School Meal Patterns & Components Training

Child Nutrition Programs
SY2024





MEAL PATTERNS & COMPONENTS

Grains, Meat/Meat Alternate, Fruit, Vegetables, and Milk



Three Grade Groups

Three grade groups at breakfast and lunch:

- K through 5
- 6 through 8
- 9 through 12
 - K-8 at lunch and breakfast (have some overlapping calories)
 - K-12 is available at breakfast only



Specific Nutrition Standards

- Calories
 - Upper and lower limits
- Saturated fat
 - Less than 10% of total calories
- Sodium standards for each of the grade group
- Trans fats
 - Zero trans fats



Overlap of Grade Group

Grade Group Differences

Grade Level:

K-5

Calorie Ranges

Breakfast: 350-500

Lunch: 550-650

Grade Level:

6-8

Calorie Ranges

Breakfast: 400-550

Lunch: 600-700

Grade Level:

9-12

Calorie Ranges

Breakfast: 450-600

Lunch: 750-850

Caloric Overlaps

B: 400-500

L: 600-650

Caloric Overlaps

B: 450-550

L: NO OVERLAP





All Foods Served

- All foods served go towards the nutrient standards, even if the items are an extra
 - Examples: condiments, salad bars served as an extra, etc.



LUNCH MEAL PATTERN

	Grad	es K-5	Grad	les 6-8	Grades 9-12	
Meal Pattern Requirements	Daily	Weeky	Daily	Weekly	Daily	Weekly
Fruits (cups)b	1/2	2 1/2	1/2	2 1/2	1	5
Vegetables (cups)b,c,e	3/4	3 ¾	3/4	3 3/4	1	5
Dark Green ^c		1/2		1/2	4	1/2
Red/Orange ^c		3/4		3/4		1 1/4
Beans/Peas (Legumes)c		1/2		1/2		1/2
Starchy ^c		1/2		1/2	9	1/2
Other ^{c,d}		1/2		1/2	8	3/4
Additional Veg to Reach Total		1		1	12	1 ½
Grains (oz eq)f	1	8	1	8	2	10
Meat/ Meat Alternates (oz eq)	1	8	1	9	2	10
Fluid Milk (cups)8	1	5	1	5	1	5
Min-Max Caloriesh	550	-650	600-700		750-850	
Saturated Fat (% Of total calories) ^h	<10 <10		10	<	10	
Sodium (mg)h,i	≤1	110	≤1225		≤1280	
Trans fath	Nutrition label or manufacturer specifications must indicate zero grams of <i>trans</i> fat per serving.					

BREAKFAST MEAL PATTERN

	Grad	Grades K-5		Grades 6-8		s 9-12
Meal Pattern Requirements	Daily	Weeky	Daily	Weekly	Daily	Weekly
Fruits (cups)b	1	5	1	5	1	5
Vegetables (cups)be		0		0		0
Dark Green ^e		0		0		0
Red/Orange ^c		0		0		0
Beans/Peas (Legumes)°		0		þ		0
Starehy ^e		0		0		0
Other ^{c,d}		0		0		0
Additional Veg to Reach Total		0		0		0
Grains (oz eq)f	1	7	1	8	1	9
Meat/ Meat Alternates (oz eq)		O ^j		Oi		Oi
Fluid Milk (cups)g	1	5	1	5	1	5
Min-Max Caloriesh	350	-500	400-550		450-600	
Saturated Fat (% Of total calories)h	<10		<10		<10	
Sodium (mg)h,i	<5	40	≤600 ≤640			40
Trans fath	Nutrition label or manufacturer specifications must indicate zero grams of trans fat per serving.					



Shorter or Longer Weeks

- Daily requirements DO NOT change
- Weekly requirements DO change
- Vegetable subgroups are slightly affected
 - Red/Orange
 - Other
 - Additional Vegetables
- Meal Pattern Requirements available for 4-day, 6day, and 7-day of normal serving days
- If you have planned shorter weeks, you MUST adjust your menus
 - •Example: After spring break, the district goes to a 4day school week CM-20-23

Reimbursable Meals

- Required number components/food items
- Portion sizes planned AND served meet meal pattern requirements
- Students must take the full, required, serving size for the meal to be reimbursable
- Monitored to ensure reimbursable meal
- Documentation to support dietary substitutions



COMPONENTS

Grains, Meat/Meat Alternate, Fruit, Vegetables, and Milk



Food Components

- Grains
- Meat/Meat Alternate
- Fruit
- Vegetables
 - Five Subgroups for Lunch
- Milk







GRAINS COMPONENT



Grains Component

- Schools must offer daily and weekly minimum servings of whole grain-rich products
- 80% of all the grains offered for the week must be whole grain-rich
- Smallest amount creditable is 0.25 oz. eq.

Grains Requirements

BREAKFAST MEAL PATTERNS

Grains	<u>Daily</u> Minimum Requirements	Weekly Minimum Requirements
K-5	1 oz equivalent	7 oz equivalent
6-8	1 oz equivalent	8 oz equivalent
K-12	1 oz equivalent	9 oz equivalent
9-12	1 oz equivalent	9 oz equivalent

LUNCH MEAL PATTERNS

Grains	<u>Daily</u> Minimum Requirements	<u>Weekly</u> Minimum Requirements
K-5	1 oz equivalent	8 oz equivalent
6-8	1 oz equivalent	8 oz equivalent
K-8	1 oz equivalent	8 oz equivalent
9-12	2 oz equivalent	10 oz equivalent



Identifying a Whole-Grain Rich Product

- When the first ingredient on the ingredient list is a whole grain and the remaining grains must be enriched
 - The first ingredient can be water as long as the second ingredient is a whole grain
- When a CN Label indicates ounce equivalent, the product is whole grain-rich

Whole Grains

- Whole Wheat
- Entire Wheat
- Rye Berries
- Cracked Wheat
- Crushed Wheat
- Whole Durum
- Barley
- Bulgar
- Wheat Berry

Gluten-free:

- Quinoa
- Brown rice
- Wild rice
- Whole Corn
- Sorghum
- Oats/Oatmeal
- Amaranth
- Buckwheat



Ounce Equivalent Standards for Whole Grain-Rich

- Baked goods (breads, biscuits, bagels) must contain 16 grams of creditable grain and provide 1 oz. eq. credit
- Cereal grain (oatmeal, pasta, brown rice) must contain 28 grams (approximately 1.0 oz. by weight) of dry product or ½ cup cooked cereal, pasta, rice and provide 1 oz. eq. credit
- Ready-to-eat (RTE) breakfast cereal must contain 28 grams or 1.0 oz. of product provides 1 oz. eq. credit
 - One oz equivalent volumes are 1 cup flakes or rounds,
 1.25 cups puffed cereal, and ¼ cup granola



Is This Biscuit Whole Grain-Rich?

Ingredients

WATER, WHOLE WHEAT FLOUR, ENRICHED FLOUR
BLEACHED (WHEAT FLOUR, MALTED BARLEY FLOUR, NIACIN,
IRON, THIAMIN MONONITRATE, RIBOFLAVIN, FOLIC ACID),
PALM OIL, PALM KERNEL OIL, SUGAR, BAKING SODA,
CALCIUM ACID PYROPHOSPHATE, BUTTERMILK, SALT,
SODIUM ALUMINUM PHOSPHATE, NONFAT MILK, WHEY
PROTEIN CONCENTRATE, WHEY, PECTIN.



Yes/No

Serving Size:	1 Biscuit (56g)	
Amount Per Serving:	As Packaged	
Calories	200	
Calories From Fat	80	
	% Daily	/ Value
Total Fat	9g	14%
Saturated Fat	7g	33%
Trans Fat	0g	
Cholesterol	0mg	0%
Sodium	410mg	17%
Total Carbohydrate	27g	9%
Dietary Fiber	2g	10%
Sugars	2g	
Protein	4g	
Vitamin A	0%	
Vitamin C	0%	
Calcium	15%	
Iron	6%	
Thiamin	10%	
Riboflavin	4%	
Niacin	6%	
Folic Acid	4%	

^{*} Percent Daily Value (DV) are based on a 2,000 calorie diet



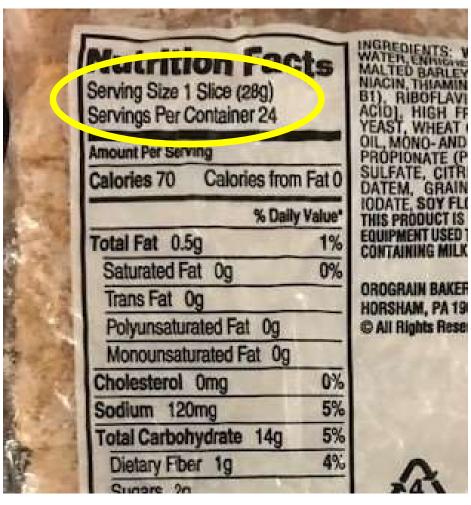
^{* -} Not a significant nutrient source

^{*} Nutritional information is subject to change. See product label to verify ingredients and allergens.

^{*}Do not eat raw dough or batter.

Not All Sliced Bread Is The Same

1 slice = 28 grams



1 slice = 26 grams





EXHIBIT A: GRAIN REQUIREMENT FOR CHILD NUTRITION PROGRAMS^{1,2}

GROUP A	OZ EQ FOR GROUPA
Bread-type coating Breadsticks (hard) Chow mein noodles Savory crackers (saltines and snack crackers) Croutons Pretzels (hard) Stuffing (dry) NOIE: Weights apply to bread in stuffing.	1 oz eq = 22 gm or 0.8 oz 3/4 oz eq = 17 gm or 0.6 oz 1/2 oz eq = 11 gm or 0.4 oz 1/4 oz eq = 6 gm or 0.2 oz
GROUPB	OZ EQ FOR GROUP B
Bagels Batter-type coating Biscuits Breads (sliced whole-wheat, French, Italian) Buns (hamburger and hot dog) Sweet crackers (graham crackers—all shapes, animal crackers) Egg roll skins English muffins Pita bread (whole-wheat or whole grain-rich) Pizza crust Pretzels (soft) Rolls (whole-wheat or whole grain-rich) Tortillas (whole-wheat or whole-com) Tortilla chips (whole-wheat or whole-com) Taco shells (whole-wheat or whole-com)	1 oz eq = 28 gm or 1.0 oz 3/4 oz eq = 21 gm or 0.75 oz 1/2 oz eq = 14 gm or 0.5 oz 1/4 oz eq = 7 gm or 0.25 oz
GROUP C	OZ EQ FOR GROUP C
Cookies (plain—includes vanilla wafers) Combread Com muffins Croissants Pancakes Pie crust (dessert pies, cobbler, fruit turnovers, and meat/meat alternate pies) Waffles	1 oz eq = 34 gm or 1.2 oz 3/4 oz eq = 26 gm or 0.9 oz 1/2 oz eq = 17 gm or 0.6 oz 1/4 oz eq = 9 gm or 0.3 oz
GROUPD	OZ EQ FOR GROUP D
Doughnut (cake and yeast-raised, unfrosted) Cereal bars, breakfast bars, granola bars (plain) Muffins (all except com) Sweet roll (unfrosted) Toaster pastry (unfrosted)	1 oz eq = 55 gm or 2.0 oz 3/4 oz eq = 42 gm or 1.5 oz 1/2 oz eq = 28 gm or 1.0 oz 1/4 oz eq = 14 gm or 0.5 oz

The following food quantities from Groups A-G must contain at least 16 grams of whole grain or can be made with 8 grams of whole grain and 8 grams of enriched meal and/or enriched flour to be considered whole grain-rich.

Some of the following grains may contain more sugar, salt, and/or fat than others. This should be a consideration when deciding how often to





GROUPE	OZ EQ FOR GROUPE			
 Cereal bars, breakfast bars, granola bars⁴ (with muts, dried fruit, and/or chocolate pieces) Cookies³ (with nuts, raisins, chocolate pieces, and/or fruit purees) Doughnuts⁴ (cake and yeast-raised, frosted or glazed) French toast Sweet rolls⁴ (frosted) Toaster pastry⁴ (frosted) 	1 oz eq = 69 gm or 2.4 oz 3/4 oz eq = 52 gm or 1.8 oz 1/2 oz eq = 35 gm or 1.2 oz 1/4 oz eq = 18 gm or 0.6 oz			
GROUPF	OZ EQ FOR GROUP F			
Cake³ (plain, unfrosted) Coffee cake⁴	1 oz eq = 82 gm or 2.9 oz 3/4 oz eq = 62 gm or 2.2 oz 1/2 oz eq = 41 gm or 1.5 oz 1/4 oz eq = 21 gm or 0.7 oz			
GROUP G	OZ EQ FOR GROUP G			
Brownies ³ (plain) Cake ³ (all varieties, frosted)	1 oz eq = 125 gm or 4.4 oz 3/4 oz eq = 94 gm or 3.3 oz 1/2 oz eq = 63 gm or 2.2 oz 1/4 oz eq = 32 gm or 1.1 oz			
GROUP H	OZ EQ FOR GROUP H			
Cereal grains (barley, quinoa, etc.) Breakfast cereals ^{3,6} (cooked) Bulgur or cracked wheat Macaroni (all shapes) Noodles (all varieties) Pasta (all shapes) Ravioli (noodle only) Rice (enriched white or brown)	1 oz eq = 1/2 cup cooked or 1 oz (28 g) dry			
GROUPI	OZ EQ FOR GROUP I			
 Ready-to-eat breakfast cereal^{3,6} (cold, dry) 	1 oz eq = 1 cup or 1 oz for flakes and rounds 1 oz eq = 1.25 cups or 1 oz for puffed cereal 1 oz eq = 1/4 cup or 1 oz for granola			

Refer to program regulations for the appropriate serving size for supplements served to children aged 1 through 5 in the NSLP and meals served to children aged one through five and adult participants in the Child and Adult Care Food Program (CACFP). Breakfast cereals are traditionally served as a breakfast menu item, but may be served in meals other than breakfast.

CM-46 Oklahoma State Department of Education Cafeteria Manager's Training Section, July 2018



Cereals must be whole grain or whole grain and enriched or whole grain and fortified cereal.

Desserts

- Schools may count no more than two grain-based servings (2 oz equivalents) per week toward the grain requirement
- Desserts need to be whole grain-rich, if counting toward whole grain-rich requirement
- Not allowable for Pre-K students if Pre-K is served CACFP meal patterns

Grains Component: Menu Example

- Chicken burrito (1.5 oz. eq. per the CN label) and 1 oz. brown rice = (2.5 oz. eq. grains total)
- Whole durum spaghetti noodles w/marinara sauce (1.5 oz. eq. grains) and whole wheat roll (1.25 oz eq. grain) = .3.75 oz eq grains total
- Rice pilaf (1 oz. eq. grain)
- Oatmeal raisin cookie (2.4 oz. eq.) = 1 oz. eq. grain per Exhibit A: Grains Chart (Group D)



Grains: Breakfast

- Items bought and served at breakfast must to either meet the Grains chart on the amount served, have a CN label, or a product formulation statement to show enough grain was served
 - Example: The district buys donuts from the local vendor and each donut is 2 ounces. This 2-ounce donut only equals a 1-ounce equivalent of grain due to the sugar content





Meat/Meat Alternate Component for Reimbursable Lunch

- At least the minimum daily oz. eq.
- Weekly minimum oz eq must be offered
- Grades K-5 and 6-8 must offer more than the minimum daily amount to meet the weekly minimum requirement
- Smallest amount credited 0.25 oz. eq.



Meat/Meat Alternate Requirements

LUNCH MEAL PATTERNS						
Meat/Meat Alternate	<u>Daily</u> Minimum Requirements	Weekly Minimum Requirements				
K-5	1 oz equivalent	8 oz equivalent				
6-8	1 oz equivalent	9 oz equivalent				
K-8	1 oz equivalent	9 oz equivalent				
9-12	2 oz equivalent	10 oz equivalent				

Breakfast:

1 oz. eq. of meat/meat alternate may count as an additional 1 oz eq of grains *AFTER the grain* requirement has been met



Meat/Meat Alternate M/MA

Use a variety of meat/meat alternates:

- Beef, pork, seafood, or poultry
- Eggs
- Nut butters including sunflower, peanut, etc.
- Tofu
- Yogurt including soy yogurt
- Beans/Legumes
- Cheese





FRUITS & VEGETABLES



Fruit Component

- Offer daily and weekly minimum servings
- May select more than the minimum amount if the calories averaged over the school week are not exceeded
- Pasteurized, 100% full-strength juice may also be offered, however, no more than half of the weekly fruit offering may be in the form of juice for each meal service
- Minimum quantity credited 1/8 of a cup



Fruit Requirements

BREAKFAST MEAL PATTERNS					
Fruit	<u>Daily</u> Minimum Requirements	<u>Weekly</u> Minimum Requirements			
K-5	1 cup	5 cups			
6-8	1 cup	5 cups			
K-12	1 cup	5 cups			
9-12	1 cup	5 cups			
	LUNCH MEAL PATTE	RNS			
Fruit	LUNCH MEAL PATTE <u>Daily</u> Minimum Requirements	ERNS Weekly Minimum Requirements			
Fruit K-5	<u>Daily</u> Minimum	<u>Weekly</u> Minimum			
	<u>Daily</u> Minimum Requirements	<u>Weekly</u> Minimum Requirements			
K-5	<u>Daily</u> Minimum Requirements ½ cup	Weekly Minimum Requirements 2.5 cups			



Fruit Serving Requirement

- If only 1 fruit is offered for grade group 9-12, 1 cup of fruit MUST be served unless the student requests a ½ cup serving
- 1 cup of fruit MUST be offered & listed on the production records



Vegetable Serving Requirement

- If only 1 vegetable is offered for lunch, 1 cup of vegetable MUST be served to 9-12 and 3/4 cup to K-8, unless the student requests a 1/2 cup serving
- •1 cup or ¾ cup vegetable, depending on the age group, *MUST* be offered & listed on the production records



Vegetables & Subgroup Requirements

LUNCH MEAL PATTERNS

Vegetables	Daily Minimum Requirements	<u>Weekly</u> Minimum Requirements			
K-5	³⁄₄ cup	3 ¾ cup			
6-8	³⁄₄ cup	3 ¾ cup			
K-8	³⁄₄ cup	3 ¾ cup			
9-12	1 cup	5 cups			

			0			Additional vegetables to meet
	Dark Green	Red/Orange	Legumes	Starchy	Other	weekly requirements
Grades K-5	1/2 Cup	3/4 Cups	1/2 Cup	1/2 Cup	1/2 Cup	1 Cup
Grades 6-8	1/2 Cup	3/4 Cups	1/2 Cup	1/2 Cup	1/2 Cup	1 Cup
Grades 9-12	1/2 Cup	1 1/4 Cups	1/2 Cup	1/2 Cup	3/4 Cups	1 1/2 Cup



Dark Green Vegetables Grades K-5: 1/2 Cup/Week Grades 6-8: 1/2 Cup/Week Grades 9-12: 1/2 Cup/Week	Red/Orange Vegetables Grades K-5: 3/4 Cup/Week Grades 6-8: 3/4 Cup/Week Grades 9-12: 1 1/4 Cups/Week	Beans/Peas (Legumes) Grades K-5: 1/2 Cup/Week Grades 6-8: 1/2 Cup/Week Grades 9-12: 1/2 Cup/Week	Starchy Vegetables Grades K-5: 1/2 Cup/Week Grades 6-8: 1/2 Cup/Week Grades 9-12: 1/2 Cup/Week	Other Vegetables Grades K-5: 1/2 Cup/Week Grades 6-8: 1/2 Cup/Week Grades 9-12: 3/4 Cup/Week
Bok choy (Chinese cabbage) Broccoli Collard greens Dark green leafy lettuce Kale Mesclun Mustard greens Romaine lettuce Spinach Turnip greens Watercress Beet greens Chicory Escarole endive Grape leaves Parsley Swiss chard	Acorn squash Butternut squash Carrots Pumpkin Tomatoes Tomato products Sweet potatoes Cherry peppers Hubbard squash Pimientos Red/orange peppers Salsa	Black beans Kidney beans Lentils Navy beans Pinto beans Soy beans (dry, mature) Split peas White beans Black-eyed peas	Corn Cassava Green bananas Green peas Green lima beans Plantains Taro Water chestnuts White potato products Black-eyed peas (not dry, fresh, frozen) Mixed vegetables Breadfruit Lima beans (canned, fresh, or frozen) Jicama (yam bean) Parsnips Piqeou peas Poi Yautia (tannier)	All other fresh, frozen, and canned; cooked or raw vegetables, including: Artichokes Radishes Asparagus Rutabagas Avocado Sauerkraut Bamboo shoots Seaweed Bean sprouts Sugar snap peas Beets Tomatillos Bell or chili peppers Wax beans Cabbage, green or red Cactus (napales) Zucchini Cauliflower Celery Chayote Chinese snow peas Cucumbers Eggplant Green beans Green peppers Iceberg lettuce Kohlrabi Mushrooms Okra Olives Onions Parsnips Pepperocini Pickles





LEAFY GREENS



©KLAHOMA Education

Red/Orange

- Acorn Squash
- Buttermilk Squash
- Carrots
- Hubbard Squash
- Pumpkin
- Red Peppers
- Sweet Potatoes
- Tomatoes
- Salsa





Beans As A Vegetable

Legumes (Beans/Peas)

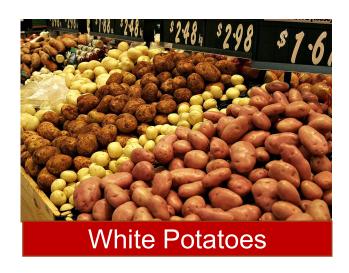


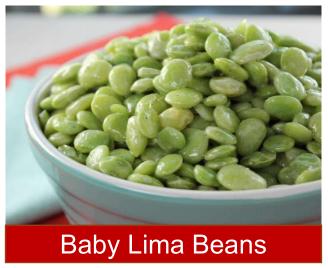


Starchy Vegetables











The "Other" Vegetables



Green Beans





Beets





Not A Vegetable!





This is not creditable. This is an EXTRA





Fluid Milk Component

- One cup (8oz) offered daily for each meal service for each grade group
- Unflavored milk must be offered at each meal service
- Milk may be used as a beverage, on cereal, or used in part for each purpose
- Milk used in smoothies can credit towards the fluid milk component
 - Milk used in preparation of menu items other than smoothies does not credit towards the fluid milk

Fluid Milk Component (Cont.)

Two types of milk must be offered at each meal service. It can be:

- Unflavored or Flavored low-fat (1%) milk
- Unflavored or Flavored Fat Free (skim) milk
- Lactose free milk is considered milk. It is not a milk substitute
- Unflavored milk must be offered at breakfast & lunch

Pre-K students cannot be offered flavored milk if they are being served the CACFP Meal Patterns or are not co-mingled

Water Does NOT Substitute For Milk

 Water must be available to students during the meal service.

EXAMPLE:

- Water Fountain
- Pitcher & Cups
- Water is NOT a component and can NOT be a substitute for milk
- Water is NOT considered a part of the reimbursable meal



Milk Substitution Rule Does NOT Apply

For students considered disabled under 7CFR Part 15(b):

Have a Section 504 Plan

OR

- Has an IEP (Individual Educational Plan)
 - Follow the plan, IEP, or doctor's statement



Is a Milk Substitution Required?

If parent request milk substitution

- At the discretion of the SFA
- Documentation
- In the application and agreement, the district will mark if they will offer the substitute
 - Mark yes or no, by each site, in question #12 of the Permanent Policy Statement



Nutrient Requirements: Nondairy Beverage

Nutrients Per Cup:

Calcium 276 mg

Protein8 g

Vitamin A 500 IU

Vitamin D 100 IU

Magnesium 24 mg

Potassium 349 mg

Phosphorus 222 mg

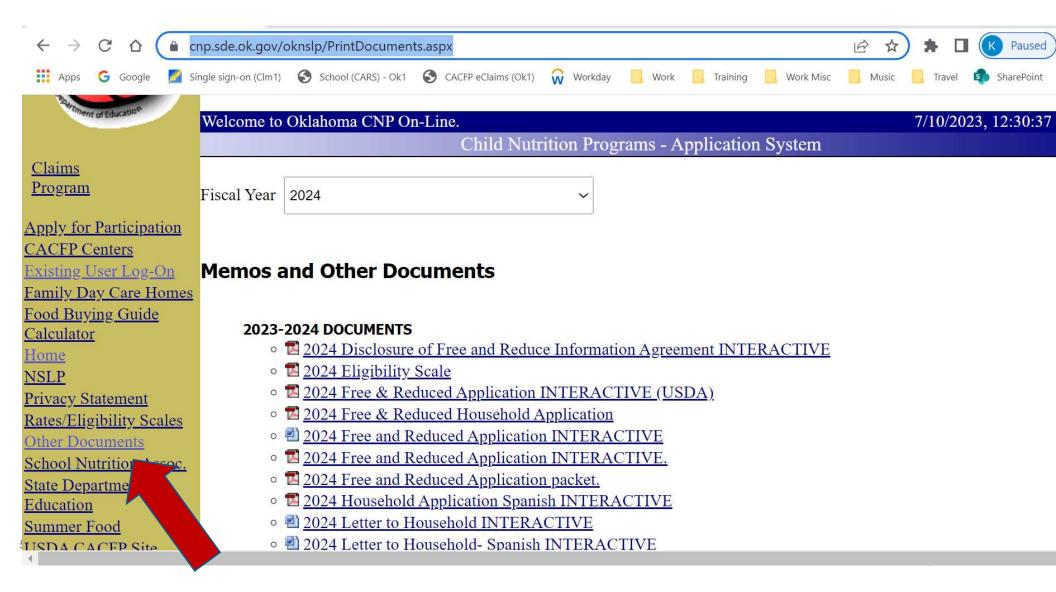
Riboflavin .44 mg

Vitamin B-12 1.1 mcg



Other Documents in CARS

https://cnp.sde.ok.gov/oknslp/PrintDocuments.aspx



Who Do You Call?

Your Program Specialist: Page C-3 in the Compliance Section Includes email, cell phone, and counties in their territory

- Conduct your Administrative Review (AR)
- Technical assistance
- Questions regarding the Child Nutrition (CN) Manual, USDA guidance, and day-to-day CN activities

Call State Office with questions 405-521-3327

- Claims
- Application & Agreement (IUE/Duns)



QUESTIONS OR COMMENTS?

THANK YOU!

