz)	51.10	1/4 cup drained vegetable	<a href="#">Add</a>	<a href="#">Add</a>
Vegetables	Other Vegetables BEANS, GREEN	Beans, Green, canned Cut, Includes USDA Foods	No. 2-1/2 Can (28 oz)	12.50	1/4 cup heated, drained vegetable	<a href="#">Add</a>	<a href="#">Add</a>
Vegetables	Other Vegetables BEANS, GREEN	Beans, Green, canned Cut, Includes USDA Foods	No. 2-1/2 Can (28 oz)	14.10	1/4 cup drained vegetable	<a href="#">Add</a>	<a href="#">Add</a>
Vegetables	Other Vegetables BEANS, GREEN	Beans, Green, canned Cut, Includes USDA Foods	No. 300 Can (15 oz)	5.00	1/4 cup heated, drained vegetable	<a href="#">Add</a>	<a href="#">Add</a>

Now for our bonus challenge! Let's look at canned green beans.

## **Bonus Challenge – Forecasting Using the FBG**

You have been tasked with figuring out how many cans of green beans to purchase for the whole year. Your school prepares about 75 ( $\frac{1}{2}$  cup) servings every time green beans are on the menu. For the 9-month school year, they are on the menu twice a month.

- How many cans do you need for the year?
- How many cases?
- If all seven schools in the division have similar usage, how many cases should your division order from VDACS for the year?

Using the Food Buying Guide to determine many cases of green beans to order for the year.

## Bonus Challenge – Forecasting Using the FBG

75 (½ cup) servings per menu cycle	22.65 (½ cup) servings per can
x 2 cycles per month	$75 \div 22.65 = 4$ cans each cycle
x 9 months	$4 \text{ cans} \times 2 \text{ cycles} \times 9 \text{ months} =$
	<b>= 72 cans/year</b>

72 cans per year	$72 \div 6 =$
$\div 6$ cans per case	<b>= 12 cases/year</b>

12 cases per year per school	$12 \text{ cs} \times 7 \text{ schools} =$
X 7 schools	<b>= 84 cases from VDACS</b>

Because you are going to implement a year-long cycle menu, you will know how many times your canned green beans are going to be on the menu, and you'll be able to forecast exactly how much you to buy.

- 45.30 (1/4 cup) servings heated, drained green beans per can.
- $\div 2 = 22.65$  (1/2 cup) servings per can
- $75 \text{ servings} \div 22.65 = 3.31$  cans, or 4 cans prepared per menu cycle.
- $4 \text{ cans} \times 2 \text{ cycles} \times 9 \text{ months} = 72$  cans for the year.
- $72 \text{ cans} \div 6 \text{ cans per case} = 12$  case for the year per school.
- $12 \text{ cases} \times 7 \text{ schools} = 84$  cases of green beans for the year for the division.

**Something to think about:** If a pallet contains 36 cases, are you going to order 2 or 3 pallets? Would you rather be short 12 cs and substitute a different vegetable, or be over 24 cases and pay storage fees?

# BRAIN BREAK!



Give me a thumbs up if you are using the Food Buying Guide to forecast daily, monthly, and yearly usage?

Now I'd like everyone to stand up and say out loud, all at the same time, all the different colors you see in this room.

We're relaxing our left brains and waking up our right brains.

## Using the Food Buying Guide with production records

### Establish consistent reporting

- Consistency by staff within a school
- Consistency across schools

### Determine usage issues

- Waste
- Theft
- Opportunities for training
  - Knife skills
  - Product rotation
  - Weights and measures

By using the Food Buying Guide to determine base amounts for your production records, you can establish consistency with your staff at each school and consistency across schools.

***(Question to audience)*** Why would this be helpful?

## Using consistent units of measure

1 cup of lettuce



1 pound of lettuce

By establishing a base-line, you can avoid small conversion mistakes that can have a big impact on your program financially.

Incorrectly reporting weights and measures on your production record can be costly to your program. Here's an example of the difference between 1 cup of lettuce and 1 pound of lettuce. If the unit of measure reported is not the same for all sites, figuring out how much food to procure is difficult. If just one site reported the wrong unit of measure, it can result in too much lettuce being ordered and create excess waste that could have been prevented. It can also be a costly mistake. In our lettuce example, there are about 7 cups of lettuce in a pound. So, the amount ordered was 7 times the amount that was needed. That variance can have a dramatic effect on your food costs, especially if it happens repeatedly over multiple sites.

Sometimes this happens on the flip side, where not enough food gets ordered. This leaves operators scrambling to find enough food to complete a reimbursable meal, which ultimately affects the nutrition of the child's meal.

To help reduce some of these mistakes, it's important to train your staff on culinary weights and measures.

Sponsor:		Fruits and Vegetables Quick Reference Sheet				
Site:						
	Menu Items	Pan Size	Serving Size	EP Servings per lb.	Volume Prepared Notes	
Vegetable	Baby carrots	4" half pan	½ cup	6.45 servings per lb.	5 lbs. in half pan = 32 servings	
Fruit	Grapes, no stems	4" full pan	½ cup	5.83 servings per lb.	20 lbs. in full pan = 116 servings	
Canned	Canned peaches, drained	4" half pan	½ cup	17.7 servings per #10 can	3 cans fit in 2 half pans = 53 servings	

We made this helpful cheat sheet that you can customize for your kitchens. We put in a few examples in each category.

## Fruits & Vegetables Quick Reference Sheet



½ cup fresh  
strawberries



½ cup sliced  
cucumbers



½ cup canned  
applesauce

Use the Food Buying Guide to practice adding:

- ½ cup sliced cucumbers
- ½ cup fresh strawberries
- ½ cup applesauce

### QUESTIONS

What are some items you would add to your cheat sheet?

Directors and Menu planners, how would you use this cheat sheet to help train your kitchen managers?

# Resources and Q & A

USDA Food Buying Guide and Recipe Analysis Workbook

- [foodbuyingguide.fns.usda.gov/](http://foodbuyingguide.fns.usda.gov/)

USDA Food Buying Guide and Recipe Analysis Workbook training

- [www.fns.usda.gov/tn/fbg/training](http://www.fns.usda.gov/tn/fbg/training)

ICN Basics-at-a-Glance

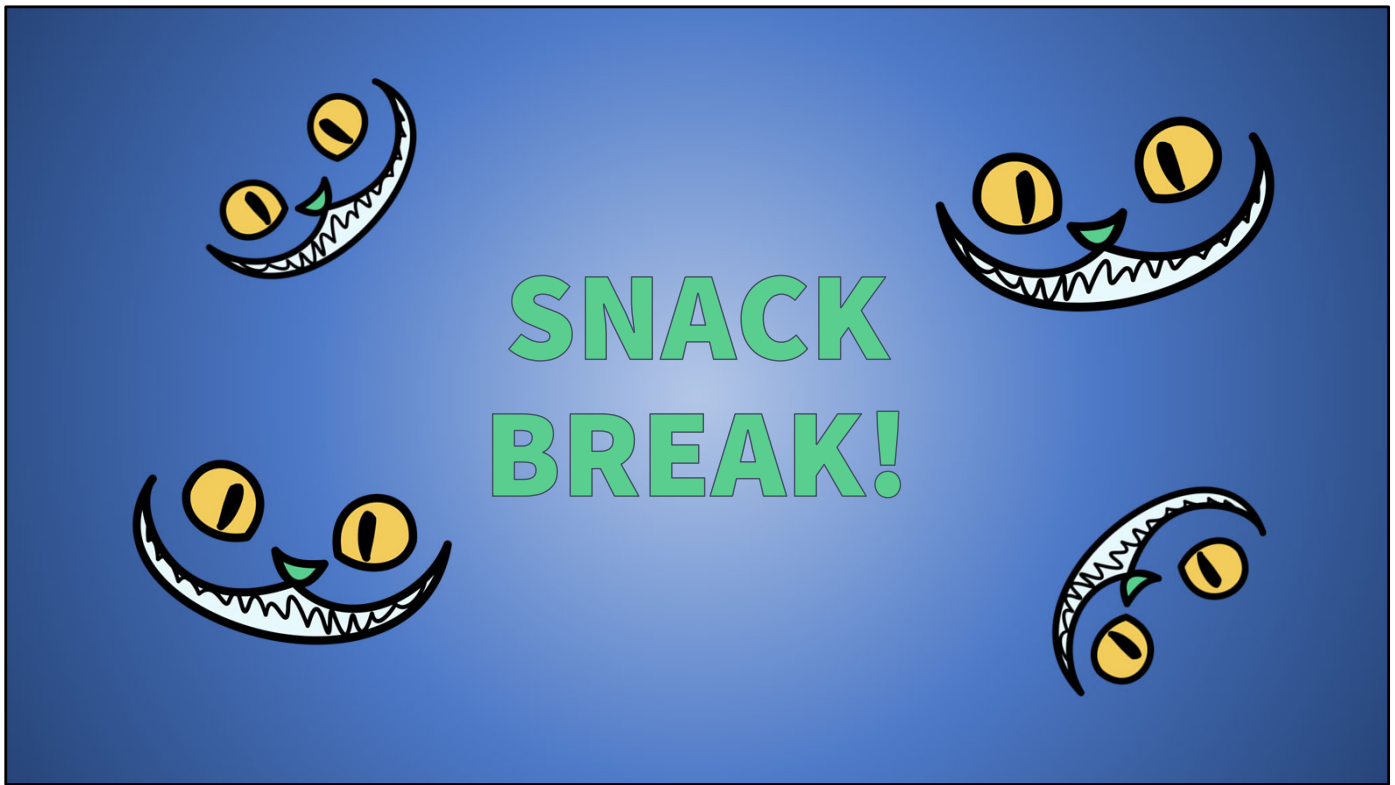
- [//theicn.org/icn-resources-a-z/basics-at-a-glance/](http://theicn.org/icn-resources-a-z/basics-at-a-glance/)

Production records – VDOE templates

- SNPweb Download Forms

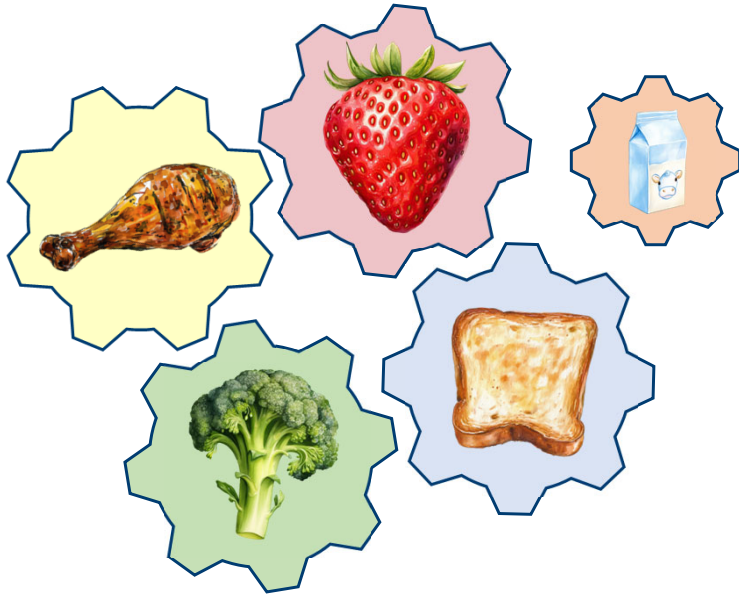
51

Here are a few of the resources we mentioned today. Who would be interested in a future deep dive training into kitchen-level forecasting?

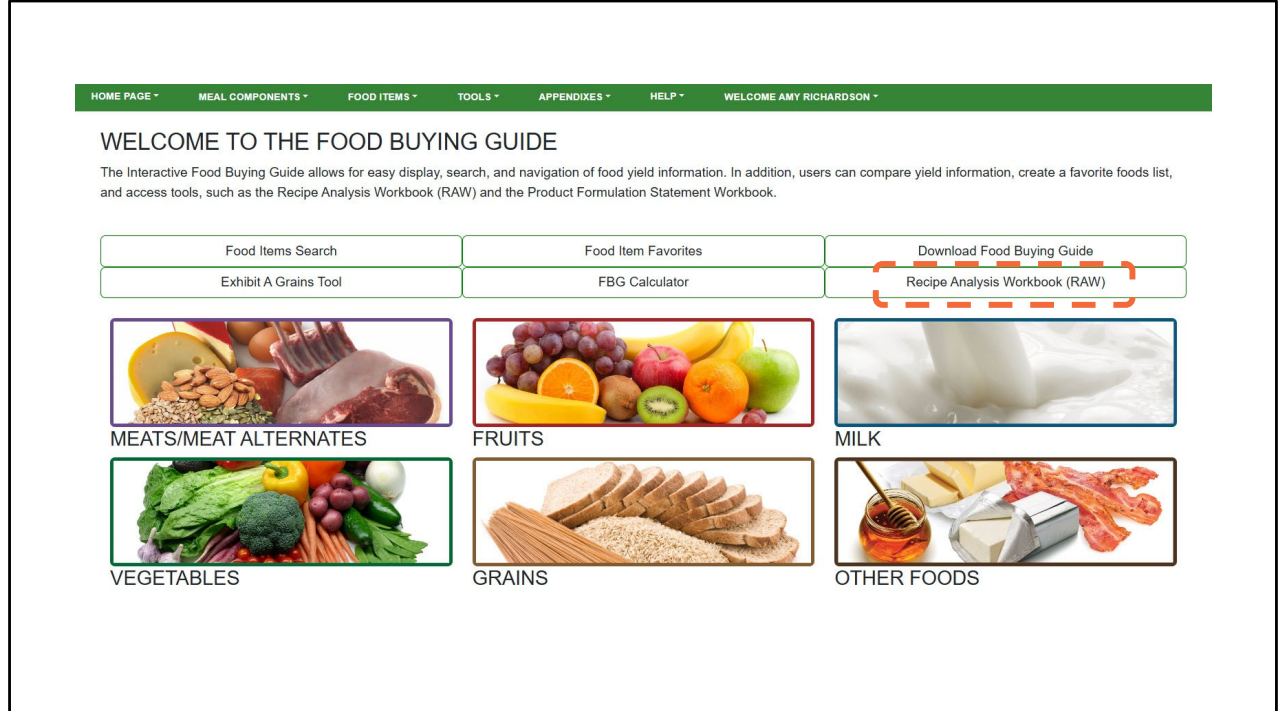


Let's take a 15-minute break here and have a snack to refuel for the next section.

# USDA's Recipe Analysis Workbook



Welcome back! Next, we are going to deep-dive into the Recipe Analysis Workbook.



Upon login, you will be at the homepage of the Food Buying Guide. The Recipe Analysis Workbook is highlighted in orange.

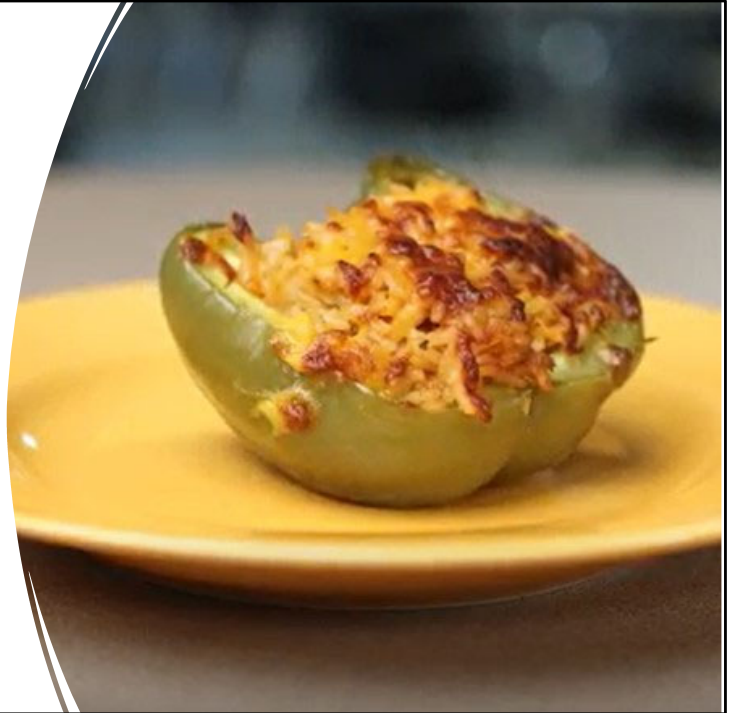
The Recipe Analysis Workbook, or RAW, is a tool to help you determine the expected meal pattern contribution for a standardized recipe. This tool contains a series of tabs with formulas for each meal component. The RAW is available in the Food Buying Guide web-based tool to registered users, except vendor users.

The RAW does not evaluate dietary specifications such as calories, sodium, saturated fat or added sugar. It also does not create standardized recipes or determine whether the serving size information entered is correct for crediting.

This next section we will walk through putting our Buffalo Chicken Stuffed Pepper recipe through the RAW to determine the meal pattern contribution statement.

# Buffalo Chicken Stuffed Pepper

**Serving Size: 1 pepper half**  
**Yield: 50 servings**



The Buffalo Chicken Stuffed Pepper has many ingredients that contribute toward meal pattern requirements.

## Recipe Analysis Workbook Exercise

Ingredient	Weight	Measure
Water		2 qt.
★ Brown rice, long-grain, regular, dry	3 lbs.	
★ USDA chicken strips, FC, FZ, thawed	6 lbs.	
★ Bell peppers, large, assorted colors		25 each
★ Yogurt, Greek, plain, nonfat		2 cups
Buffalo sauce, prepared		1 cup
Paprika		1 ½ Tbsp.
Chili powder		1 ½ Tbsp.
Onion powder		¾ Tbsp.
Garlic powder		¾ Tbsp.
Dried oregano		½ Tbsp.
Black pepper, ground		½ tsp.
★ USDA low-fat cheddar cheese, shredded	1 lb.	4 cups

Here is the list of ingredients for our recipe. Again, we will only need to use the creditable ingredients in the RAW, meaning we can leave out the spices, seasonings, sauce, and water. So the creditable ingredients would be: rice, chicken, bell peppers, yogurt, and cheddar cheese.

## Create Recipe Analysis Workbook (RAW)

▶ Instructions

Asterisks (\*) denote required information.

① **Recipe Name \*** Buffalo Chicken Stuffed Pepper

**Servings per Recipe \*** 50

**Recipe Number** 17

**Serving Size \*** 1 pepper half

**Folder** 2024 VDOE Add Folder

Select Creditable Ingredient | Recipe Notes | Meats/MA | Vegetables | Fruits | Grains - Method A | Grains - Method B | Grains - Method C | Meal Pattern Contribution

Use this tab to select ingredients from the FBG. Use Grains - Method A tab to select ingredients from Exhibit A and use Grains - Method C tab to input ingredients for Grains Based on Grams of Creditable Grains. (For further guidance see 'Instructions' section above).

② **Search Food Ingredients** Food Ingredients Selected for Recipe

Program—Meal: Select Program—Meal

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Action

After entering the Recipe Analysis Workbook, you'll start by creating a new workbook. You will see at the top of the screen there are drop down instructions for reference. Following the numbered steps, you will begin by entering the required information. The recipe name, servings per recipe, and serving size. Recipe number is optional. For this example, the stuffed pepper recipe yields 50 servings of 1 pepper half each. There is also a way to organize your recipes into folders. For this example, we are using a recipe that was developed by Bedford County for the 2024 Recipe Development Team. I have my folders organized by teams, but some other examples are by grade level or menu category.

### ② Search Food Ingredients

Program—Meal:  
NSLP—Lunch

Keywords:  
chicken, diced

Meal Component:  
All Meal Components

Category:  
All Categories

Search Reset Display Favorites

### Food Ingredients Selected for Recipe

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Action
<b>Grains</b> Rice (Group H) <small>Brown, Long grain, Parboiled, Dry, Includes USDA Foods</small>	Pound	15.50	1/2 cup cooked (1.00 oz eq grains)	Remove

### Search Results

Meal Component	Category / Subcategory	Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Additional Information	③ Add to RAW
Meats/Meat Alternates	Poultry CHICKEN, COOKED, frozen	Chicken, cooked, frozen, Diced or Pulled no skin, wing meat, neck meat, giblet, or kidneys, Includes USDA Foods	Pound	16.00	1 oz cooked poultry	1 lb AP = 1.0 lb cooked chicken meat	Add
Meats/Meat Alternates	Poultry CHICKEN, COOKED, frozen	Chicken, cooked, frozen, Diced or Pulled no skin, wing meat, neck meat, giblet, or kidneys, Includes USDA Foods	40 lb Package	640.00	1 oz cooked poultry	1 lb AP = 1.0 lb cooked chicken meat	Add

Now we will begin to search for the creditable food ingredients of the recipe.

Let's start with chicken. To refine our results, we will search for chicken, diced. Out of the two diced chicken options that come up, the first one is a better match because the purchase unit is in pounds, which better matches our ingredient of 6 pounds. So, we can select this first option to add to the RAW.

### ② Search Food Ingredients

Program—Meal: NSLP—Lunch

Keywords: bell pepper

Meal Component: All Meal Components

Category: All Categories

Search Reset Display Favorites

### Food Ingredients Selected for Recipe

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Action
<b>Grains</b> Rice (Group M) Brown, Long grain, Parboiled, Dry, Includes USDA Foods	Pound	15.50	1/2 cup cooked (1.00 oz eq grains)	Remove

### Search Results

Meal Component	Category / Subcategory	Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Additional Information	Add to RAW
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	9.70	1/4 cup chopped or diced raw vegetable	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	14.70	1/4 cup raw vegetable strips	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	9.80	1/4 cup cooked, drained vegetable strips	1 lb AP = 0.73 lb cooked peppers; 1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, dehydrated Green or Yellow, Diced	Pound	99.20	1/4 cup rehydrated, cooked vegetable	1 lb dry = about 9-11/4 cups dehydrated pepper	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, dehydrated Green or Yellow, Diced	Pound	38.80	1/4 cup dehydrated vegetable	1 lb dry = about 9-11/4 cups dehydrated pepper	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, frozen Green or Yellow, Diced	Pound	12.10	1/4 cup thawed vegetable	1 lb AP = 1 lb (about 3 cups) thawed peppers	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, frozen Green or Yellow, Diced	Pound	7.30	1/4 cup cooked, drained vegetable		Add
Vegetables	Red/Orange Vegetables PEPPERS, BELL, ORANGE OR RED	Peppers, Bell, fresh Orange or Red, Medium or Large, Whole	Pound	9.70	1/4 cup chopped or diced raw vegetable	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	Add
Vegetables	Red/Orange Vegetables PEPPERS, BELL, ORANGE OR RED	Peppers, Bell, fresh Orange or Red, Medium or Large, Whole	Pound	14.70	1/4 cup raw vegetable strips	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	Add
Vegetables	Red/Orange Vegetables PEPPERS, BELL, ORANGE OR RED	Peppers, Bell, fresh Orange or Red, Medium or Large, Whole	Pound	9.80	1/4 cup cooked, drained vegetable strips	1 lb AP = 0.73 lb cooked peppers	Add

Now, let's search for bell peppers. We know that bell peppers can either credit as a Red/Orange vegetable or an Other vegetable depending on their color. The recipe calls for assorted bell peppers, but for this demonstration, we are going to use green bell peppers because they are economical and widely available for schools. We enter key words bell pepper. We will leave the Meal Component as All Meal Components. You'll see that the results is a large list, organized by meal category and subcategory.

② Search Food Ingredients

Program—Meal:  
NSLP—Lunch

Keywords:  
bell pepper

Meal Component:  
All Meal Components

Category:  
All Categories

Search Reset Display Favorites

Food Ingredients Selected for Recipe

Meal Component	Category / Subcategory	Serving Size per Meal Contribution	Action
		1/2 cup cooked (1.00 oz eq grains)	Remove
Vegetables	Other Vegetables PEPPERS, BELL		
Vegetables	Other Vegetables PEPPERS, BELL		
Vegetables	Other Vegetables PEPPERS, BELL		
Vegetables	Other Vegetables PEPPERS, BELL		
Vegetables	Other Vegetables PEPPERS, BELL		
Vegetables	Other Vegetables PEPPERS, BELL	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	Add
Vegetables	Other Vegetables PEPPERS, BELL	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	Add
Vegetables	Other Vegetables PEPPERS, BELL	1 lb AP = 0.73 lb cooked peppers; 1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	Add
Vegetables	Other Vegetables PEPPERS, BELL	1 lb dry = about 9-14 cups dehydrated pepper	Add
Vegetables	Red/Orange Vegetables PEPPERS, BELL, ORANGE OR RED	1 lb dry = about 9-14 cups dehydrated pepper	Add
Vegetables	Red/Orange Vegetables PEPPERS, BELL, ORANGE OR RED	1 lb AP = 1 lb (about 3 cups) thawed peppers	Add
Vegetables	Red/Orange Vegetables PEPPERS, BELL, ORANGE OR RED	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	Add
Vegetables	Red/Orange Vegetables PEPPERS, BELL, ORANGE OR RED	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	Add
Vegetables	Red/Orange Vegetables PEPPERS, BELL, ORANGE OR RED	1 lb AP = 0.73 lb cooked peppers	Add

Additional Information Add to RAW

You'll see both the other vegetables and red/orange vegetables on the list. Let's look at how we can refine the search.

② Search Food Ingredients

Program—Meal: NSLP—Lunch

Keywords: bell pepper

Meal Component:
 

- All Meal Components
- All Meal Components
- Meats/Meat Alternates
- Vegetables**
- Fruits
- Grains

Food Ingredients Selected for Recipe

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Action
<b>Grains</b> Rice (Group #1) <small>Rice: Long grain, Parboiled, Dry, Includes USDA Foods</small>	Pound	16.50	1/2 cup cooked (1.00 oz eq grains)	<a href="#">Remove</a>

Search Results

Meal Component	Category / Subcategory	Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Additional Information	<a href="#">Add to RAW</a>
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	9.70	1/4 cup chopped or diced raw vegetable	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	<a href="#">Add</a>
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	14.70	1/4 cup raw vegetable strips	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	<a href="#">Add</a>
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	9.80	1/4 cup cooked, drained vegetable strips	1 lb AP = 0.73 lb cooked peppers, 1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	<a href="#">Add</a>
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, dehydrated Green or Yellow, Diced	Pound	99.20	1/4 cup rehydrated, cooked vegetable	1 lb dry = about 9-1/4 cups dehydrated pepper	<a href="#">Add</a>
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, dehydrated Green or Yellow, Diced	Pound	38.00	1/4 cup dehydrated vegetable	1 lb dry = about 9-1/4 cups dehydrated pepper	<a href="#">Add</a>
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, frozen Green or Yellow, Diced	Pound	12.10	1/4 cup thawed vegetable	1 lb AP = 1 lb (about 3 cups) thawed peppers	<a href="#">Add</a>
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, frozen Green or Yellow, Diced	Pound	7.30	1/4 cup cooked, drained vegetable		<a href="#">Add</a>

We have our bell pepper in the keyword already.  
Next, in the Meal Component dropdown select Vegetable.

② Search Food Ingredients

Program—Meal: NSLP—Lunch

Keywords: bell pepper

Meal Component: Vegetables

Category:
 

- All Categories
- Additional Vegetables
- Beans, Peas, and Lentils
- Dark Green Vegetables
- Other Vegetables**
- Red/Orange Vegetables
- Starchy Vegetables

Food Ingredients Selected for Recipe

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Action
<b>Grains</b> Rice (Group #1) Brown, Long grain, Parboiled, Dry, Includes USDA Foods	Pound	16.50	1/2 cup cooked (1.00 oz eq grains)	<a href="#">Remove</a>

Search Results

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Additional Information	Add to RAW
Vegetables PEPPERS, BELL	Pound	9.70	1/4 cup chopped or diced raw vegetable	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	<a href="#">Add</a>
Vegetables Other Vegetables PEPPERS, BELL	Pound	14.70	1/4 cup raw vegetable strips	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	<a href="#">Add</a>
Vegetables Other Vegetables PEPPERS, BELL	Pound	9.80	1/4 cup cooked, drained vegetable strips	1 lb AP = 0.73 lb cooked peppers, 1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	<a href="#">Add</a>
Vegetables Other Vegetables PEPPERS, BELL	Pound	99.20	1/4 cup rehydrated, cooked vegetable	1 lb dry = about 9-1/4 cups dehydrated pepper	<a href="#">Add</a>
Vegetables Other Vegetables PEPPERS, BELL	Pound	38.00	1/4 cup dehydrated vegetable	1 lb dry = about 9-1/4 cups dehydrated pepper	<a href="#">Add</a>
Vegetables Other Vegetables PEPPERS, BELL	Pound	12.10	1/4 cup thawed vegetable	1 lb AP = 1 lb (about 3 cups) thawed peppers	<a href="#">Add</a>
Vegetables Other Vegetables PEPPERS, BELL	Pound	7.30	1/4 cup cooked, drained vegetable		<a href="#">Add</a>

Then in the Category dropdown, select Other Vegetables. The results are refined to show only the Other Vegetables.  
Now we can select the best option for our recipe.

② Search Food Ingredients    ① Food Ingredients Selected for Recipe

Program—Meal: NSLP

Keyword: bell p

Meal Component: Vegetables

Category: Other

Meal Component	Category / Subcategory	Food As Purchased (AP)	Additional Information	Add to RAW
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole		
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole		
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole		
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, dehydrated Green or Yellow, Diced	AP = 0.83 lb ready-to-serve or -cook peppers	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, dehydrated Green or Yellow, Diced		
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, frozen Green or Yellow, Diced	AP = 0.73 lb cooked peppers, 1 lb AP = 1 lb ready-to-serve or -cook raw peppers	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, frozen Green or Yellow, Diced		
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, frozen Green or Yellow, Diced	Sry = about 9-1/4 cups dehydrated per	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, frozen Green or Yellow, Diced	Sry = about 9-1/4 cups dehydrated per	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, frozen Green or Yellow, Diced	1 lb AP = 1 lb (about 3 cups) thawed peppers	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, frozen Green or Yellow, Diced	1/4 cup cooked, drained vegetable	Add

There are As Purchased (or AP) options for fresh in the green bracket, dehydrated in the red bracket, and frozen peppers in the blue bracket, so we're going to look only at the fresh pepper options.

**② Search Food Ingredients**

Program—Meal:  
NSLP—Lunch

Keywords:  
bell pepper

Meal Component:  
Vegetables

**Food Ingredients Selected for Recipe**

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Action
<b>Grains</b> Rice (Group H) Brown, Long grain, Parboiled, Dry, Includes USDA Foods	Pound	16.50	1/2 cup cooked (1.00 oz eq grains)	<a href="#">Remove</a>

Category / Subcategory	Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Additional Information	③ Add to RAW	
Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	9.70	1/4 cup chopped or diced raw vegetable	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	<a href="#">Add</a>	
Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	14.70	1/4 cup raw vegetable strips	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	<a href="#">Add</a>	
Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	9.80	1/4 cup cooked, drained vegetable strips	1 lb AP = 0.73 lb cooked peppers; 1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	<a href="#">Add</a>	
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	14.70	1/4 cup raw vegetable strips	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	<a href="#">Add</a>
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	9.80	1/4 cup cooked, drained vegetable strips	1 lb AP = 0.73 lb cooked peppers; 1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	<a href="#">Add</a>
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, dehydrated Green or Yellow, Diced	Pound	99.20	1/4 cup rehydrated, cooked vegetable	1 lb dry = about 9-11/4 cups dehydrated pepper	<a href="#">Add</a>
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, dehydrated Green or Yellow, Diced	Pound	38.00	1/4 cup dehydrated vegetable	1 lb dry = about 9-11/4 cups dehydrated pepper	<a href="#">Add</a>
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, frozen Green or Yellow, Diced	Pound	12.10	1/4 cup thawed vegetable	1 lb AP = 1 lb (about 3 cups) thawed peppers	<a href="#">Add</a>
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, frozen Green or Yellow, Diced	Pound	7.30	1/4 cup cooked, drained vegetable		<a href="#">Add</a>

In the three fresh pepper lines, there are preparation options for raw peppers and cooked peppers. We will select the option for cooked, drained vegetable strips, even though we are cooking our peppers in halves, this is the best option for our recipe.

② Search Food Ingredients

Program—Meal: NSLP—Lunch

Keywords: bell pepper

Meal Component: Vegetables

Category: Other Vegetables

Search Reset Display Favorites

### Food Ingredients Selected for Recipe

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Action
<b>Grains</b> Rice (Group #) Brown, Long grain, Parboiled, Dry, Includes USDA Foods	Pound	16.50	1/2 cup cooked (1.00 oz eq grains)	Remove

### Search Results

Meal Component	Category / Subcategory	Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Additional Information	Add to RAW
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	9.70	1/4 cup chopped or diced raw vegetable	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	14.70	1/4 cup raw vegetable strips	1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	9.80	1/4 cup cooked, drained vegetable strips	1 lb AP = 0.73 lb cooked peppers; 1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, dehydrated Green or Yellow, Diced	Pound	99.20	1/4 cup rehydrated, cooked vegetable	1 lb dry = about 9-11/4 cups dehydrated pepper	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, dehydrated Green or Yellow, Diced	Pound	38.00	1/4 cup dehydrated vegetable	1 lb dry = about 9-1/4 cups dehydrated pepper	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, frozen Green or Yellow, Diced	Pound	12.10	1/4 cup thawed vegetable	1 lb AP = 1 lb (about 3 cups) thawed peppers	Add
Vegetables	Other Vegetables PEPPERS, BELL	Peppers, Bell, frozen Green or Yellow, Diced	Pound	7.30	1/4 cup cooked, drained vegetable		Add

And select Add to add to the RAW.

Select Creditable Ingredient | Recipe Notes | Meats/MA | Vegetables | Fruits | Grains - Method A | Grains - Method B | Grains - Method C | Meal Pattern Contribution

Use this tab to select ingredients from the FBG. Use Grains - Method A tab to select ingredients from Exhibit A and use Grains - Method C tab to input ingredients for Grains Based on Grams of Creditable Grains. (For further guidance see 'Instructions' section above).

### Food Ingredients Selected for Recipe

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Action
<b>Meats/Meat Alternates</b> Cheese, American, Cheddar, Mozzarella, or Swiss Natural or Process, Includes USDA Foods	Pound	16.00	1 oz Cheese	<a href="#">Remove</a>
<b>Meats/Meat Alternates</b> Chicken, cooked, frozen, Diced or Pulled no skin, wing meat, neck meat, giblet, or kidneys, Includes USDA Foods	Pound	16.00	1 oz cooked poultry	<a href="#">Remove</a>
<b>Meats/Meat Alternates</b> Yogurt, fresh Plain or Flavored, Sweetened or Unsweetened, Commercially-prepared, (includes Greek yogurt), Includes USDA Foods	32 oz Container	8.00	1/2 cup or 4 oz yogurt provides 1 oz meat alternate	<a href="#">Remove</a>
<b>Vegetables</b> Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	9.80	1/4 cup cooked, drained vegetable strips	<a href="#">Remove</a>
<b>Grains</b> Rice (Group H) Brown, Long grain, Parboiled, Dry, Includes USDA Foods	Pound	15.50	1/2 cup cooked (1.00 oz eq grains)	<a href="#">Remove</a>

**Search Food Ingredients**

**Program—Meal:**  
Select Program—Meal

**Keywords:**

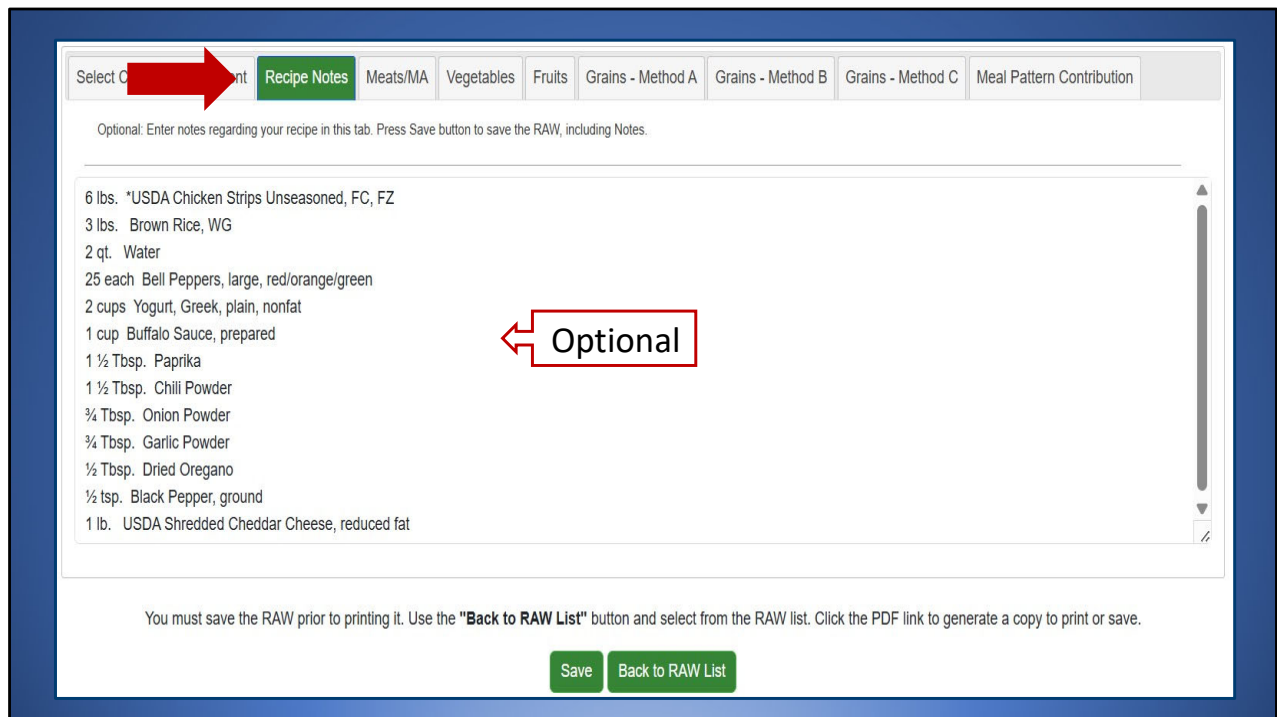
**Meal Component:**  
All Meal Components

**Category:**  
All Categories

[Search](#) [Reset](#) [Display Favorites](#)

Okay, so in the interest of time, we added the rest of our creditable ingredients for our Buffalo Chicken Stuffed Pepper into the Recipe Analysis Workbook. We have the cheese, chicken, and yogurt in the Meat/Meat Alternate category; the bell peppers in the Vegetable category; and the rice in the Grains category.

The next tabbed section in the Recipe Analysis Workbook is the Recipe Notes section.



In the second tab at the top, there is a place to enter recipe notes. We entered all the ingredients for the Buffalo Chicken Stuffed Pepper recipe here, but you could put any notes you find helpful in this optional section. The notes print on the RAW results pdf., which is useful for when there are multiple revisions to a recipe.

You can also note the math calculation if converting from one unit of measure to another, which could be handy when using different pack sizes on ingredients.

Now let's put our ingredient amounts into each category.

Select Creditable Ingredients **Meats/MA** Vegetables Fruits

Enter "Quantity of Ingredient" in the same unit as the "Purchase Unit". If the recipe lists the ingredients in a different unit, you will need to convert the quantity to match the FBG. For example, convert ingredients measured in ounces to their decimal equivalent of a pound. See Table 5 Decimal Weight Equivalents in the Resource Center (located under the "Home" navigation tab). Record your answer to four decimal places.

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution ⓘ	Additional Information	④ Quantity of Ingredient ⓘ	⑤ Preparation Yield (if applicable) ⓘ	⑥ Calculated Quantity to Purchase
Cheese, American, Cheddar, Mozzarella, or Swiss Natural or Process. Includes USDA Foods	Pound	16.00	1 oz Cheese	1 lb AP = about 4 cups shredded cheese; 1 lb AP = about 2 cups cubed cheese	<input type="text" value="1.0000"/>	<input type="text" value="0.0000"/>	1.0000
Chicken, cooked, frozen, Diced or Pulled no skin, wing meat, neck meat, giblet, or kidneys. Includes USDA Foods	Pound	16.00	1 oz cooked poultry	1 lb AP = 1.0 lb cooked chicken meat	<input type="text" value="6.0000"/>	<input type="text" value="0.0000"/>	6.0000
Yogurt, fresh Plain or Flavored, Sweetened or Unsweetened. Commercially-prepared, (includes Greek yogurt). Includes USDA Foods	32 oz Container	8.00	1/2 cup or 4 oz yogurt provides 1 oz meat alternate		<input type="text" value="0.5000"/>	<input type="text" value="0.0000"/>	0.5000

You must save the RAW prior to printing it. Use the **"Back to RAW List"** button and select from the RAW list. Click the PDF link to generate a copy to print or save.

The next tabbed section is meats/meat alternates and you can see our three ingredients here. We'll start with cheddar cheese. The purchase unit is by pound, so we'll enter the quantity of ingredient by pound. The recipe calls for 1 lb. of cheddar cheese. Enter 1.0 in the Quantity of Ingredient section. If you click on the little blue information button, a popup will provide additional information for each column. Since 1 pound yields 1 pound of cheese, there is no preparation yield factor.


Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution ⓘ	Additional Information	④ Quantity of Ingredient ⓘ	⑤ Preparation Yield (if applicable) ⓘ	⑥ Calculated Quantity to Purchase
Cheese, American, Cheddar, Mozzarella, or Swiss Natural or Process. Includes USDA Foods	Pound	16.00	1 oz Cheese	1 lb AP = about 4 cups shredded cheese; 1 lb AP = about 2 cups cubed cheese	<input type="text" value="1.0000"/>	<input type="text" value="0.0000"/>	1.0000
Chicken, cooked, frozen, Diced or Pulled no skin, wing meat, neck meat, giblet, or kidneys. Includes USDA Foods	Pound	16.00	1 oz cooked poultry	1 lb AP = 1.0 lb cooked chicken meat	<input type="text" value="6.0000"/>	<input type="text" value="0.0000"/>	6.0000
Yogurt, fresh Plain or Flavored, Sweetened or Unsweetened. Commercially-prepared, (includes Greek yogurt). Includes USDA Foods	32 oz Container	8.00	1/2 cup or 4 oz yogurt alternate		<input type="text" value="0.5000"/>	<input type="text" value="0.0000"/>	0.5000

You must save the RAW prior to printing it. Use the **"Back to RAW List"** button and select from the RAW list. Click the PDF link to generate a copy to print or save.

And next ingredient is the chicken. We need 6 lbs. of chicken for our recipe. There is also no preparation yield factor to consider, since this chicken is purchased cooked and diced and the yield is 1 lb. As Purchased = 1 lb. cooked chicken. So we will enter the quantity of ingredient but no preparation yield.

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution ⓘ	Additional Information	④ Quantity of Ingredient ⓘ	⑤ Preparation Yield (if applicable) ⓘ	⑥ Calculated Quantity to Purchase
Cheese, American, Cheddar, Mozzarella Natural or Process. Includes USDA Foods					<input type="text" value="1.0000"/>	<input type="text" value="0.0000"/>	1.0000
Chicken, cooked, frozen, Diced or Pulled, no skin, wing meat, neck meat, giblet, or kidney				meat	<input type="text" value="6.0000"/>	<input type="text" value="0.0000"/>	6.0000
Yogurt, fresh Plain or Flavored, Sweetened or Unsweetened, Commercially-prepared, (includes Greek yogurt), Includes USDA Foods	32 oz Container	8.00	1/2 cup or 4 oz yogurt provides 1 oz meat alternate		<input type="text" value="0.5000"/>	<input type="text" value="0.0000"/>	0.5000


You must save the RAW prior to printing it. Use the **"Back to RAW List"** button and select from the RAW list. Click the PDF link to generate a copy to print or save.



The recipe also calls for Greek yogurt. The Purchase Unit is a 32 oz. container, which has 8, half cup servings, or 4 cups.

Our recipe calls for 2 cups of Greek yogurt, so we can calculate the quantity as half of the container and enter 0.5 in the Quantity box.

Always make sure to **SAVE** you work before moving on to the next tab.

Select Creditable Ingredient   Recipe    **Vegetables**   Fruits   Grains - Method A   Grains - Method B   Grains - Method C   Meal Pattern Contribution

### Other Vegetables

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution ①	Additional Information	④ Quantity of Ingredient ④	⑤ Preparation Yield (if applicable) ⑤	⑥ Calculated Quantity to Purchase
Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	9.80	1/4 cup cooked, drained vegetable strips	1 lb AP = 0.73 lb cooked peppers; 1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	9.125	0.7300	12.5000

You must save the RAW prior to printing it. Use the **"Back to RAW List"** button and select from the RAW list. Click the PDF link to generate a copy to print or save.

[Save](#)   [Back to RAW List](#)

Moving on to the vegetable category our recipe calls for 25 individual peppers. We picked the cooked, drained vegetable strips in the Food Buying Guide because that was the best fit for our recipe. And because our ingredient is by each, not by pound, we need to do some conversions.

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution ①	Additional Information	④ Quantity of Ingredient ④	⑤ Preparation Yield (if applicable) ⑤	⑥ Calculated Quantity to Purchase
Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	9.80	1/4 cup cooked, drained vegetable strips	1 lb AP = 0.73 lb cooked peppers; 1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	9.125	0.7300	12.5000

25 large peppers  
 ÷ approx. 2 raw peppers per lb.  
 12.5 lbs. As Purchased

12.5lbs.  
 x 0.73 yield factor for cooked peppers  
 9.125 lbs. quantity of cooked peppers


We know from testing our recipe multiple times, that there are approximately 2 whole peppers per pound, which totals 12.5 lbs. as purchased.  
 So now let's take the 12.5 lbs. Purchased weight and multiply it by the yield factor for cooked peppers, which is 0.73, as noted in the additional information section. That gives us 9.125 lbs. of cooked peppers. This is the number that will be used to determine the crediting for 50 servings.  
 Enter 9.125 into the Quantity of Ingredient column.  
 Then enter the preparation yield of 0.73. and you should get your As Purchased weight of 12.5 lbs.

Select Creditable Ingredient   Recipe Notes   Meats/MA   **Vegetables**   Fruits   Grains - Method A   Grains - Method B   Grains - Method C   Meal Pattern Contribution

### Other Vegetables

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution ①	Additional Information	④ Quantity of Ingredient ①	⑤ Preparation Yield (if applicable) ①	⑥ Calculated Quantity to Purchase
Peppers, Bell, fresh Green or Yellow, Medium or Large, Whole	Pound	9.80	1/4 cup cooked, drained vegetable strips	1 lb AP = 0.73 lb cooked peppers; 1 lb AP = 0.80 lb ready-to-serve or -cook raw peppers	<input type="text" value="9.125"/>	<input type="text" value="0.7300"/>	12.5000

You must save the RAW prior to printing it. Use the "**Back to RAW List**" button and select from the RAW list. Click the PDF link to generate a copy to print or save.



**[CLICK]** Lastly, don't forget to **SAVE!**

If you need a refresher on converting between various measurements, check out the Resource Center under the Food Buying Guide Home Tab or in the Introduction section of the downloadable PDF.



Are there any questions so far?

Let's stand and wiggle for a minute, because this next section is a big one.

Give me a thumbs up if you have had Grains training for Child Nutrition Programs. Great! We're not going to go too deep today but want to highlight how different grains affect your recipe and the meal pattern contribution of your recipe.

- *(hand out Exhibit A: Grains Tool)*
- *Show whole grain resource (open tab on computer)*

Has anyone seen the USDA Whole Grain Resource?

### Search Food Ingredients

Program—Meal: NSLP—Lunch

Keywords: brown rice

Meal Component: All Meal Components

Category: All Categories

Search Reset Display Favorites

### Food Ingredients Selected for Recipe

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Action

### Search Results

Meal Component	Category / Subcategory	Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Additional Information	Add to RAW
Grains	Pasta PASTA	Pasta (Group H) Elbow Pasta, Whole Grain, (brown rice), Regular, Dry	Pound	17.20	1/2 cup cooked (1.00 oz eq grains)	1 lb dry = about 4-1/2 cups dry whole grain elbow pasta; 1 lb dry = about 5-5/8 cups cooked	Add
Grains	Pasta PASTA	Pasta (Group H) Spaghetti, Whole Grain, (brown rice), Regular, Dry	Pound	12.20	1/2 cup cooked, pieces (1.00 oz eq grains)	1 lb dry = about 4 cups dry pieces of whole grain spaghetti; 1 lb dry = about 5-1/8 cups cooked	Add
Grains	Rice RICE	Rice (Group H) Brown, Long grain, Instant, Dry	Pound	12.58	1/2 cup cooked (1.00 oz eq grains)	1 lb dry = 2-1/4 cups dry brown rice; 1 lb dry = about 5-1/3 cups cooked	Add
Grains	Rice RICE	Rice (Group H) Brown, Long grain, Regular, Dry	Pound	13.00	1/2 cup cooked (1.00 oz eq grains)	1 lb dry = about 2-1/4 cups dry brown rice; 1 lb dry = about 5-1/2 cups cooked	Add
Grains	Rice RICE	Rice (Group H) Brown, Long grain, Parboiled, Dry, Includes USDA Foods	Pound	15.50	1/2 cup cooked (1.00 oz eq grains)	1 lb dry = about 2-1/8 cups dry brown rice; 1 lb dry = about 7-3/4 cups cooked; 1 cup dry = about 3-5/8 cups cooked	Add
Grains	Rice RICE	Rice (Group H) Brown, Medium grain, Quick Cooking, Dry	Pound	11.00	1/2 cup cooked (1.00 oz eq grains)	1 lb dry = about 2-1/4 cups dry brown rice; 1 lb dry = about 5-1/2 cups cooked brown rice	Add

Ok, let's continue with our Buffalo Chicken Stuffed Pepper recipe.

The next creditable ingredient is brown rice, which we will enter into the keywords.

The options will auto-populate below when you select Search. This is going to give you a list of everything with that key word. You can see that it lists brown rice as well as pasta made with brown rice.

Then select the item that best represents the ingredient you are using.

We will select the brown rice, long grain, parboiled, USDA foods option here which matches the ingredient listed in the recipe.

Select Add to add to the RAW.

Select Creditable Ingredient | Recipe Notes | Meats/MA | Vegetables | Fruits | **Grains - Method B** | Grains - Method C | Meal Pattern Contribution

Method B - Grains Based on FBG [Example](#)

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution ⓘ	Additional Information	④ Quantity of Ingredient ⓘ	⑥ Calculated Quantity to Purchase
Rice (Group H) Brown, Long grain, Parboiled, Dry, Includes USDA Foods	Pound	15.50	1/2 cup cooked (1.00 oz eq grains)	1 lb dry = about 2-1/8 cups dry brown rice; 1 lb dry = about 7-3/4 cups cooked; 1 cup dry = about 3 5/8 cups cooked	3.0000	3.0000

[Grain Requirements for the National School Lunch Program and School Breakfast Program](#)  
[Grain Requirements in the Child and Adult Care Food Program](#)

You must save the RAW prior to printing it. Use the "Back to RAW List" button and select from the RAW list. Click the PDF link to generate a copy to print or save.

**Save** **Back to RAW List**

So let's go back to our recipe.

The last ingredient we need to calculate for the stuff pepper recipe is the brown rice. Since the brown rice is an item that we selected from the Food Buying Guide, we are using Grains-Method B.

Here you will enter the information for the brown rice. Enter the quantity of the ingredient, which is 3 lbs. and don't forget to save.

We invite you to browse around the three Grains tabs to see how grain ingredients might be calculated using different methods.

Now that we have walked through a little bit of the process, you can see the importance of writing your recipes with convertible ingredients. When using the Recipe Analysis Workbook, you will need to know the weights of ingredients, for both the edible portion for accurate crediting, and the as purchased weight for forecasting and ordering.

So let's look at the analysis to see how our recipe contributes toward the meal pattern.

Select Creditable Ingredient | Recipe Notes | Meats/MA | Vegetables | Fruits | Grains - Method A | Grains - Method B | **Meal Pattern Contribution**

Meats/Meat Alternates	2.25 oz eq	
Vegetables	Other Vegetables	1/2 cup
Grains ( Method B )	0.75 oz eq	

1 half pepper provides 2.25 oz eq meat/meat alternate, 1/2 cup total vegetable ( 1/2 cup other vegetable ), 0.75 oz eq grains

We have finished entering information for all the creditable ingredients, so we can now check out the meal pattern contribution.

Click on the meal pattern contribution tab at the top of the screen. You can see we have meats/meat alternates, vegetables, and grains.


The crediting statement at the bottom says that 1 half pepper provides 2.25 oz. eq. of Meats/Meat alternates, 1/2 cup total Vegetable which is 1/2 cup of other vegetable, and 0.75 oz. eq. Grains.



## Buffalo Chicken Stuffed Pepper

Serving Size: 1 pepper half  
Yield: 50 servings

### Contribution to Meal Pattern

- 2.25 oz. Eq. Meat/Meat Alternate
- 0.75 oz. Eq. Whole Grain 
- ½ cup Vegetable

### Contribution to Vegetable Subgroups

- ½ cup Other Vegetables

**[CLICK]** Now that you have determined what the crediting provides, what will you do next?

Some questions to ask:

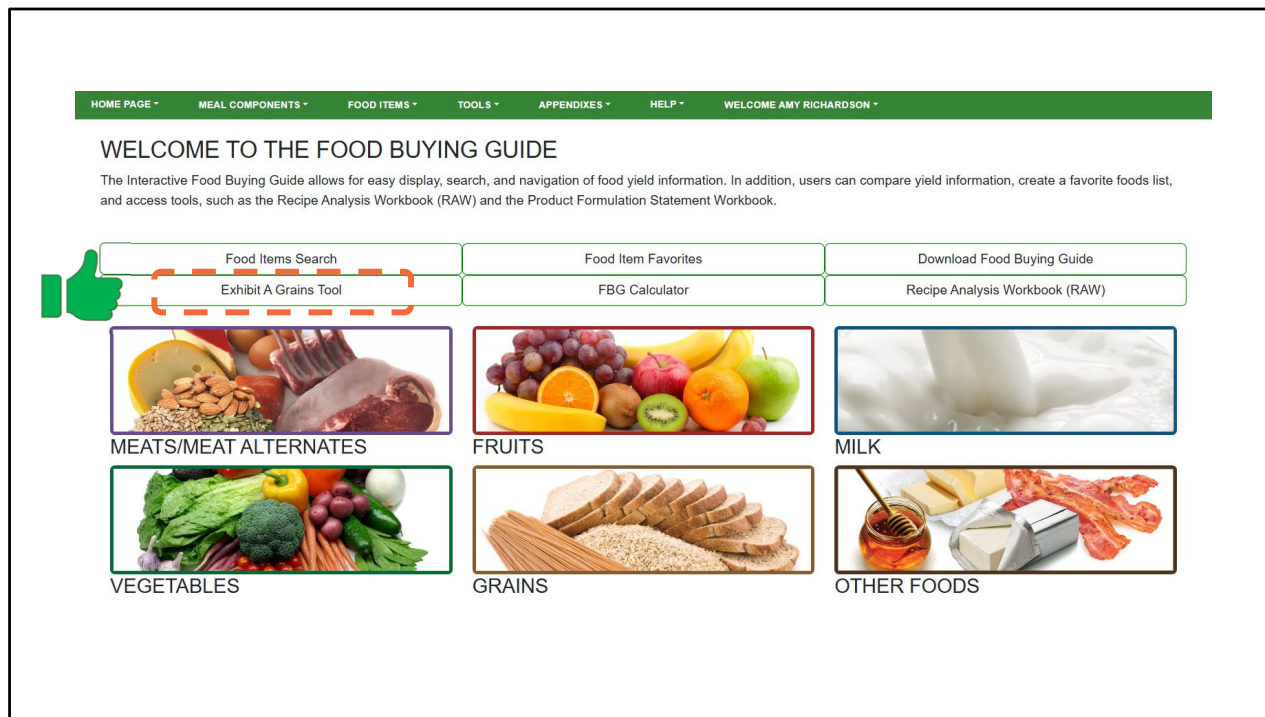
1. Is this the desired contribution you want? If yes, you could move forward with evaluation. Or will you go back to the recipe and adjust anything?
2. Could you add more rice to get to a full 1 oz eq. credit?

**YES!!!**

If you look at the rice line. (slide 19) Rice is 15.50 servings per pound, which give you 46.50 servings for 3 lbs.

If we want 50 servings, we take 50 and divide it by 15.50 to get 3.22 lbs.

So, by adding just 4 oz. of rice for a total of 3.25 lbs., we get enough to credit 1 oz. eq. of grain and make this entrée a 3-component complete meal.



From the homepage of the Food Buying Guide, you will see the Exhibit A Grains Tool.

After clicking on the grains tool, you will see there are instructions at the top. This will help you navigate through the tool.

**Question:** How many of you have used the Exhibit A Grains Tool in the Food Buying Guide? This is where you can enter products that have labels and save them for future use, like a certain brand tortilla for example.

As you start to think about creating your own recipes, this is a great tool to keep handy so you can save products that you are regularly procuring.



## Fluffy Apple Cinnamon Oat Breakfast Bar

Serving Size: 1 bar  
Yield: 50 servings

### Contribution to Meal Pattern

- \_\_\_\_\_ Grain
- \_\_\_\_\_ Fruit

### Creditable Ingredients

- Apples
- Applesauce
- Oats
- Flour

Now let's look at the Fluffy Apple Cinnamon Oat Breakfast Bar recipe. This is also the muffin that we just sampled.

The recipe came from a school recipes website, and reports that the contribution to the meal pattern is 2 oz. eq. Grain and  $\frac{1}{2}$  cup fruit. We are going to put this recipe into the RAW and see if that claim is accurate.

The recipe uses creditable ingredients of apples, applesauce, all-purpose flour and rolled oats.

Is all-purpose flour considered a whole grain? **NO** Are oats considered a whole grain? **YES**

Let's put the ingredients into the Recipe Analysis Workbook to see how they will contribute to the meal pattern.

Instructions

Asterisks (\*) denote required information.

1 Recipe Name \* Fluffy Apple Cinnamon Oat Breakfast Bar

Recipe Number 2026-1

Folder test recipes

Servings per Recipe \* 50

Serving Size \* 1 bar

Add Folder

Search for food items using the Program - Meal (optional), Keywords, Meal Component, and Category search criteria to narrow down your results and select only the recipe food ingredients that contribute to the meal pattern. These ingredients will automatically populate under the appropriate meal component tabs. It is important to select the correct form of the ingredient (fresh, frozen, etc.) from the Food Buying Guide (FBG). If an exact match is not available, choose a food item in the FBG that closely matches your recipe ingredient.

Please note there are three methods to calculate meal pattern contribution for grains:

- Method A - based on Exhibit A – Go to this tab to search and select ingredients from Exhibit A.
- Method B - based on Food Buying Guide – This tab will automatically populate if food ingredients are selected from the search below.
- Method C - based on Grams of Creditable Grains – Go to this tab to manually enter grain ingredients. Use Method C for grain ingredients used in finished products that are listed in Groups A-I in Exhibit A. For example, your recipe is a roll (Group B) or a muffin (Group D).

Grains – Method C – for each ingredient:

4. Click Add New Ingredient button to enter a creditable grain ingredient.
5. Enter Description of the Creditable Grain Ingredient.
6. From the drop-down menu, select the Exhibit A Group (A - I) that the End Product Belongs To.
7. Enter Quantity of Ingredient in Grams.
8. The Gram Standard of Creditable Grain per Oz Equivalent will automatically populate.
9. Grains Meal Pattern Contribution will calculate and display on the Meal Pattern Contribution tab.

Let's create a new Recipe Analysis Workbook and enter the information from our Fluffy Apple Cinnamon Oat Breakfast Bar recipe.

For this demonstration, you don't have to pick a recipe number, or a folder, but you DO need to put in the Servings per Recipe and the Serving Size.

Click on the down triangle next to the Instructions label at the top and you will see some instructions for how to choose which Grains Method to use for the calculations.

The section talks about where to put your ingredient. Use Method C for ingredients used in recipes to create finished products listed in Groups A-I in Exhibit A. We will use Method C because flour is an ingredient and we are making a muffin, which is listed in Exhibit A Group D.

Select Creditable Ingredient | Recipe Notes | Meats/MA | Vegetables | Fruits | Grains - Method A | Grains - Method B | **Grains - Method C** | Meal Pattern Contribution

Method C - Grains Based on Grams of Creditable Grains [Example](#)

③ Description of Creditable Grain Ingredient	⑤ Exhibit A Group (A - I) the End Product Belongs To	⑦ Quantity of Ingredient in Grams	⑧ Gram Standard of Creditable Grain per Oz Equivalent
X Flour, all-purpose	Group D	0.00 g	16.00 g

④ Add New Ingredient

[Grain Requirements for the National School Lunch Program and School Breakfast Program](#)  
[Grain Requirements in the Child and Adult Care Food Program](#)

Group D	Ounce Equivalent (oz eq) for Group D	Minimum Serving Size for Group D
Doughnuts* (cake and yeast raised, unfrosted)	1 oz eq = 55 gm or 2.0 oz	1 serving = 50 gm or 1.8 oz
Cereal bars, breakfast bars, granola bars* (plain)	¾ oz eq = 42 gm or 1.5 oz	¾ serving = 38 gm or 1.3 oz
Muffins (all, except corn)	½ oz eq = 28 gm or 1.0 oz	½ serving = 25 gm or 0.9 oz
Sweet roll* (unfrosted)	¼ oz eq = 14 gm or 0.5 oz	¼ serving = 13 gm or 0.5 oz
Toaster pastry* (unfrosted)		

You must save the RAW prior to printing it. Use the "Back to RAW List" button and select from the RAW list. Click the PDF link to generate a copy to print or save.

Save Back to RAW List

**[CLICK]** To enter our grain ingredients, select the Method C tab.

**[CLICK]** Then click Add New Ingredient. Type in Flour, all-purpose.

**[CLICK]** Then in column 6 – the Exhibit A dropdown, we are going to pick the END PRODUCT we are making from the Exhibit A reference.

**[CLICK]** Muffins are in Group D.

Select Creditable Ingredient | Recipe Notes | Meats/MA | Vegetables | Fruits | Grains - Method A | Grains - Method C

Method C - Grains Based on Grams of Creditable Grains [Example](#)

The weight of the grain ingredient must be entered in grams (g). If the weight is stated in ounces (oz) (example: 2 oz), then multiply this amount by 28.35 to convert to grams (example: 2 oz x 28.35 = 56.7 g).

Description of Creditable Grain Ingredient	Exhibit A Group (A - I) the End Product Belongs To	Quantity of Ingredient in Grams	Gram Standard of Creditable Grain per Oz Equivalent
X Flour, all-purpose	Group D	510.3 g	18.00 g

[Add New Ingredient](#)

[Grain Requirements for the National School Lunch Program and School Breakfast Program](#)  
[Grain Requirements in the Child and Adult Care Food Program](#)

$$18 \text{ oz. flour} \times 28.35 \text{ g} = 510.3 \text{ grams}$$

You must save the RAW prior to printing it. Use the "Back to RAW List" button and select from the RAW list. Click the PDF link to generate a copy to print or save.

[Save](#) [Back to RAW List](#)

(refer to printout Exhibit A)

Then in column 7, you will enter the weight of the flour in grams. Select the information icon [CLICK] to see how to convert ounces to grams. For our recipe, we are using 18 oz. of flour, [CLICK] so the calculation is 18 ounces x 28.35 grams = 510.3 grams. Enter 510.3 grams in column 7.

Select Creditable Ingredient | Recipe Notes | Meats/MA | Vegetables | Fruits | Grains - Method A | Grains - Method B | **Grains - Method C** | Meal Pattern Contribution

Method C - Grains Based on Grams of Creditable Grains [Example](#)

③ Description of Creditable Grain Ingredient	⑤ Exhibit A Group (A - I) the End Product Belongs To	⑦ Quantity of Ingredient in Grams	⑧ Gram Standard of Creditable Grain per Oz Equivalent
X Flour, all-purpose	Group D	510.3 g	16.00 g

[Grain Requirements for the National School Lunch Program and School Breakfast Program](#)  
[Grain Requirements in the Child and Adult Care Food Program](#)

Group D	Ounce Equivalent (oz eq) for Group D	Minimum Serving Size for Group D
Doughnuts* (cake and yeast raised, unfrosted)	1 oz eq = 55 gm or 2.0 oz	1 serving = 50 gm or 1.8 oz
Cereal bars, breakfast bars, granola bars* (plain)	¾ oz eq = 42 gm or 1.5 oz	¾ serving = 38 gm or 1.3 oz
Muffins (all, except corn)	½ oz eq = 28 gm or 1.0 oz	½ serving = 25 gm or 0.9 oz
Sweet roll* (unfrosted)	¼ oz eq = 14 gm or 0.5 oz	¼ serving = 13 gm or 0.5 oz
Toaster pastry* (unfrosted)		

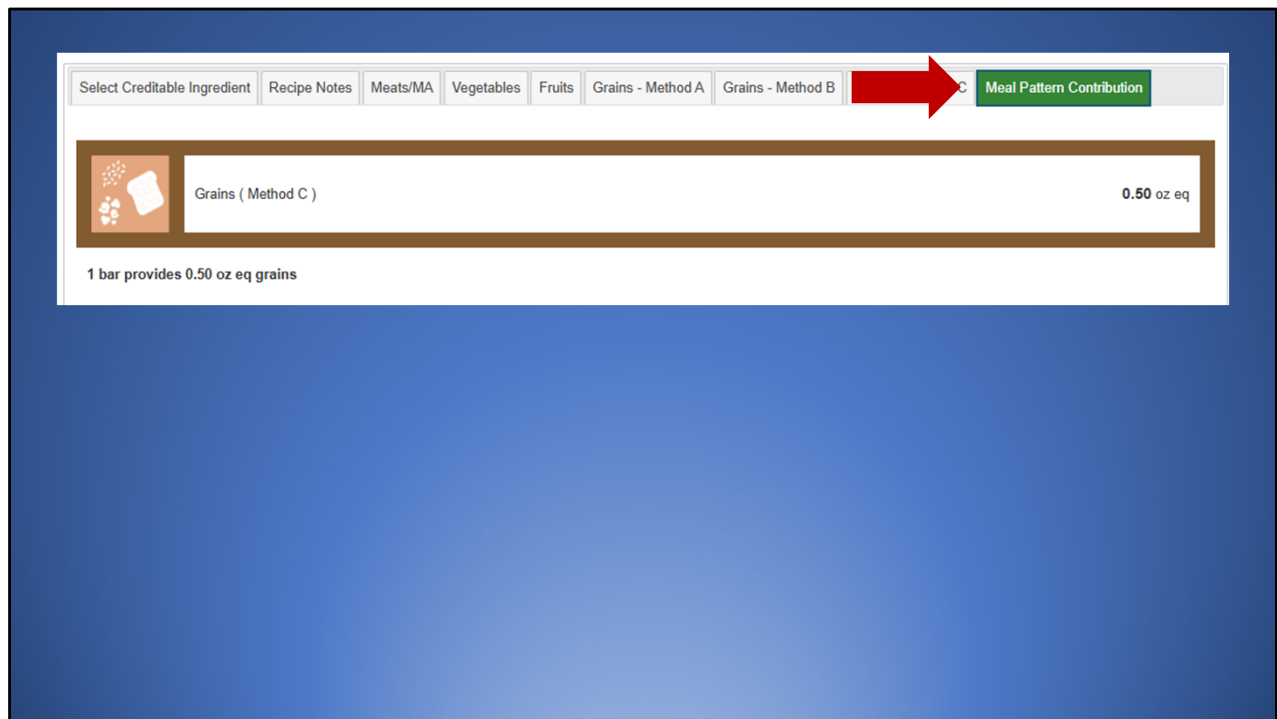
You must save the RAW prior to printing it. Use the "Back to RAW List" button and select from the RAW list. Click the PDF link to generate a copy to print or save.

[Save](#) [Back to RAW List](#)

[CLICK] I want to talk about column 8 for a minute. This is where USDA has calculated the gram standard of creditable grain per ounce equivalent for the **grain ingredient**.

[CLICK] This is not the same as the finished product. So while a completed muffin weight is 55 grams per ounce, the flour ingredient credits as 16 grams per ounce towards the muffin. You don't need to change anything in this column.

[CLICK] Next you're going to SAVE at the bottom.



After you have saved the workbook, select the Meal Pattern Contribution tab. This will show you how much your ingredients contribute. We can see the flour alone contributes for 0.50 oz. eq. of Grain. Let's make a note of this so later on, we can determine if our recipe meets the 51% whole grain requirement.

Now let's go back over to the Grains – Method C tab and enter our oats.

Select Creditable Ingredient | Recipe Notes | Meats/MA | Vegetables | Fruits | Grains - Method A | Grains - Method C

Method C - Grains Based on Grams of Creditable Grains [Example](#)

Description of Creditable Grain Ingredient	Group	Weight of Ingredient in grams	Creditable Grain per Oz Equivalent
<input checked="" type="checkbox"/> Flour, all-purpose	Group D	510.30 g	18.00 g
<input checked="" type="checkbox"/> Oats, rolled, dry	Group D	1304.10 g	18.00 g


[Add New Ingredient](#)

[Grain Requirements for the National School Lunch Program and School Breakfast Program](#)  
[Grain Requirements in the Child and Adult Care Food Program](#)

The weight of the grain ingredient must be entered in grams (g). If the weight is stated in ounces (oz) (example: 2 oz), then multiply this amount by 28.35 to convert to grams (example: 2 oz x 28.35 = 56.7 g).

$$46 \text{ oz. oats} \times 28.35 \text{ g} = 1304.10 \text{ grams}$$

You must save the RAW prior to printing it. Use the "Back to RAW List" button and select from the RAW list. Click the PDF link to generate a copy to print or save.



We're going to Add New Ingredient. Type in Oats, rolled, dry. Remember, even though you can find oats in the Food Buying Guide using Method A or B, we are going to use Method C because it is an ingredient for a recipe and we are already using Method C for the flour.

Then in column 6 – the Exhibit A dropdown, select Group D, because we are still making a muffin.

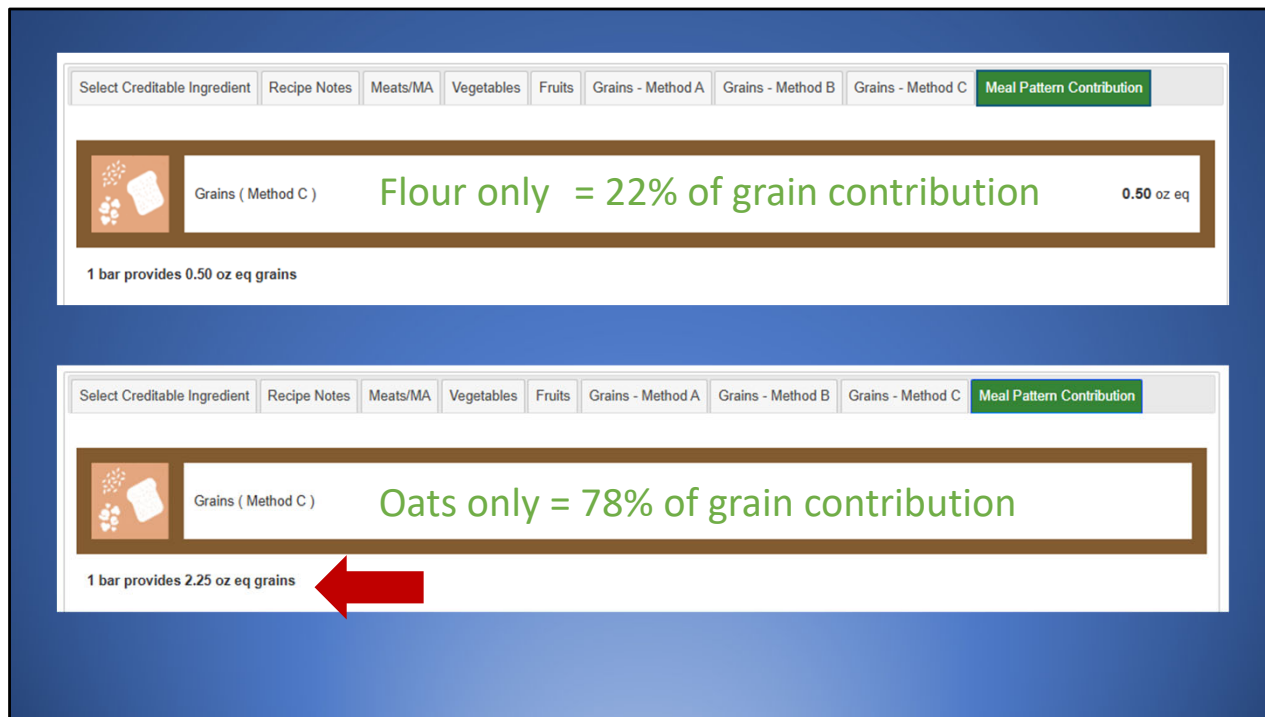
*(refer to printout Exhibit A)*

Then in column 7, you will enter the weight of the oats in grams. Select the information icon here is the information again on how to convert lbs. to grams.

For our recipe, we are using 46 oz. of oats, so the calculation is 1304.10 grams. Enter this number in column 7.

Again, we're not going to change anything in column 8.

**[CLICK]** Next you're going to SAVE at the bottom.



After you have saved the workbook, select the Meal Pattern Contribution tab again. In the top image from earlier, we can see the flour contribution for 0.50 oz. eq. of Grain.

In the bottom image, we can see the flour and oats together contribute to 2.25 oz eq. of Grain. If we subtract 0.50 from 2.25, we will have the stand-alone contribution for Oats as 1.75 oz. eq.

I'm showing the two images together so you can see that all-purpose flour, which is not a whole grain, contributes less than 50% of the total grains. And because oats are a whole grain and contribute to 51% or more of the total grain contribution, we can consider this muffin recipe to be whole-grain rich and will contribute 2.25 oz eq. Grains to the meal pattern.

Search Results

Meal Component	Category / Subcategory	Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Additional Information	① Add to RAW
Fruits	Fruit and Fruit Juice APPLES	Apples, fresh 100 count Whole	Pound	15.60	1/4 cup raw, unpeeled fruit	1 lb AP = 0.93 lb (about 3-7/8 cups) ready-to-serve or -cook raw, cored, unpeeled apples; 1/4 cup raw, unpeeled fruit = about 1/5 apple	Add
Fruits	Fruit and Fruit Juice APPLES	Apples, fresh 125-138 count Whole, Includes USDA Foods	Pound	14.80	1/4 cup raw, unpeeled fruit	1 lb AP = 0.91 lb (3-2/3 cups) ready-to-serve or -cook raw, cored, unpeeled apples; 1/4 cup raw, unpeeled fruit = about 1/4 apple	Add
Fruits	Fruit and Fruit Juice APPLES	Apples, fresh 125-138 count Whole, Includes USDA Foods	Pound	11.40	1/4 cup raw, cored, peeled fruit	1 lb AP = 0.78 lb (about 2-3/4 cups) ready-to-serve or -cook raw, cored, peeled apples	Add
Fruits	Fruit and Fruit Juice APPLES	Apples, fresh 125-138 count Whole, Includes USDA Foods	Pound	6.80	1/4 cup cored, peeled, cooked, unsweetened fruit	1 lb AP = 0.78 lb (about 1-3/4 cups) cored, peeled, cooked apples; 1 lb AP = 0.78 lb (about 2-3/4 cups) ready-to-serve or -cook raw, cored, peeled apples	Add
Fruits	Fruit and Fruit Juice APPLES	Apples, fresh 125-138 count Whole, Includes USDA Foods	Pound	5.80	1/4 cup cooked, sieved, unsweetened fruit		Add
Fruits	Fruit and Fruit Juice APPLES	Apples, fresh 88-163 count (approx. 2-1/2 inch to 3-inch diameter) Whole	3 lb Bag	39.50	1/4 cup raw, unpeeled, cored, sliced fruit	1 lb AP = 0.85 lb (about 3-7/8 cups) ready-to-serve, cored, unpeeled apples	Add
Fruits	Fruit and Fruit Juice APPLES	Apples, fresh Whole, Includes USDA Foods	Pound	14.56	1/4 cup raw, unpeeled, cored, sliced fruit	1 lb AP = 0.91 lb raw, unpeeled, cored apple	Add
Fruits	Fruit and Fruit Juice APPLES	Apples, canned Slices, Solid pack, Includes USDA Foods	No. 10 Can (100 oz)	50.40	1/4 cup fruit and liquid		Add
Fruits	Fruit and Fruit Juice APPLES	Apples, canned Slices, Solid pack, Includes USDA Foods	No. 10 Can (100 oz)	47.50	1/4 cup drained fruit	1 No. 10 can = about 89.0 oz (11-7/8 cups) drained apples	Add
Fruits	Fruit and Fruit Juice APPLES	Apples, canned Slices, Solid pack, Includes USDA Foods	Pound	8.06	1/4 cup fruit and liquid		Add












1 2

Now let's look at our Fruits.

I want everyone to go to the Select Creditable Ingredient Tab and put in the keyword Apples.

It will result in 2 pages of apples in various forms, but we're going to focus on Apples, Fresh.

Search Results

Meal Component	Category / Subcategory	Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Additional Information	 Add to RAW
Fruits	Fruit and Fruit Juice APPLES	Apples, fresh 100 count Whole	Pound	15.60	1/4 cup raw, unpeeled fruit	1 lb AP = 0.93 lb (about 3-7/8 cups) ready-to-serve or -cook raw, cored, unpeeled apples; 1/4 cup raw, unpeeled fruit = about 1/5 apple	
Fruits	Fruit and Fruit Juice APPLES	Apples, fresh 125-138 count Whole, Includes USDA Foods	Pound	14.80	1/4 cup raw, unpeeled fruit	1 lb AP = 0.91 lb (3-2/3 cups) ready-to-serve or -cook raw, cored, unpeeled apples; 1/4 cup raw, unpeeled fruit = about 1/4 apple	
Fruits	Fruit and Fruit Juice APPLES	Apples, fresh 125-138 count Whole, Includes USDA Foods	Pound	11.40	1/4 cup raw, cored, peeled fruit	1 lb AP = 0.78 lb (about 2-3/4 cups) ready-to-serve or -cook raw, cored, peeled apples	
Fruits	Fruit and Fruit Juice APPLES	Apples, fresh 125-138 count Whole, Includes USDA Foods	Pound	6.80	1/4 cup cored, peeled, cooked, unsweetened fruit	1 lb AP = 0.78 lb (about 1-3/4 cups) cored, peeled, cooked apples; 1 lb AP = 0.78 lb (about 2-3/4 cups) ready-to-serve or -cook raw, cored, peeled apples	
Fruits	Fruit and Fruit Juice APPLES	Apples, fresh 125-138 count Whole, Includes USDA Foods	Pound	5.80	1/4 cup cooked, sieved, unsweetened fruit		
Fruits	Fruit and Fruit Juice APPLES	Apples, fresh 88-163 count (approx. 2-1/2 inch to 3-inch diameter) Whole	3 lb Bag	39.50	1/4 cup raw, unpeeled, cored, sliced fruit	1 lb AP = 0.85 lb (about 3-7/8 cups) ready-to-serve, cored, unpeeled apples	
Fruits	Fruit and Fruit Juice APPLES	Apples, fresh Whole, Includes USDA Foods	Pound	14.56	1/4 cup raw, unpeeled, cored, sliced fruit	1 lb AP = 0.91 lb raw, unpeeled, cored apple	
Fruits	Fruit and Fruit Juice APPLES	Apples, canned Slices, Solid pack, Includes USDA Foods	No. 10 Can (100 oz)	50.40	1/4 cup fruit and liquid		
Fruits	Fruit and Fruit Juice APPLES	Apples, canned Slices, Solid pack, Includes USDA Foods	No. 10 Can (100 oz)	47.50	1/4 cup drained fruit	1 No. 10 can = about 89.0 oz (11-7/8 cups) drained apples	
Fruits	Fruit and Fruit Juice APPLES	Apples, canned Slices, Solid pack, Includes USDA Foods	Pound	8.06	1/4 cup fruit and liquid		

1 2

The column for the Serving Size is how the fruit is served, so in the case of our breakfast bar, the apples are served cooked. Click Add to add it to the workbook.

The Additional Information column shows the preparation yield of how the ingredient goes into the recipe. We are adding ready-to-cook apples to the recipe, and in this case, the preparation yield is the same at 78%.

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Additional Information	Quantity of Ingredient	Preparation Yield (if applicable)	Calculated Quantity to Purchase
Apples, fresh 125-138 count Whole, Includes USDA Foods	Pound	6.80	1/4 cup cored, peeled, cooked, unsweetened fruit	1 lb AP = 0.78 lb (about 1-3/4 cups) cored, peeled, cooked apples; 1 lb AP = 0.78 lb (about 2-3/4 cups) ready-to-serve or -cook raw, cored, peeled apples	5.3040	0.7800	6.8000
Applesauce, canned Smooth or Chunky, Includes USDA Foods	No. 10 Can (108 oz)	47.60	1/4 cup fruit	1 No. 10 can = about 12 cups applesauce	0.3330	0.0000	0.3330

$$6.8 \text{ lbs. apples AP} \times 0.78 \text{ yield} = 5.3040 \text{ lbs. EP}$$

You must save the RAW prior to printing it. Use the "Back to RAW List" button and select from the RAW list. Click the PDF link to generate a copy to print or save.



Save Back to RAW List

Go to the Fruits tab.

In the Apples row, we can see the yield information for cored, peeled, cooked apples. Now you might notice that there is no option for unpeeled, cooked apples as listed in our recipe. You are still going to use the 78% yield, as it is the best option for this recipe. Remember, you can under-report the contribution, but you cannot over-report it.

So let's do some math! We have the AP weight amount of 6.8 lbs. multiply that by 78% yield and you get 5.3040 lbs. EP. Enter 5.3040 into column 4.

Enter 0.78 into column 5 for the yield factor.

Column 6, the Quantity to Purchase should equal the same amount as the recipe AP weight.

Don't forget to save!

Select Creditable Ingredient | Recipe Notes | Meats/MA | Vegetables | Fruits | Grains - Method A | Grains - Method B | Grains - Method C | **Meal Pattern Contribution**

Fruits <sup>3</sup> **Apples & Applesauce** → 1/4 cup

Grains (Method C) 2.25 oz eq

- Add more apples ?
- Add more applesauce 🚫
- Change the Fruits contribution of the recipe ?

Let's go back to the Meal Pattern Contribution tab again. I entered in the information for Applesauce, so this is the total contribution for Fruit for the recipe. Does this align with what is reported on the recipe? NO, it does not! The recipe reported 1/2 cup Fruit contribution.

What should we do to adjust this recipe?

We could add more apples. But how many will we need?

Why would we not want to add more applesauce? (*The texture and final product of the baked good would change*)

Should we just change the contribution to 1/4 cup?

So how do we fix it? Because the contribution is both apples and applesauce, it might take a bit of trial and error to get to 1/2 cup Fruit because we can't just look at the apples in the Food Buying Guide.




Select Creditable Ingredient	Recipe Notes	Meats/MA	Vegetables	Fruits	Grains - Method A	Grains - Method B	Grains - Method C	Meal Pattern Contribution
Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Additional Information	Quantity of Ingredient	Preparation Yield (if applicable)	Calculated Quantity to Purchase	
Apples, fresh 125-138 count Whole, Includes USDA Foods	Pound	6.80	1/4 cup cored, peeled, cooked, unsweetened fruit	1 lb AP = 0.78 lb (about 1-3/4 cups) cored, peeled, cooked apples; 1 lb AP = 0.78 lb (about 2-3/4 cups) ready-to-serve or -cook raw, cored, peeled apples	8.0	0.7800		
Applesauce, canned Smooth or Chunky, Includes USDA Foods	No. 10 Can (108 oz)	47.80	1/4 cup fruit	1 No. 10 can = about 12 cups applesauce	0.3	0.0000	0.3330	

Go back to the Fruits tab.

We started with 5.3 lbs. of EP apples in column 4. Let's bump that up to 8 lbs. Leave the 78% yield factor the same.

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Additional Information	Quantity of Ingredient	Preparation Yield (if applicable)	Calculated Quantity to Purchase
Apples, fresh 125-138 count Whole. Includes USDA Foods	Pound	6.80	1/4 cup cored, peeled, cooked, unsweetened fruit	1 lb AP = 0.78 lb (about 1-3/4 cups) cored, peeled, cooked apples; 1 lb AP = 0.78 lb (about 2-3/4 cups) ready-to-serve or -cook raw, cored, peeled apples	8.0	0.7800	
Applesauce, canned Smooth or Chunky. Includes USDA Foods	No. 10 Can (108 oz)	47.80	1/4 cup fruit	1 No. 10 can = about 12 cups applesauce	0.3330	0.0000	0.3330

Select Creditable Ingredient	Recipe Notes	Meats/MA	Vegetables	Fruits	Grains - Method A	Grains - Method B	Grains - Method C	Meal Pattern Contribution
 <span>Fruits <sup>3</sup></span>		<h2>Apples &amp; Applesauce</h2>						 <span>1/4 cup</span>
 <span>Grains ( Method C )</span>								2.25 oz eq




Now go to the Meal Pattern Contribution tab. Did it change to 1/2 cup? *NO*

Select Creditable Ingredient	Recipe Notes	Meats/MA	Vegetables	Fruits	Grains - Method A	Grains - Method B	Grains - Method C	Meal Pattern Contribution
Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Additional Information	Quantity of Ingredient	Preparation Yield (if applicable)	Calculated Quantity to Purchase	
Apples, fresh 125-138 count Whole, Includes USDA Foods	Pound	6.80	1/4 cup cored, peeled, cooked, unsweetened fruit	1 lb AP = 0.78 lb (about 1-3/4 cups) cored, peeled, cooked apples; 1 lb AP = 0.78 lb (about 2-3/4 cups) ready-to-serve or -cook raw, cored, peeled apples	10.0	0.7800		
Applesauce, canned Smooth or Chunky, Includes USDA Foods	No. 10 Can (108 oz)	47.60	1/4 cup fruit	1 No. 10 can = about 12 cups applesauce	0.3	0.0000	0.3330	

Go back to the Fruits tab. Let's try 10 lbs. in column 4.

Select Creditable Ingredient	Recipe Notes	Meats/MA	Vegetables	Fruits	Grains - Method A	Grains - Method B	Grains - Method C	Meal Pattern Contribution
Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Additional Information	Quantity of Ingredient	Preparation Yield (if applicable)	Calculated Quantity to Purchase	
Apples, fresh 125-138 count Whole, Includes USDA Foods	Pound	6.80	1/4 cup cored, peeled, cooked, unsweetened fruit	1 lb AP = 0.78 lb (about 1-3/4 cups) cored, peeled, cooked apples; 1 lb AP = 0.78 lb (about 2-3/4 cups) ready-to-serve or -cook raw, cored, peeled apples	10.0	0.7800	12.50	
Applesauce, canned Smooth or Chunky, Includes USDA Foods	No. 10 Can (108 oz)	47.80	1/4 cup fruit	1 No. 10 can = about 12 cups applesauce	0.3330	0.0000	0.3330	

Select Creditable Ingredient	Recipe Notes	Meats/MA	Vegetables	Fruits	Grains - Method A	Grains - Method B	Grains - Method C	Meal Pattern Contribution
 Fruits <sup>3</sup>							 1/2 cup	
 Grains ( Method C )							2.25 oz eq	

Now go to the Meal Pattern Contribution tab. Did it change to 1/2 cup? *YES*

You can start working backwards to see how much you can decrease your apples to get the same 1/2 cup serving size.

I figured out that we will need 9.75 lbs. of prepared apples to get 1/2 cup of Fruit total for the meal pattern contribution. This resulted in 12.5 lbs. As Purchased.

Food As Purchased (AP)	Purchase Unit	Servings per Purchase Unit, Edible Portion (EP)	Serving Size per Meal Contribution	Additional Information	Quantity of Ingredient	Preparation Yield (if applicable)	Calculated Quantity to Purchase
Apples, fresh 125-138 count Whole, Includes USDA Foods	Pound	6.80	1/4 cup cored, peeled, cooked, unsweetened fruit	1 lb AP = 0.78 lb (about 1-3/4 cups) cored, peeled, cooked apples; 1 lb AP = 0.78 lb (about 2-3/4 cups) ready-to-serve or -cook raw, cored, peeled apples	5.3040	0.7800	
Applesauce, canned Smooth or Chunky, Includes USDA Foods	No. 10 Can (108 oz)	47.80	1/4 cup fruit	1 No. 10 can = about 12 cups applesauce	0.3	0.0000	0.3330

? Does it make sense to double the apples for this recipe?

👍 Change the Fruit contribution of the recipe

You must save the RAW prior to printing it. Use the "Back to RAW List" button and select from the RAW list. Click the PDF link to generate a copy to print or save.



Save Back to RAW List

Does it make sense to almost double the amount of apples for this recipe? *(NO!)*

So, I would change the Fruit contribution on the recipe and preserve the integrity of the recipe.

Make sure you change your column 4 amount back to the original 5.3040, and don't forget to save!



## Fluffy Apple Cinnamon Oat Breakfast Bar

Serving Size: 1 bar  
Yield: 50 servings

### Contribution to Meal Pattern

- 2.25 oz. eq. Grain
- ¼ cup Fruit



### Creditable Ingredients

- Apples
- Applesauce
- Oats
- Flour

So, let's look at the Fluffy Apple Cinnamon Oat Breakfast Bar recipe again.

This recipe creator chose to only count 2 oz. eq. of Grain towards the meal pattern. What are some reasons for doing that?

Remember, you can count less than the RAW calculations, but you cannot count more.

How about the Fruits contribution. The original recipe states the recipe credits for ½ cup of fruit. But as we have just learned, it only counts for ¼ cup. This means you will have to serve additional fruit with this breakfast bar to claim a reimbursable meal.



Give me a thumbs up if you learned something new about the Recipe Analysis Workbook. Hooray! This is not easy work, but it is important to develop recipes that accurately contribute to your meal pattern.

Now we are going to practice for \_\_\_\_\_ minutes (until 10:50am) with your own recipes. Stephen and I will be walking around to help with any questions you may have. The more you practice, the better you get at it.

Let's talk about how everyone did. Does anyone want to share any challenges they had?

Let's take a quick break and meet back here at 11:00.

# Resources and Q & A

USDA Food Buying Guide and Recipe Analysis Workbook

- <https://foodbuyingguide.fns.usda.gov/>

USDA Whole Grain Resource

- <https://fns-prod.azureedge.us/sites/default/files/resource-files/tn-whole-grain-resource.pdf>

USDA Video – How to Maximize the Exhibit A Grains Tool

- <https://www.fns.usda.gov/tn/how-maximize-exhibit-grains-tool>

USDA Crediting Grains in Child Nutrition Programs Tip Sheets

- <https://www.fns.usda.gov/tn/cn/crediting-tipsheets/grains>

CACFP Crediting Handbook - Grains

- <https://www.cacfp.org/assets/pdf/FNS+Crediting+Handbook+-+Grains+cacfp.org/>

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Here are a few of the resources we mentioned today.

We will also have these links available on the post session survey.

# Menu Planning for Scratch Cooking

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Today, we have talked about:  
Recipe brainstorming,  
How to create a standardized recipe,  
How purchase the right amount of food for the recipe,  
And how to credit the recipe towards your meal pattern.

Now let's talk about how to get those recipes on to your menu.

*(photograph by Amy Richardson, 2025 Frontline Culinary Workshop, Alleghany Highlands)*

# WHY SCRATCH COOK?



Radford City Public Schools

- ✓ Better control of ingredients
- ✓ Cost effective
- ✓ Fresh ingredients
- ✓ Tastes better
- ✓ Staff development

A quick show of hands. How many of you cook at home?

Just like cooking at home, by scratch cooking at school,  
You have better control of the ingredients

This means, you can make recipes that are lower in sodium or sugar  
and are not highly processed.

Scratch cooking is cost effective.

Ingredients cost less than finished products.

Ingredients are more versatile and can be used in multiple different  
menu items. Reduce the skus!

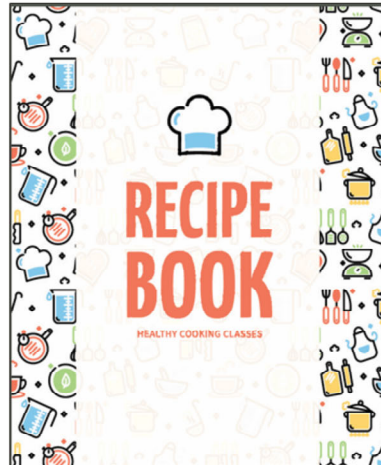
You can use fresh, local ingredients that change with the season.

Fresh-made food just tastes better!

Scratch cooking can help with staff development and retention.

This is example of using a tilt skillet, Radford City was making sloppy joes  
using raw ground beef.

# START WITH FOOD PLANNING



A common theme we hear from schools, it that there is no time to scratch cook. Here are some ways you can streamline your operations to free up time for scratch cooking. Start by evaluating your cycle menu. How many of you have a cycle menu?

A cycle menu is a menu that repeats, which makes for efficient planning, procuring and training.

I like having a 5-week cycle menu because it allows for different food pairings and incorporating more seasonal items.

If you have a full-year cycle menu, you will know exactly how many times an item will be on the menu.

Your staff will get really good at making the recipes because they repeat in a consistent way.

You will save time forecasting for the next year because you'll have trackable numbers to plan from.

Are you using standardized recipes?

Your standardized recipe is the blueprint for everything in your kitchen.

Even your heat and serve items need to have a standardized recipe, because it tells you not only how to make the food, but it dictates how much food to order and how much time it takes to make the food, which will help determine staffing.

Having well-written standardized recipes are an essential part of transitioning to scratch cooking.

Next, is your procurement aligned with the menu?

Have you forecasted the correct amounts?

Are you using your USDA dollars appropriately for your menu?

Are you planning menu items around seasonal food?

Are you using the USDA Food Buying Guide to calculate usages to help with recipe forecasting?

These are all questions you need to ask during the planning phase.

## TRANSITIONING TO SCRATCH COOKING



How many of you have heard of the scratch cooking continuum?

The concept is where you take one menu item and improve it by either replacing the ingredient or by changing the preparation method.

Here you see chicken in three phases: heat & serve chicken nuggets, bone-in precooked chicken thighs, and raw chicken drumsticks that are ready for seasoning and cooking.

In each phase, the ingredient has been replaced by a less processed ingredient.



Let's walk through some ideas of how to transition from processed menu items to freshly prepared menu items.

You can also simply change the preparation method of an ingredient to achieve a scratch prepared item.

For example: You may be ordering individually bagged baby carrots. Those are expensive, right?

You could order bulk bagged baby carrots and let the students serve themselves with a spoodle. Now you've reduced your cost a little bit.

After that adjustment phase, you can purchase whole carrots and either cut them into sticks or shred them with a food processor. Even better yet, you buy the carrots from a local farm!

This example might not show up as a menu change, because you are still just listing carrots, but students will certainly notice the better taste of the fresh carrots.

Plus, you will save money on the carrots and reduce the environmental impact from the individual plastic packaging.

# ACTION STEPS FOR COOKING FROM SCRATCH

- Identify menu items to transition
- Create standardized recipes
- Conduct taste tests
- Add more fresh produce
- Plan your procurement
- Train your staff
- Market new recipes



Prince Edward County Public Schools

The scratch cooking continuum is not meant to overwhelm you. It's best to evaluate your operation and make forward progress.

Start by identifying menu items to transition.

Can you take a Heat & Serve product and make your own version?

The quesadillas you see in this picture are a great example of transitioning from pre-packaged quesadillas to scratch made. It's just a tortilla and cheese.

But now what you've done, is opened up the possibilities of what else that quesadilla could be. In addition to just cheese, you could also serve chicken & green chili quesadillas, or seasoned beef quesadillas, or black bean and corn quesadillas.

Instead of being locked into a vendor sku for one processed item, you're buying versatile ingredients that can be used across menu items.

We have already talked about how to create standardized recipes and conduct taste tests.

Consider plant forward menu items. The more plants you incorporate, especially FRESH local plants, the more your menu will look and feel like a scratch menu.

Pilot a salad bar. This could be a stand-alone salad bar, a cold well or chill top, or even just a table with bulk fresh fruit and veggies that students can choose.

Plan your procurement. Start thinking about buying ingredients instead of the finished product. Decide early on what processed items you are going to keep, and what items you are going to move through the scratch cooking continuum and plan to decrease the amount you purchase.

You will also need to train your staff on how to prepare the new scratch items including how to follow a recipe, equipment training and production scheduling.

And lastly, you need to market your new amazing recipes to your students, parents and the community. If you've switched from a processed menu item to a made-with-love scratch menu item...shout it from the rooftops!

# SMALL CHANGES YOU CAN START NOW!

- 👍 Offer more fresh fruit than canned
- 👍 Self-service of fruits and vegetables
- 👍 Cut back on pre-packaged items
- 👍 Limit single serve condiments
- 👍 Use spices and herbs to enhance your current recipes.



Rockingham County Public Schools

So what can you do now? These small changes can lead to an immediate impact on your nutrition program.

When you make the switch from canned fruit to fresh fruit, your students will notice the difference and your staff will too.

If you still want to offer both, make canned fruit self-serve, not cupped by a staff member.

You can select one recipe to move through the scratch cooking continuum, that will reduce your use of pre-packaged items and allow you to make the shift from products to ingredients. This may allow you to start sourcing and buying ingredients in bulk that can be used across multiple recipes.

Limit single serve condiments and move toward bulk condiments. Better yet, making your own! Scratch-made dressings are an easy and financially impactful way to make an immediate change.

Use spices, herbs and salt-free blends to enhance your current recipes. This

is the spice shelf at one of the schools in Rockingham County.



Now we're going to deep-dive into some menus! Let's start with a little menu planning activity to identify what items can be improved.

If you didn't bring your division menus, we have a few sample menus to share. Feel free to buddy up with someone sitting next to you.

# MENU EVALUATION FOR SCRATCH

	3	4	5	6	7
<b>HARVEST OF THE MONTH</b> Butternut Squash	Choose 1 Cheeseburgers  Pizza Box  Chef Salad w/ dressing  Choose 2 French Fries Steamed Broccoli Salad Bar w/ dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 Chicken Philly Cheese Sub  Ham & Cheese Wrap box  Pizza Box Choose 2 Pan Fried Onions and Bell Peppers Baked Sweet Potato Salad Bar w/ dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 BBQ Pulled Pork on Bun  Ham & Cheese Wrap box  Pizza Box  Choose 2 Salad Bar w/ dressing Baked Beans Coleslaw Choose 2 Fresh Fruit Chilled Fruit	Choose 1 Scrambled Eggs W/ Dutch Waffle  Asian Chef Salad Pizza Box Choose 2 Roasted Breakfast Potatoes Salad Bar w/ dressing Choose 2 Apple Crisp Fresh Fruit	Choose 1 Pizza  Chef Salad w/ Pita Chips  Choose 2 Sweet Potato Wedges Salad Bar w/dressing  Choose 2 Fresh Fruit Chilled Fruit
	10	11	12	13	14
We buy Local Beef	Choose 1 Deputy Lee's Sloppy Joes * Tomato Soup w/ Flatbread Grilled Cheese Chicken Wrap Box Pizza Box  Choose 2 Glazed Carrots Steamed Broccoli Salad Bar w/dressing Choose 2 Fruit Juice Chilled Fruit	Choose 1 Ramen Bowl with Chicken & Vegetable Potstickers Ham and Cheese Wrap Pizza Box  Choose 2 Ramen Toppings Collard Greens Salad Bar w/Dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 BBQ Baked Chicken Pizza Box Chef Salad w/ Pita Chips  Choose 2 Potato Wedges Coleslaw Tangy Baked Beans Salad Bar w/ Dressing Choose 2 Fruit Juice Chilled Fruit	Choose 1 Penne Pasta Chicken Alfredo w/ Garlic Knot Baked Spaghetti w/ Garlic Knot Pizza Box Ham and Cheese Wrap Choose 2 Roasted Vegetables Savory Pinto Beans Salad Bar w/ dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 Pizza Chef Salad w/ Pita Chips  Choose 2 Sweet Potato Wedges Roasted Corn Salad Bar w/dressing  Choose 2 Fresh Fruit Chilled Fruit  Valentines Day
	17	18	19	20	21

Let's look at this menu.

It's a balanced menu with some heat & serve options, as well as some speed scratch, and full scratch items.

# MENU EVALUATION FOR SCRATCH

	3	4	5	6	7
<b>HARVEST OF THE MONTH</b> Butternut Squash	Choose 1 Cheeseburgers Pizza Box Chef Salad w/ dressing Choose 2 French Fries Steamed Broccoli Salad Bar w/ dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 Chicken Philly Cheese Sub Ham & Cheese Wrap box Pizza Box Choose 2 Pan Fried Onions and Bell Peppers Baked Sweet Potato Salad Bar w/ dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 BBQ Pulled Pork on Bun Ham & Cheese Wrap box Pizza Box Choose 2 Salad Bar w/ dressing Baked Beans Coleslaw Choose 2 Fresh Fruit Chilled Fruit	Choose 1 Scrambled Eggs W/ Dutch Waffle Asian Chef Salad Pizza Box Choose 2 Roasted Breakfast Potatoes Salad Bar w/ dressing Choose 2 Apple Crisp Fresh Fruit	Choose 1 Pizza Chef Salad w/ Pita Chips Choose 2 Sweet Potato Wedges Salad Bar w/dressing Choose 2 Fresh Fruit Chilled Fruit
We buy Local Beef	Choose 1 Deputy Lee's Sloppy Joes * Tomato Soup w/ Flatbread Grilled Cheese Chicken Wrap Box Pizza Box Choose 2 Glazed Carrots Steamed Broccoli Salad Bar w/dressing Choose 2 Fruit Juice Chilled Fruit	Choose 1 Ramen Bowl with Chicken & Vegetable Potstickers Ham and Cheese Wrap Pizza Box Choose 2 Ramen Toppings Collard Greens Salad Bar w/Dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 BBQ Baked Chicken Pizza Box Chef Salad w/ Pita Chips Choose 2 Potato Wedges Coleslaw Tangy Baked Beans Salad Bar w/ Dressing Choose 2 Fruit Juice Chilled Fruit	Choose 1 Penne Pasta Chicken Alfredo w/ Garlic Knot Baked Spaghetti w/ Garlic Knot Pizza Box Ham and Cheese Wrap Choose 2 Roasted Vegetables Savory Pinto Beans Salad Bar w/ dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 Pizza Chef Salad w/ Pita Chips Choose 2 Sweet Potato Wedges Roasted Corn Salad Bar w/dressing Choose 2 Fresh Fruit Chilled Fruit Valentines Day
	17	18	19	20	21

There is a place for heat & serve or packaged items on your menu. These could be items that don't make financial sense to try to reproduce due to their ingredients or preparation method.

I like to use bread as an example. Bread, burger buns and dinner rolls are one of the hardest items to produce in your kitchen. It takes a lot of time, specialized equipment and the right environment to produce good, consistent results and it's still just a grain equivalent that isn't that nutritionally different than purchased bread. In Virginia, we have such a wide variety of factors that would greatly affect bread making, like elevation, humidity, and temperature, so I recommend not making your own bread and focusing your time and energy into scratch cooking other menu items.

Here I've highlighted Chicken & Vegetable Potstickers. You are probably not going to produce your own potstickers. What this division did was make them part of a speed scratch Ramen Bowl. They added fresh vegetable ramen toppings to the self-serve salad bar, which offers students a choice in building their own lunch.

Food bars and build-a-bowls are an excellent way to transition menu items to scratch.

# MENU EVALUATION FOR SCRATCH

	3	4	5	6	7
<b>HARVEST OF THE MONTH</b> Butternut Squash	Choose 1 Cheeseburgers Pizza Box Chef Salad w/ dressing Choose 2 French Fries Steamed Broccoli Salad Bar w/ dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 Chicken Philly Cheese Sub Ham & Cheese Wrap box Pizza Box Choose 2 Pan Fried Onions and Bell Peppers Baked Sweet Potato Salad Bar w/ dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 BBQ Pulled Pork on Bun Ham & Cheese Wrap box Pizza Box Choose 2 Salad Bar w/ dressing Baked Beans Coleslaw Choose 2 Fresh Fruit Chilled Fruit	Choose 1 Scrambled Eggs W/ Dutch Waffle Asian Chef Salad Pizza Box Choose 2 Roasted Breakfast Potatoes Salad Bar w/ dressing Choose 2 Apple Crisp Fresh Fruit	Choose 1 Pizza Chef Salad w/ Pita Chips Choose 2 Sweet Potato Wedges Salad Bar w/dressing Choose 2 Fresh Fruit Chilled Fruit
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We buy Local Beef	Choose 1 Deputy Lee's Sloppy Joes * Tomato Soup w/ Flatbread Grilled Cheese Chicken Wrap Box Pizza Box Choose 2 Glazed Carrots Steamed Broccoli Salad Bar w/dressing Choose 2 Fruit Juice Chilled Fruit	Choose 1 Ramen Bowl with Chicken & Vegetable Potstickers Ham and Cheese Wrap Pizza Box Choose 2 Ramen Toppings Collard Greens Salad Bar w/Dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 BBQ Baked Chicken Pizza Box Chef Salad w/ Pita Chips Choose 2 Potato Wedges Coleslaw Tangy Baked Beans Salad Bar w/ Dressing Choose 2 Fruit Juice Chilled Fruit	Choose 1 Penne Pasta Chicken Alfredo w/ Garlic Knot Baked Spaghetti w/ Garlic Knot Pizza Box Ham and Cheese Wrap Choose 2 Roasted Vegetables Savory Pinto Beans Salad Bar w/ dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 Pizza Chef Salad w/ Pita Chips Choose 2 Sweet Potato Wedges Roasted Corn Salad Bar w/dressing Choose 2 Fresh Fruit Chilled Fruit Valentines Day
	17	18	19	20	21

Here's a great example of a menu item that this director moved from heat & serve to scratch cooked.

The menu item is the same, but they moved from USDA pre-cooked beef crumbles to local beef produced on a farm in their county. They trained their staff to use the tilt skillet to brown the beef, which they do in large batches and freeze...just like beef crumbles.

They switched from a bagged spaghetti sauce to a recipe using canned tomatoes and spices. This also allows her to incorporate fresh tomatoes and other vegetables when they are in season.

# MENU EVALUATION FOR SCRATCH

	3	4	5	6	7
<b>HARVEST OF THE MONTH</b> Butternut Squash	Choose 1 Cheeseburgers Pizza Box Chef Salad w/ dressing	Choose 1 Chicken Philly Cheese Sub Ham & Cheese Wrap box Pizza Box Choose 2 Pan Fried Onions and Bell Peppers Baked Sweet Potato Salad Bar w/ dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 BBQ Pulled Pork on Bun Ham & Cheese Wrap box Pizza Box Choose 2 Salad Bar w/ dressing Baked Beans Coleslaw Choose 2 Fresh Fruit Chilled Fruit	Choose 1 Scrambled Eggs W/ Dutch Waffle Asian Chef Salad Pizza Box Choose 2 Roasted Breakfast Potatoes Salad Bar w/ dressing Choose 2 Apple Crisp Fresh Fruit	Choose 1 Pizza Chef Salad w/ Pita Chips Choose 2 Sweet Potato Wedges Salad Bar w/dressing Choose 2 Fresh Fruit Chilled Fruit
	Choose 2 French Fries Steamed Broccoli Salad Bar w/ dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 2 Ramen Toppings Collard Greens Salad Bar w/Dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 2 Potato Wedges Coleslaw Tangy Baked Beans Salad Bar w/ Dressing Choose 2 Fruit Juice Chilled Fruit	Choose 1 Penne Pasta Chicken Alfredo w/ Garlic Knot Baked Spaghetti w/ Garlic Knot Pizza Box Ham and Cheese Wrap Choose 2 Roasted Vegetables Savory Pinto Beans Salad Bar w/ dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 Pizza Chef Salad w/ Pita Chips Choose 2 Sweet Potato Wedges Roasted Corn Salad Bar w/dressing Choose 2 Fresh Fruit Chilled Fruit Valentines Day
	10	11	12	13	14
We buy Local Beef	Choose 1 Deputy Lee's Sloppy Joes * Tomato Soup w/ Flatbread Grilled Cheese Chicken Wrap Box Pizza Box Choose 2 Glazed Carrots Steamed Broccoli Salad Bar w/dressing Choose 2 Fruit Juice Chilled Fruit	Choose 1 Ramen Bowl with Chicken & Vegetable Potstickers Ham and Cheese Wrap Pizza Box Choose 2 Ramen Toppings Collard Greens Salad Bar w/Dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 BBQ Baked Chicken Pizza Box Chef Salad w/ Pita Chips Choose 2 Potato Wedges Coleslaw Tangy Baked Beans Salad Bar w/ Dressing Choose 2 Fruit Juice Chilled Fruit	Choose 1 Penne Pasta Chicken Alfredo w/ Garlic Knot Baked Spaghetti w/ Garlic Knot Pizza Box Ham and Cheese Wrap Choose 2 Roasted Vegetables Savory Pinto Beans Salad Bar w/ dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 Pizza Chef Salad w/ Pita Chips Choose 2 Sweet Potato Wedges Roasted Corn Salad Bar w/dressing Choose 2 Fresh Fruit Chilled Fruit Valentines Day
	17	18	19	20	21

You may be looking at this menu at wondering what “qualifies” as scratch cooking. What’s the easiest way to introduce scratch?  
**FRUITS AND VEGETABLES!**

They make all their salads fresh every morning. They switched from dressing packets to bulk purchased dressing and now are introducing scratch-made Ranch and Italian dressing.

They also stopped cupping fruit and put it on the cold line for self-service. The director reported that the staff was overjoyed because it saved them so much time every day to focus on other areas of the kitchen.

With that time saved, she was able to introduce a new scratch recipe, the Deputy Lee’s Sloppy Joes, and staff did not complain about it.

So the lesson is: Before you introduce a scratch recipe, look at the time it will take to make, and figure out how to save that time somewhere else. Offering fruits and veggies in bulk, is a great way to save time.

# MENU EVALUATION FOR SCRATCH

	3	4	5	6	7
<b>HARVEST OF THE MONTH</b> Butternut Squash	Choose 1 Cheeseburgers Pizza Box Chef Salad w/ dressing Choose 2 French Fries Steamed Broccoli Salad Bar w/ dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 Chicken Philly Cheese Sub Ham & Cheese Wrap box Pizza Box Choose 2 Pan Fried Onions and Bell Peppers Baked Sweet Potato Salad Bar w/ dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 BBQ Pulled Pork on Bun Ham & Cheese Wrap box Pizza Box Choose 2 Salad Bar w/ dressing Baked Beans Coleslaw Choose 2 Fresh Fruit Chilled Fruit	Choose 1 Scrambled Eggs W/ Dutch Waffle Asian Chef Salad Pizza Box Choose 2 Roasted Breakfast Potatoes Salad Bar w/ dressing Choose 2 Apple Crisp Fresh Fruit	Choose 1 Pizza Chef Salad w/ Pita Chips Choose 2 Sweet Potato Wedges Salad Bar w/dressing Choose 2 Fresh Fruit Chilled Fruit
We buy Local Beef	Choose 1 Deputy Lee's Sloppy Joes * Tomato Soup w/ Flatbread Grilled Cheese Chicken Wrap Box Pizza Box Choose 2 Glazed Carrots Steamed Broccoli Salad Bar w/dressing Choose 2 Fruit Juice Chilled Fruit	Choose 1 Ramen Bowl with Chicken & Vegetable Potstickers Ham and Cheese Wrap Pizza Box Choose 2 Ramen Toppings Collard Greens Salad Bar w/Dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 BBQ Baked Chicken Pizza Box Chef Salad w/ Pita Chips Choose 2 Potato Wedges Coleslaw Tangy Baked Beans Salad Bar w/ Dressing Choose 2 Fruit Juice Chilled Fruit	Choose 1 Penne Pasta Chicken Alfredo w/ Garlic Knot Baked Spaghetti w/ Garlic Knot Pizza Box Ham and Cheese Wrap Choose 2 Roasted Vegetables Savory Pinto Beans Salad Bar w/ dressing Choose 2 Fresh Fruit Chilled Fruit	Choose 1 Pizza Chef Salad w/ Pita Chips Choose 2 Sweet Potato Wedges Roasted Corn Salad Bar w/dressing Choose 2 Fresh Fruit Chilled Fruit Valentines Day
	17	18	19	20	21

What are some ways you can move these main entrées along the scratch cooking continuum?

- Chicken Philly cheese sub-
- BBQ pulled pork on a bun-
- BBQ baked chicken-
- Penne pasta chicken alfredo-

# MENU



Which Heat & Serve menu items can move to Speed Scratch?



How many processed menu items can move to freshly prepared?



What recipes will you need?



What staff training will you need?



Now let's look at your division menus and identify some items on your menu for improvement.

Which Heat & Serve menu items can move to Speed Scratch?

Consider entrees, side dishes, sauces, breakfast entrees.

How many processed menu items can move to freshly prepared?

Can you serve fresh raw broccoli instead of frozen cooked broccoli?

Can you make ranch dressing and serve it in squirt bottles instead of buying little ranch packets?

What recipes will you need?

Do you need a scratch recipe to keep the menu item the same? or

Do you want to switch the menu item to be something new?

Can you incorporate any of the recipes you brainstormed from earlier today?

What staff training will you need to be able to make this recipe?

Culinary skills?

Equipment training?

Production efficiency training?

Another question to consider, is a timeline.

What can you realistically accomplish next year?

Start small and build.



Small group sharing:

Name one menu item you are going to transition to scratch cooking.

- What are some of your menu goals for the upcoming year?

What recipes do you need to accomplish this goal?

Large group sharing:

Is anyone willing to share some of their menu and recipe goals for the upcoming school year?

# Resources

## Food Buying Guide for Child Nutrition Programs

- USDA Food and Nutrition Service  
(<https://foodbuyingguide.fns.usda.gov>)

## Menu Planning

- USDA Menu Planner for School Meals  
(<https://www.fns.usda.gov/tn/menu-planner-school-meals>)
- CICN Menu Planning Tools  
(<https://theicn.org/cicn/menu-plannig-tools/>)

Yes! ICN misspelled their link!



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As promised, here is a list of the resources we talked about today.

The USDA Food Buying Guide is a valuable tool for all operators, and it's located on the USDA website.

USDA also has a Menu Planning toolkit on their website.

In our session survey, we will have a full list of resource links.



## SESSION RECAP

- USDA Recipe Standardization Guide
- Food Buying Guide for Child Nutrition Programs
- Calculating Meal Pattern Contributions in the Recipe Analysis Workbook
- Menu Planning for Scratch Cooking

### ***Hand out post-survey***

To recap, today we learned about:

The USDA Recipe Standardization Guide, including the structure and elements that should be included in a well written recipe.

We learned about the factors that affect menu planning,  
We practiced scaling a recipe using the factor method, and  
We brainstormed some recipes to use in our kitchens.

Next, we looked at the Food Buying Guide for Child Nutrition Programs.

We learned the different features of the FBG, and how to search for creditable food items,

We practiced how to forecast food items for the week, month and year, and  
We created a fruit and veggie production cheat sheet using serving quantities from the Food Buying Guide.

Then we took a deep-dive into the Recipe Analysis Workbook.

We learned how to create a RAW for a scratch recipe,  
We practiced calculating foods from the meat/meat alternates, vegetables, grains and fruit components, and

We created a new Recipe Analysis Workbook for one of our own recipes.

And finally, explored how to incorporate more scratch recipes into your menu.

We learned about the importance of having a cycle menu,

We practiced identifying menu items that can move along the scratch cooking continuum, and  
We used our own menus to plan which items to transition to scratch next year.

## Questions?



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CNP Lead Specialist

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Thank you for joining us today! We're happy to answer your questions.

- We also have a quick survey for you, if you wouldn't mind taking a minute to fill it out. We would love to hear about the recipes you would like to develop and your training needs in recipe development, the food buying guide and the recipe analysis workbook.

## This training satisfies the following USDA Professional Standards



1000

4.0 hours

Key area: 1100  
Menu Planning



2000



3000



4000

**TOTAL HOURS: 4.0**

This session provides the following USDA Professional Standards

4.0 hours Nutrition – Key area: 1100 Menu Planning

1110- Plan menus that meet USDA nutrition requirements for reimbursable meals, including calculating meal components.

1120- Plan cycle menus that meet all rules. Consider cost, equipment, foods available, storage, staffing, student tastes, and promotional events.

1140- Write standardized recipes and use Food Buying Guide.

1150- Analyze menus for school meal pattern requirements.

1170- Plan for effective use of USDA Foods.

This training is logged in USDA Professional Standards Training and Tracking Tool as: SNA-VA 2026: DEVELOPING STANDARDIZED RECIPES FOR PROGRAM SUCCESS



SNA-VA conference session survey