



CCEI 530A: Nutrition I: The USDA Food Program and Meal Planning Handout

Welcome to CCEI 530A

In this course, you will gain a greater understanding of the requirements of the USDA Food Program and meal planning in an early childhood education setting.

Objectives

By taking notes on the handout and successfully answering assessment questions, participants will meet the following objectives as a result of taking this course:

- Identify the reasons that nutrition is important in an early childhood education setting
- Identify the purpose of the Child and Adult Care Food Program (CACFP)
- List the effects of improper nutrition on children's growth and development
- Identify creditable and non-creditable foods in each food group
- Define meal patterns, proper meal components, and serving sizes in the CACFP
- Identify important strategies for planning nutritional meals

References:

- Meal Pattern Requirements and other program info, (2016) Child and Adult Care Food Program. <https://www.fns.usda.gov/cacfp/meals-and-snacks>
- National Resource Center for Health and Safety in Child Care and Early Education. (2015). *Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care Programs*, 3rd edition American Academy of Pediatrics, Elk Grove Village, IL.
- Herr, J. (2016). *Working with Young Children*. 8th Edition. The Goodheart-Wilcox Company, Inc.
- Sciarrino, C. and Siegfried, J. (2009). *Reaching & Relating*. HighRead Learning
- Martin, Jody (Ed.). (2011). *Preschool Health and Safety Matters*. Gryphon House.
- <http://www.choosemyplate.gov/> (2014)
- http://www.fns.usda.gov/sites/default/files/CACFP_creditinghandbook.pdf (2014)
- <http://www.fns.usda.gov/pressrelease/2016/fns-000616>

Course Notes:

Good nutrition is:

Improper nutrition in children may result in multiple side effects including:

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The prevalence of childhood obesity has _____ in the last 20 years.

Providing healthy meals in the child care setting is also a way to encourage children to:

The Child and Adult Care Food Program

The **Child and Adult Care Food Program (CACFP)** is:

In order to help programs meet these healthy nutrition standards, the CACFP created:

Foods that meet the nutritional guidelines are considered _____; those that do not are considered _____.

Meal Patterns of the Child and Adult Care Food Program

Food requirements are broken down into the following food groups, called **components**:

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Meal Requirements for Infants

The USDA recommends that only _____ be served to children under the age of 6 months.

It is recommended that solid food items be slowly introduced once infants reach _____ months of age.

Breakfast Meal Pattern for Infants

Lunch and Supper Meal Pattern for Infants

Snack Meal Pattern for Infants

Here are a few important notes about the foods served to infants:

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Meal Requirements for Older Children

This chart shows the number of recommended servings from each food group for each meal period for older children.

Meal	Grain	Vegetable	Fruit	Meat/Meat Alternate	Milk
Breakfast					
Lunch					
Supper					
Snack					

While the servings are the same for the age groups, _____ vary depending on a child's age.

Age groups for older children are broken down as such:

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Breakfast for Children Ages 1-18

Important notes about breakfast requirements:

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Breakfast cereals must contain no more than _____ of sugar per dry ounce.

Lunch and Supper for Children Ages 1-18

The same serving sizes are used for both lunch and supper. Both of these meals require a serving from _____ food groups.

Snacks for Children Ages 1-18

A snack is made up of _____ components.

Here are a few important notes to keep in mind when meal planning for older children:

Food Groups of the CACFP

Grains

Grains come in several forms:

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Food items in the grains group provide the following essential nutrients:

Creditable Grain Items

When serving grains, look for foods that are _____.

Following are some of the **creditable** grain foods:

- Bagels
- Biscuits
- Bread
- Cornbread
- Macaroni
- Muffins
- Oat Bran
- Rice
- Bread Sticks
- Bulgur
- Cereal
- English Muffins
- Pasta
- Pita Bread
- Pretzels
- Wheat germ

Non-Creditable Grain Items

The USDA considers these items **non-creditable** grains:

- Caramel corn
- Hominy
- Nut or seed meal or flour
- Popcorn¹
- Potato chips or shoe string potatoes
- Potato pancakes²
- Tapioca pudding

_____ are no longer considered as a creditable food source regardless of the type of grain used to make the product. This is due to the fact that these food items contain high amounts of sugar and saturated fats.

Items in this category include:

Fruit and Vegetable Groups

Foods from the fruits and vegetables group can provide a variety of nutrients including:

Creditable Fruits and Vegetables

Some of the **creditable** fruits and vegetables are listed below.

- Apples
- Bananas
- Salsa
- Broccoli
- Peppers
- Sweet potatoes
- Tomatoes
- Cranberries
- Leafy greens
- Cauliflower
- Olives
- Raisins
- Blueberries
- Asparagus

Full-strength (_____) fruit or vegetable juices are **creditable**. Juices should not contain:

Non-creditable Fruits and Vegetables

The following are from the **non-creditable** fruits and vegetables list.

- Sweetened frozen drinks (lemonade, limeade, etc.)
- Apple butter
- Barbecue sauce
- Fig bar cookies
- Fruit beverages or drinks (juice drinks, punches, cocktails, etc.)
- Fruit condiments (jam, jelly, nectar or preserves)
- Coconut
- Condiments (ketchup, mayonnaise and mustard)
- Corn syrup
- Dry spice mixes
- Fruit snacks (bars, roll-ups, etc.)
- Fruit flavored powders (Kool-Aid, etc.)
- Popsicles (not 100% juice)

Meat/Meat Alternate Group

_____ and _____ are two of the main nutrients provided by the **meat/meat alternate group**.

Some fat is necessary for brain development, vision, and the production of some hormones. However, it is best to avoid consuming too much _____ to reduce the risk of heart attack and certain types of cancer.

Cholesterol is:

Creditable Meats or Meat Alternates

There are many **creditable** foods from the meats/meat alternates group.

- Beans, canned or dry
- Canadian bacon
- Cottage cheese¹
- Cheese food and spread¹

- Canned or frozen food with meat (commercial beef stew, chili mac)
- Hot dogs
- Nuts²
- Peanut butter² or soy nut butter
- Processed meat and poultry products
- Cheese, natural¹ (American, cheddar, mozzarella)
- Whole eggs
- Sausage
- Tofu
- Fish or fish sticks

⁽¹⁾ Milk products such as cheese are meat alternates because they are high in protein.

⁽²⁾ Many centers have removed nuts and peanut butter from their offerings due to concerns about food allergies. Review your program's policies. State or local regulations may outlaw the use of peanuts altogether.

Yogurt should contain no more than _____ of sugar per 6 ounces.

Commercially prepared _____, when used as a recognizable meat substitute, is now a creditable meat alternate.

Non-creditable Meat or Meat Alternates

Non-creditable meat or meat alternates include:

- Acorns
- Bacon and imitation bacon products
- Cream cheese
- Chestnuts
- Chitterlings
- Coconuts
- Ham hocks
- Imitation seafood
- Macaroni and cheese (commercial)
- Meat sauce (commercial)
- Scrapple

Best practices to consider when incorporating meat and meal alternates into the menu:

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Fluid Milk Group

Milk provides:

Only _____ standards should be served:

- Children under the age of one should be served:
- Children between 1 and 2 years of age should be served:
- Once children turn 2 years of age:
- Flavored fat-free (skim) milk can be served to children over the age of _____ but it should have no more than _____ of sugar per 8 fluid ounces.

Non-dairy beverages may be served in place of cow's milk when a child has a:

Meal Planning

In addition to remembering the required food group components and serving sizes when planning meals, you also need to consider:

Nutrients

Tips for Making Sure You Get the Right Nutrients

- 1) Read food labels:
- 2) Read ingredients
- 3) Research:

In addition to providing children with nutritious foods, mealtimes provide a great educational opportunity in the early childhood classroom.

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Variety

The USDA created a list of recommendations to consider when menu planning.

- **Strive for balance** –
- **Emphasize variety** –
- **Add contrast** –
- **Think about color** –
- **Consider eye appeal** –

Children's Preferences

Serving sizes for some food items may need to be broken up for younger children to prevent:

Foods that may be choking hazards for young children include:

The potential for choking can be reduced by:

Meal Planning Activity

Let's Plan a Meal!

Now that you know the parts of a creditable meal according to CACFP guidelines, let's do some menu planning.

Directions:

1. You will be planning two meals (breakfast and lunch) and two snacks.
2. Use the list of foods on the next slide to complete this activity.
3. Write your day's menu on the form provided on your handout or on a separate piece of paper.

Note: Milk is the only item that may be used more than once, and you may have some extra food items. ***Non-creditable items should not be used.***

<input type="checkbox"/> Apple slices	<input type="checkbox"/> Chicken fillets	<input type="checkbox"/> Sweet potato wedges
<input type="checkbox"/> Vanilla yogurt	<input type="checkbox"/> Cookies	<input type="checkbox"/> Steamed Broccoli
<input type="checkbox"/> Watermelon squares	<input type="checkbox"/> Milk	<input type="checkbox"/> Whole Egg
<input type="checkbox"/> Bran muffin	<input type="checkbox"/> Roll	<input type="checkbox"/> Dried coconut
<input type="checkbox"/> Pancakes	<input type="checkbox"/> Sausage	<input type="checkbox"/> Whole grain crackers
<input type="checkbox"/> Bacon	<input type="checkbox"/> Fruit Roll-up	<input type="checkbox"/> Green beans
<input type="checkbox"/> Cantaloupe	<input type="checkbox"/> Cucumber slices	<input type="checkbox"/> Tuna salad
<input type="checkbox"/> Cheese cubes	<input type="checkbox"/> Mandarin oranges	<input type="checkbox"/> Blueberries

Day 1	
Breakfast: 3 components	
AM snack: 2 components	
Lunch: 5 components	
PM snack: 2 components	
Day 2	
Breakfast: 3 components	
AM snack: 2 components	
Lunch: 5 components	
PM snack: 2 components	

Resources to help with meal and menu planning can be found at the CACFP website. The website provides recipes as well as a [sample menu](#) that can be used by early learning programs.

The USDA also provides many resources:

- [Child and Adult Care Food Program Meal Pattern Revision: Best Practices](#)
- [CACFP Meal Pattern Training Tools](#)
- [Menu Planning Resources](#)



Infant Meal Pattern

Breakfast	
Birth through 5 months	6 through 11 months
4-6 fluid ounces breastmilk ¹ or formula ²	6-8 fluid ounces breastmilk ¹ or formula ² ; and 0-4 tablespoons infant cereal ^{2,3} meat, fish, poultry, whole egg, cooked dry beans, or cooked dry peas; or 0-2 ounces of cheese; or 0-4 ounces (volume) of cottage cheese; or 0-4 ounces or ½cup of yogurt ⁴ ; or a combination of the above ⁵ ; and 0-2 tablespoons vegetable or fruit or a combination of both ^{5,6}

¹ Breastmilk or formula, or portions of both, must be served; however, it is recommended that breastmilk be served in place of formula from birth through 11 months. For some breastfed infants who regularly consume less than the minimum amount of breastmilk per feeding, a serving of less than the minimum amount of breastmilk may be offered, with additional breastmilk offered at a later time if the infant will consume more.

² Infant formula and dry infant cereal must be iron-fortified.

³ Beginning October 1, 2019, ounce equivalents are used to determine the quantity of creditable grains.

⁴ Yogurt must contain no more than 23 grams of total sugars per 6 ounces.

⁵ A serving of this component is required when the infant is developmentally ready to accept it.

⁶ Fruit and vegetable juices must not be served.

Infant Meal Pattern

Lunch and Supper	
Birth through 5 months	6 through 11 months
4-6 fluid ounces breastmilk ¹ or formula ²	6-8 fluid ounces breastmilk ¹ or formula ² ; and 0-4 tablespoons infant cereal ^{2,3} meat, fish, poultry, whole egg, cooked dry beans, or cooked dry peas; or 0-2 ounces of cheese; or 0-4 ounces (volume) of cottage cheese; or 0-4 ounces or ½cup of yogurt ⁴ ; or a combination of the above ⁵ ; and 0-2 tablespoons vegetable or fruit or a combination of both ^{5,6}

¹ Breastmilk or formula, or portions of both, must be served; however, it is recommended that breastmilk be served in place of formula from birth through 11 months. For some breastfed infants who regularly consume less than the minimum amount of breastmilk per feeding, a serving of less than the minimum amount of breastmilk may be offered, with additional breastmilk offered at a later time if the infant will consume more.

² Infant formula and dry infant cereal must be iron-fortified.

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⁴ Yogurt must contain no more than 23 grams of total sugars per 6 ounces.

⁵ A serving of this component is required when the infant is developmentally ready to accept it.

⁶ Fruit and vegetable juices must not be served.

Infant Meal Pattern

Snack	
Birth through 5 months	6 through 11 months
4-6 fluid ounces breastmilk ¹ or formula ²	2-4 fluid ounces breastmilk ¹ or formula ² ; and 0-½ slice bread ^{3,4} ; or 0-2 crackers ^{3,4} ; or 0-4 tablespoons infant cereal ^{2,3,4} or ready-to-eat breakfast cereal ^{3,4,5,6} ; and 0-2 tablespoons vegetable or fruit, or a combination of both ^{6,7}

¹ Breastmilk or formula, or portions of both, must be served; however, it is recommended that breastmilk be served in place of formula from birth through 11 months. For some breastfed infants who regularly consume less than the minimum amount of breastmilk per feeding, a serving of less than the minimum amount of breastmilk may be offered, with additional breastmilk offered at a later time if the infant will consume more.

² Infant formula and dry infant cereal must be iron-fortified.

³ Beginning October 1, 2019, ounce equivalents are used to determine the quantity of creditable grains.

⁴ A serving of grains must be whole grain-rich, enriched meal, or enriched flour.

⁵ Breakfast cereals must contain no more than 6 grams of sugar per dry ounce (no more than 21.2 grams sucrose and other sugars per 100 grams of dry cereal).

⁶ A serving of this component is required when the infant is developmentally ready to accept it.

⁷ Fruit and vegetable juices must not be served.

**CHILD MEAL PATTERN**

Breakfast (Select all three components for a reimbursable meal)				
Food Components and Food Items¹	Ages 1-2	Ages 3-5	Ages 6-12	Ages 13-18² <small>(at-risk afterschool programs and emergency shelters)</small>
Fluid Milk³	4 fluid ounces	6 fluid ounces	8 fluid ounces	8 fluid ounces
Vegetables, fruits, or portions of both⁴	¼ cup	½ cup	½ cup	½ cup
Grains (oz eq)^{5,6,7}				
Whole grain-rich or enriched bread	½ slice	½ slice	1 slice	1 slice
Whole grain-rich or enriched bread product, such as biscuit, roll or muffin	½ serving	½ serving	1 serving	1 serving
Whole grain-rich, enriched or fortified cooked breakfast cereal ⁸ , cereal grain, and/or pasta	¼ cup	¼ cup	½ cup	½ cup
Whole grain-rich, enriched or fortified ready-to-eat breakfast cereal (dry, cold) ^{8,9}				
Flakes or rounds	½ cup	½ cup	1 cup	1 cup
Puffed cereal	¾ cup	¾ cup	1 ¼ cup	1 ¼ cup
Granola	⅛ cup	⅛ cup	¼ cup	¼ cup

¹ Must serve all three components for a reimbursable meal. Offer versus serve is an option for at-risk afterschool participants.

² Larger portion sizes than specified may need to be served to children 13 through 18 years old to meet their nutritional needs.

³ Must be unflavored whole milk for children age one. Must be unflavored low-fat (1 percent) or unflavored fat-free (skim) milk for children two through five years old. Must be unflavored low-fat (1 percent), unflavored fat-free (skim), or flavored fat-free (skim) milk for children six years old and older.

⁴ Pasteurized full-strength juice may only be used to meet the vegetable or fruit requirement at one meal, including snack, per day.

⁵ At least one serving per day, across all eating occasions, must be whole grain-rich. Grain-based desserts do not count towards meeting the grains requirement.

⁶ Meat and meat alternates may be used to meet the entire grains requirement a maximum of three times a week. One ounce of meat and meat alternates is equal to one ounce equivalent of grains.

⁷ Beginning October 1, 2019, ounce equivalents are used to determine the quantity of creditable grains.

⁸ Breakfast cereals must contain no more than 6 grams of sugar per dry ounce (no more than 21.2 grams sucrose and other sugars per 100 grams of dry cereal).

⁹ Beginning October 1, 2019, the minimum serving size specified in this section for ready-to-eat breakfast cereals must be served. Until October 1, 2019, the minimum serving size for any type of ready-to-eat breakfast cereals is ¼ cup for children ages 1-2; 1/3 cup for children ages 3-5; and ¾ cup for children ages 6-12.

CHILD MEAL PATTERN

Lunch and Supper				
(Select all five components for a reimbursable meal)				
Food Components and Food Items ¹	Ages 1-2	Ages 3-5	Ages 6-12	Ages 13-18 ² <small>(at-risk afterschool programs and emergency shelters)</small>
Fluid Milk³	4 fluid ounces	6 fluid ounces	8 fluid ounces	8 fluid ounces
Meat/meat alternates				
Lean meat, poultry, or fish	1 ounce	1 ½ ounce	2 ounces	2 ounces
Tofu, soy product, or alternate protein products ⁴	1 ounce	1 ½ ounce	2 ounces	2 ounces
Cheese	1 ounce	1 ½ ounce	2 ounces	2 ounces
Large egg	½	¾	1	1
Cooked dry beans or peas	¼ cup	⅜ cup	½ cup	½ cup
Peanut butter or soy nut butter or other nut or seed butters	2 tbsp	3 tbsp	4 tbsp	4 tbsp
Yogurt, plain or flavored unsweetened or sweetened ⁵	4 ounces or ½ cup	6 ounces or ¾ cup	8 ounces or 1 cup	8 ounces or 1 cup
The following may be used to meet no more than 50% of the requirement: Peanuts, soy nuts, tree nuts, or seeds, as listed in program guidance, or an equivalent quantity of any combination of the above meat/meat alternates (1 ounces of nuts/seeds = 1 ounce of cooked lean meat, poultry, or fish)	½ ounce = 50%	¾ ounce = 50%	1 ounce = 50%	1 ounce = 50%
Vegetables⁶	⅛ cup	¼ cup	½ cup	½ cup
Fruits^{6,7}	⅛ cup	¼ cup	¼ cup	¼ cup
Grains (oz eq)^{8,9}				
Whole grain-rich or enriched bread	½ slice	½ slice	1 slice	1 slice
Whole grain-rich or enriched bread product, such as biscuit, roll or muffin	½ serving	½ serving	1 serving	1 serving
Whole grain-rich, enriched or fortified cooked breakfast cereal ¹⁰ , cereal grain, and/or pasta	¼ cup	¼ cup	½ cup	½ cup

¹ Must serve all five components for a reimbursable meal. Offer versus serve is an option for at-risk afterschool participants.

² Larger portion sizes than specified may need to be served to children 13 through 18 years old to meet their nutritional needs.

³ Must be unflavored whole milk for children age one. Must be unflavored low-fat (1 percent) or unflavored fat-free (skim) milk for children two through five years old. Must be unflavored low-fat (1 percent), unflavored fat-free (skim), or flavored fat-free (skim) milk for children six years old and older.

⁴ Alternate protein products must meet the requirements in Appendix A to Part 226.

⁵ Yogurt must contain no more than 23 grams of total sugars per 6 ounces.

⁶ Pasteurized full-strength juice may only be used to meet the vegetable or fruit requirement at one meal, including snack, per day.

⁷ A vegetable may be used to meet the entire fruit requirement. When two vegetables are served at lunch or supper, two different kinds of vegetables must be served.

⁸ At least one serving per day, across all eating occasions, must be whole grain-rich. Grain-based desserts do not count towards the grains requirement.

⁹ Beginning October 1, 2019, ounce equivalents are used to determine the quantity of the creditable grain.

¹⁰ Breakfast cereals must contain no more than 6 grams of sugar per dry ounce (no more than 21.2 grams sucrose and other sugars per 100 grams of dry cereal).

CHILD MEAL PATTERN

Snack				
(Select two of the five components for a reimbursable snack)				
Food Components and Food Items ¹	Ages 1-2	Ages 3-5	Ages 6-12	Ages 13-18 ² <small>(at-risk afterschool programs and emergency shelters)</small>
Fluid Milk³	4 fluid ounces	4 fluid ounces	8 fluid ounces	8 fluid ounces
Meat/meat alternates				
Lean meat, poultry, or fish	½ ounce	½ ounce	1 ounce	1 ounce
Tofu, soy product, or alternate protein products ⁴	½ ounce	½ ounce	1 ounce	1 ounce
Cheese	½ ounce	½ ounce	1 ounce	1 ounce
Large egg	½	½	½	½
Cooked dry beans or peas	⅛ cup	⅛ cup	¼ cup	¼ cup
Peanut butter or soy nut butter or other nut or seed butters	1 tbsp	1 tbsp	2 tbsp	2 tbsp
Yogurt, plain or flavored unsweetened or sweetened ⁵	2 ounces or ¼ cup	2 ounces or ¼ cup	4 ounces or ½ cup	4 ounces or ½ cup
Peanuts, soy nuts, tree nuts, or seeds	½ ounce	½ ounce	1 ounce	1 ounce
Vegetables⁶	½ cup	½ cup	¾ cup	¾ cup
Fruits⁶	½ cup	½ cup	¾ cup	¾ cup
Grains (oz eq)^{7,8}				
Whole grain-rich or enriched bread	½ slice	½ slice	1 slice	1 slice
Whole grain-rich or enriched bread product, such as biscuit, roll or muffin	½ serving	½ serving	1 serving	1 serving
Whole grain-rich, enriched or fortified cooked breakfast cereal ⁹ , cereal grain, and/or pasta	¼ cup	¼ cup	½ cup	½ cup
Whole grain-rich, enriched or fortified ready-to-eat breakfast cereal (dry, cold) ^{9,10}				
Flakes or rounds	½ cup	½ cup	1 cup	1 cup
Puffed cereal	¾ cup	¾ cup	1 ¼ cup	1 ¼ cup
Granola	⅛ cup	⅛ cup	¼ cup	¼ cup

¹ Select two of the five components for a reimbursable snack. Only one of the two components may be a beverage.

² Larger portion sizes than specified may need to be served to children 13 through 18 years old to meet their nutritional needs.

³ Must be unflavored whole milk for children age one. Must be unflavored low-fat (1 percent) or unflavored fat-free (skim) milk for children two through five years old. Must be unflavored low-fat (1 percent), unflavored fat-free (skim), or flavored fat-free (skim) milk for children six years old and older.

⁴ Alternate protein products must meet the requirements in Appendix A to Part 226.

⁵ Yogurt must contain no more than 23 grams of total sugars per 6 ounces.

⁶ Pasteurized full-strength juice may only be used to meet the vegetable or fruit requirement at one meal, including snack, per day.

⁷ At least one serving per day, across all eating occasions, must be whole grain-rich. Grain-based desserts do not count towards meeting the grains requirement.

⁸ Beginning October 1, 2019, ounce equivalents are used to determine the quantity of creditable grains.

⁹ Breakfast cereals must contain no more than 6 grams of sugar per dry ounce (no more than 21.2 grams sucrose and other sugars per 100 grams of dry cereal).

¹⁰ Beginning October 1, 2019, the minimum serving sizes specified in this section for ready-to-eat breakfast cereals must be served. Until October 1, 2019, the minimum serving size for any type of ready-to-eat breakfast cereals is $\frac{1}{4}$ cup for children ages 1-2; $\frac{1}{3}$ cup for children ages 3-5; and $\frac{3}{4}$ cup for children ages 6-12.