



# A fresh look at the Food Distribution Program on Indian Reservations

Holly Hunts and Ed Dratz

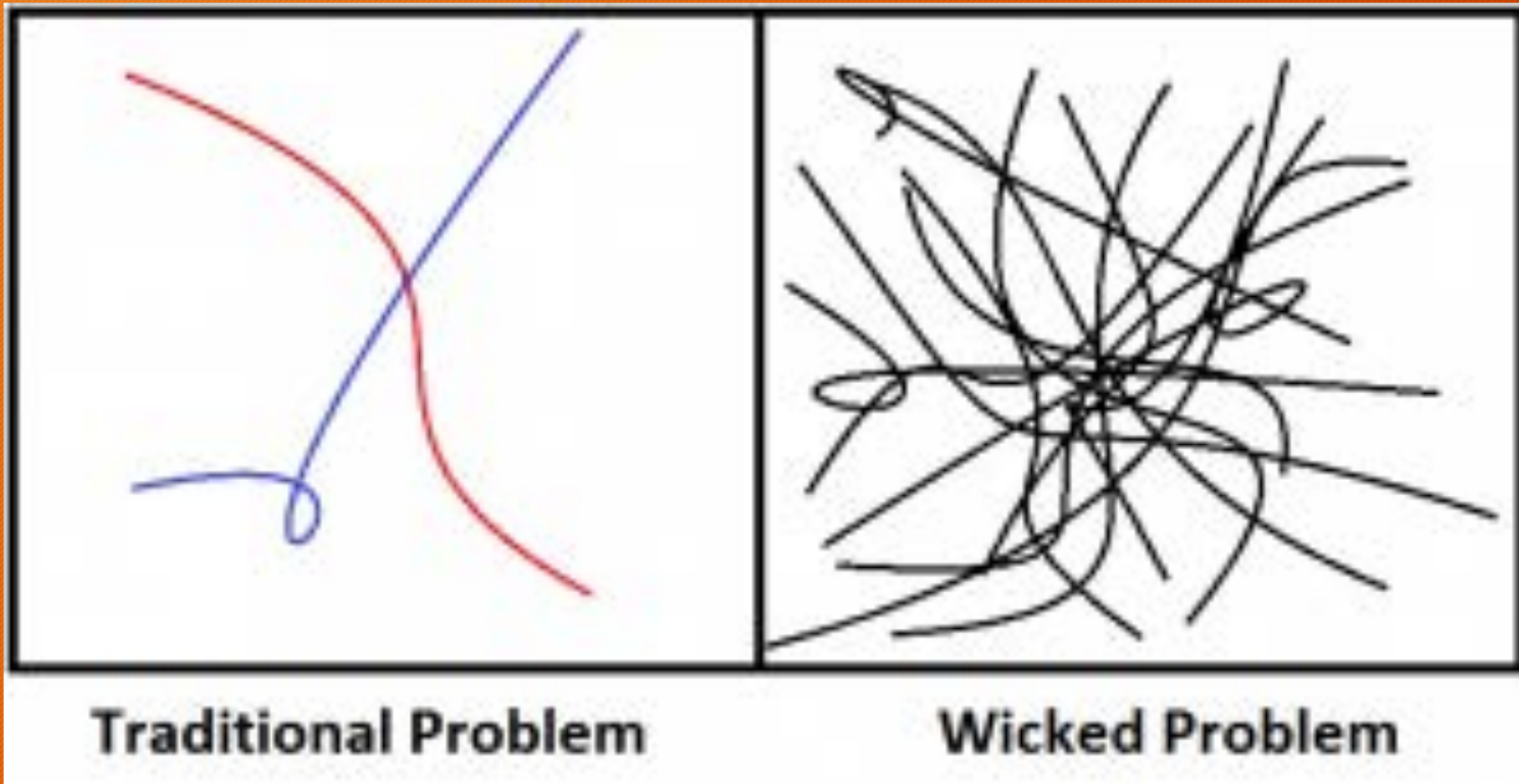
# FDPIR - Pronounced Fa-Dip-Er



- Extension of the United States Department of Agriculture Commodity Foods Program from the Great Depression
- 1972 Supplemental Nutrition Assistance Program (SNAP)
- Senator George McGovern argued that Indian Reservations did not have full service grocery stores so low-income citizens on reservations should be able to choose between SNAP and FDPIR (commodity foods).



**Wicked problems are inextricably intertwined - loosening one end can tighten the other end.**



**Every wicked problem is the  
symptom of another wicked  
problem!**





# FDPIR was a reductionist solution to a wicked problem

- Poverty
- Hunger
- Destruction of traditional food sources
- Allotted land (access to credit)
- Low quality agricultural land
- Barriers to market trade

Demand for a normal food market was there... but no money and no incentive for suppliers

# “Free food” spawns a host of other problems

- Generational food trauma
- Supressed economic oppoturnities
- Poor health outcomes from cheap, low quality food
- Food spoilage from only receiving food once every 30 days

**No opportunity for suppliers - can't compete with free food**

# Non-perishable foods: Another reductionist solution to a wicked problem

## Solved

- Transportation costs for clients
- Storage issues
- Able to avoid some issues with poor water quality

## Caused

- Food trauma
- Serious health issues



## So, how does FDPIR work?

- 276 centers nationwide - reservations - specially designated areas
- Serve about 100,000 people a year (official records 88,615)
- Low income families living on reservations, near reservations or in designated areas are eligible for either FDPIR or SNAP (not both!)
- Food package is provided every 30 days











High scores on the Healthy Eating Index

But numbers can be deceiving  
A closer look

# HEI-2010 Total and Component Scores<sup>1</sup> for the U.S. Total Population, Children and Older Adults, NHANES 2011-2012

HEI-2010 Dietary Component (maximum score)	Total Population ≥ 2 years (n=7,933)	Children 2-17 years (n=2,857)	Older Adults ≥ 65 years (n=1,032)
Mean Score (standard error)			
Total fruit (5)	3.00 (0.11)	3.91 (0.18)	3.84 (0.22)
Whole fruit (5)	4.01 (0.17)	4.78 (0.22)	4.99 (0.05)
Total vegetables (5)	3.36 (0.08)	2.10 (0.09)	4.16 (0.19)
Greens and beans (5)	2.98 (0.15)	0.70 (0.09)	3.58 (0.47)
Whole grains (10)	2.86 (0.13)	2.50 (0.10)	4.23 (0.34)
Dairy (10)	6.44 (0.14)	9.03 (0.22)	5.99 (0.16)
Total protein foods (5)	5.00 (0.00)	4.44 (0.13)	5.00 (0.00)
Seafood and plant proteins (5)	3.74 (0.20)	3.05 (0.17)	4.91(0.18)
Fatty acids (10)	4.66 (0.14)	3.29 (0.18)	5.60 (0.36)
Refined grains (10)	6.19 (0.15)	4.91 (0.16)	7.34 (0.31)
Sodium (10)	4.15 (0.06)	4.85 (0.25)	3.66 (0.26)
Empty calories (20)	12.60 (0.23)	11.50 (0.28)	14.99 (0.44)
<b>Total HEI score (100)</b>	<b>59.00 (0.95)</b>	<b>55.07 (0.72)</b>	<b>68.29 (1.76)</b>

<sup>1</sup>Calculated using the population ratio method.



2.66 (0.13)	2.56 (0.10)	4.23 (0.34)
6.44 (0.14)	9.03 (0.22)	5.99 (0.16)
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59.00 (0.95)	55.07 (0.72)	68.29 (1.76)

method.

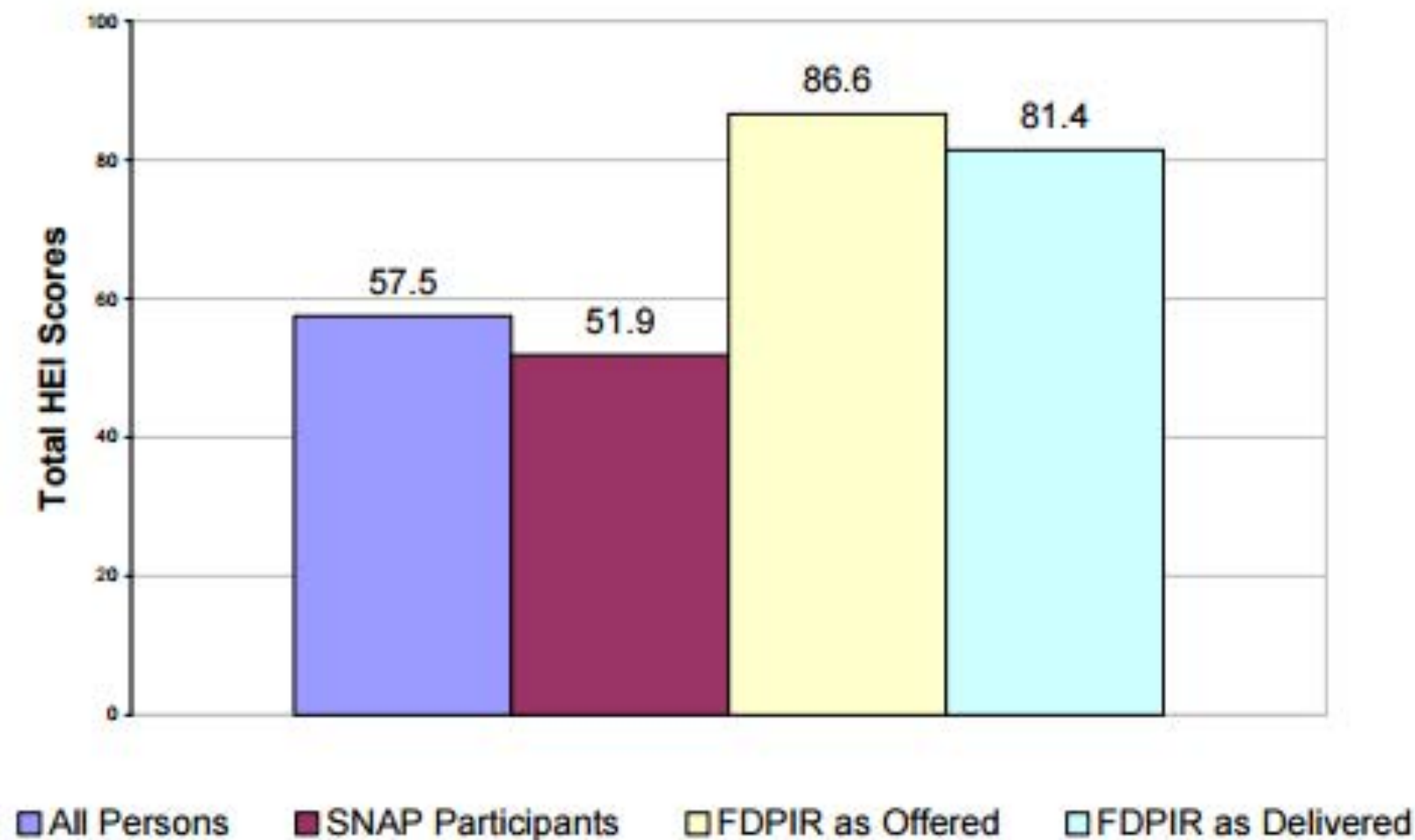
**Table 2** HEI-2010† component and total scores for each of the five sample FDPIR monthly food packages (*n* 5)

Component	Maximum value	Standard for maximum score	Standard for minimum score of zero	Mean	SD	Range	% Meeting maximum value‡	<i>n</i>
Total Fruit§	5	≥0.8 cup equivalent per 1000 kcal	No Fruit	3.52*	0.73	2.60–4.40	0	0
Whole Fruit	5	≥0.4 cup equivalent per 1000 kcal	No Whole Fruit	4.60	0.52	3.90–5.00	40.0	2
Total Vegetables¶	5	≥1.1 cup equivalents per 1000 kcal	No Vegetables	2.58***	0.15	2.40–2.80	0	0
Greens and Beans¶¶	5	≥0.2 cup equivalent per 1000 kcal	No Dark Green Vegetables or Beans and Peas	0.92***	1.00	0.00–2.20	0	0
Whole Grains	10	≥1.5 oz equivalents per 1000 kcal	No Whole Grains	7.88	3.68	1.50–10.00	60.0	3
Dairy††	10	≥1.3 cup equivalents per 1000 kcal	No Dairy	5.12***	0.63	4.20–5.70	0	0
Total Protein Foods‡‡	5	≥2.5 oz equivalents per 1000 kcal	No Protein Foods	4.14*	0.56	3.30–4.80	0	0
Seafood and Plant Proteins‡‡,§§	5	≥0.8 oz equivalent per 1000 kcal	No Seafood or Plant Proteins	4.64	0.53	3.80–5.00	60.0	3
Fatty Acids	10	(PUFA + MUFA)/SFA > 2.5	(PUFA + MUFA)/SFA ≤ 1.2	4.80	4.55	0.00–10.00	20.0	1
Refined Grains	10	≤1.8 oz equivalents per 1000 kcal	≥4.3 oz equivalents per 1000 kcal	3.04**	2.90	0.00–6.40	0	0
Sodium	10	≤1.1 g per 1000 kcal	≥2.0 g per 1000 kcal	5.08*	3.15	0.70–9.30	0	0
Empty Calories¶¶¶	20	≤19% of energy	≥50% of energy	20.00	0	20.00–20.00	100.0	5
Total	100			66.38**	11.60	49.50–79.50	—	



r	4.64	0.53	3.80–5.00	60
ns				
FA)	4.80	4.55	0.00–10.00	20
	3.04**	2.90	0.00–6.40	0
per				
	5.08*	3.15	0.70–9.30	0
rgy	20.00	0	20.00–20.00	100
	66.38**	11.60	49.50–79.50	

**Figure ES-1**  
**Healthy Eating Index 2005 Overall Scores for the Average American Diet, the Average Diet of SNAP Participants, and the FDIPIR Food Package**





# Why are the USDA numbers in the 80's?

- “FDPIR as offered” - which means they analyzed ALL of the foods that the USDA lists as available to select from...





# Issues with the Food Package

- Not enough vegetables
  - Not enough fruit
  - Household size matters
  - Household Fact Sheets are incorrect
  - National Nutrient Database is incorrect
  - Lactose intolerance
- 
- HEI weighting does not align with latest research



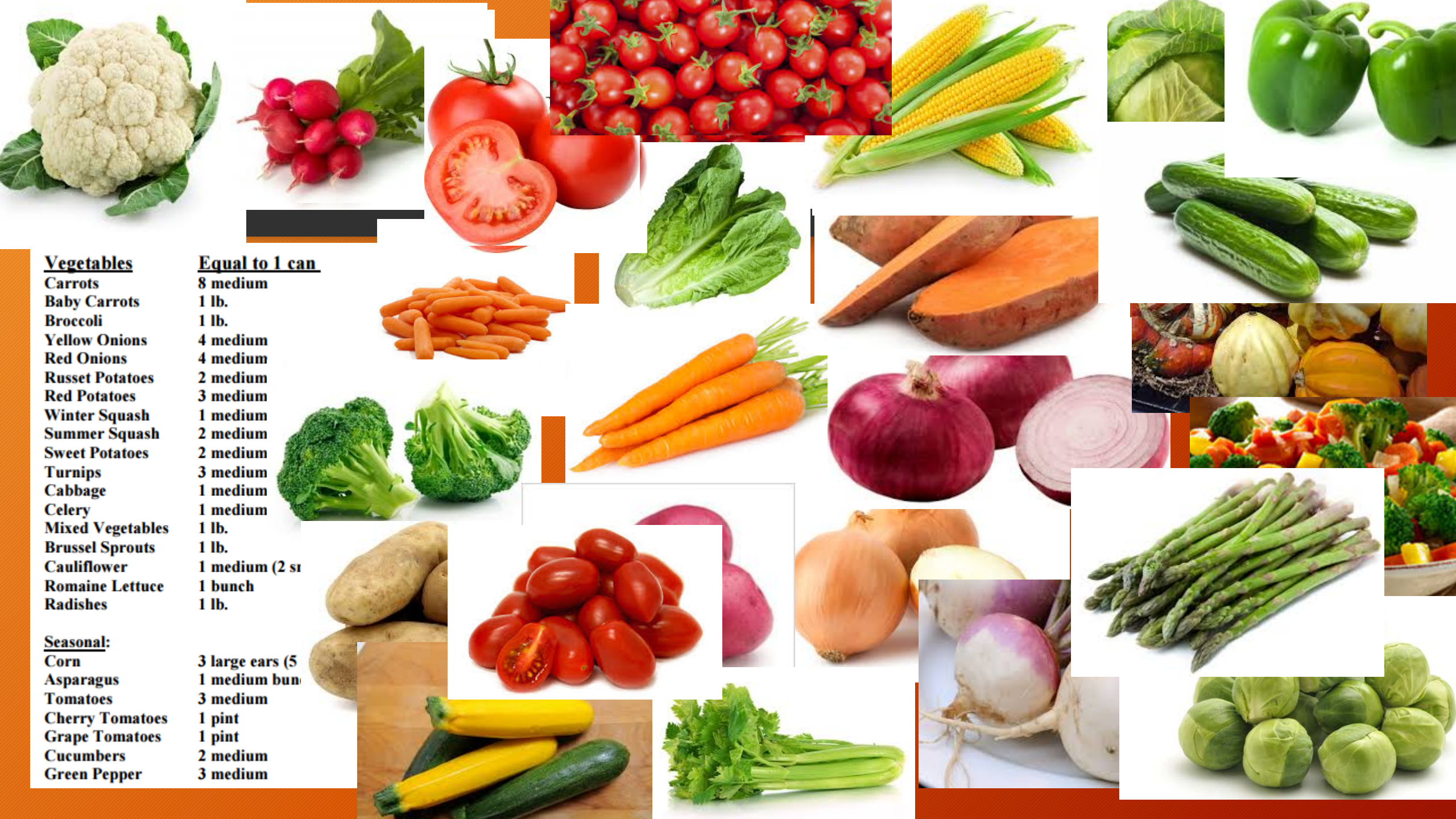
There are  
five kinds of  
cereal - but  
individuals  
only get one  
box per  
month.

**Effective: July 1, 2016**

**NOTE: The availability of individual products is subject to market conditions**

<i>Household Size</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	
<b>USDA Food</b>	<b>Number of Items Per Month</b>								<b>Options</b>
<b>GRAINS, CEREAL, RICE and PASTA</b>									
<b>Cereal, Dry</b> (all sizes)	1 unit per person								Corn, Oat, Wheat, Rice, Bran
<b>Quick Oats</b> (42 oz. package) or <b>Farina</b> (14 oz. package)	1 unit per person								
<b>Macaroni &amp; Cheese</b> (7.25 oz.)  <b>Macaroni</b> (1 lb.)  <b>Whole Grain Rotini</b> (1 lb.)  <b>Spaghetti</b> (1 lb. or 2 lb. package)  <b>Egg Noodles</b> (1 lb. package)  <b>Rice</b> (2 lb.)	Any combination of options cannot exceed 5 lbs. per person; limit of 1 lb. of Macaroni & Cheese per person  • Three 7.25 oz. boxes of Macaroni & Cheese are treated as 1 lb.								





### Vegetables

Carrots	8 medium
Baby Carrots	1 lb.
Broccoli	1 lb.
Yellow Onions	4 medium
Red Onions	4 medium
Russet Potatoes	2 medium
Red Potatoes	3 medium
Winter Squash	1 medium
Summer Squash	2 medium
Sweet Potatoes	2 medium
Turnips	3 medium
Cabbage	1 medium
Celery	1 medium
Mixed Vegetables	1 lb.
Brussel Sprouts	1 lb.
Cauliflower	1 medium (2 st
Romaine Lettuce	1 bunch
Radishes	1 lb.

### Seasonal:


Corn	3 large ears (5
Asparagus	1 medium bun
Tomatoes	3 medium
Cherry Tomatoes	1 pint
Grape Tomatoes	1 pint
Cucumbers	2 medium
Green Pepper	3 medium





Household Size	1	2	3
USDA Food	Number		

And soups!



Month	Options
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Carrots, Corn Kernel, Corn Cream, Hominy, Green Beans, Peas, Potatoes, Rich, Mixed Vegetables, Diced Potatoes, Dehydrated Potatoes (1 lb. bag), Spaghetti Sauce, and Tomatoe. Seasonal (October-December): Instant Potatoes and Pumpkin Soups, Beefy Beef Stew (24 oz), Tomato and Vegetarian Vegetable (10.5 oz), Cream of Mushroom, Cream of Chicken (22 oz)









# WOW!

- 45 different kinds of vegetables
- Fresh
- Canned
- Soups
- Stews

Household Size	1	2	3	4	5	6	7	8	
USDA Food	Number of Items Per Month								Options
VEGETABLES and SOUP									
Canned Vegetables (15.5 oz. can)  Fresh Vegetables (see attached list)	Up to 11 units per person						Carrots, Corn Kernel, Corn Cream, Hominy, Green Beans, Peas, Potatoes, Spinach, Mixed Vegetables, Diced Tomatoes, Dehydrated Potatoes (1 lb. package), Spaghetti Sauce, and Tomato Sauce. Seasonal (October-December): Sweet Potatoes and Pumpkin		
Soups	Up to 3 units per person						Chunky Beef Stew (24 oz), Tomato and Vegetarian Vegetable (10.5 oz), Cream of Mushroom, Cream of Chicken (22 oz RTE)		

# FDPIR provides 11 “units” of vegetables plus 3 cans of soup every 30 days



1 pound

1 medium



3 medium



3 medium peppers



1 pound

1 medium bunch



2 medium

1 medium  
(2 small)



1 bunch

2 medium



3 medium





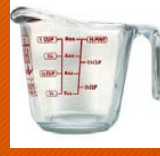
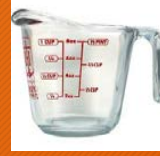
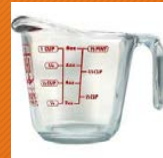
11 units \* 1.5 cups each = 16.5  
3 cans of soup = 3 cups

19.5 Cups



=





19.5 Cups of vegetables for 30 days  
provided from FDPIR

It may seem like a lot...but....



## DAILY VEGETABLE TABLE

### DAILY RECOMMENDATION\*

Children	2-3 years old	1 cup
	4-8 years old	1 ½ cups
Girls	9-13 years old	2 cups
	14-18 years old	2 ½ cups
Boys	9-13 years old	2 ½ cups
	14-18 years old	3 cups
Women	19-30 years old	2 ½ cups
	31-50 years old	2 ½ cups
	51+ years old	2 cups
Men	19-30 years old	3 cups
	31-50 years old	3 cups
	51+ years old	2 ½ cups

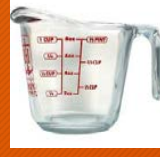
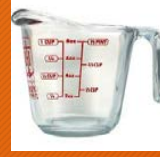


3 cups per day \*  
30 days = 90  
cups per month

# 90 Cups Recommended for boys

28





19.5 Cups of vegetables for 30 days  
provided from FDPIR

It may seem like a lot...but....

# 90 Cups Recommended for boys

90

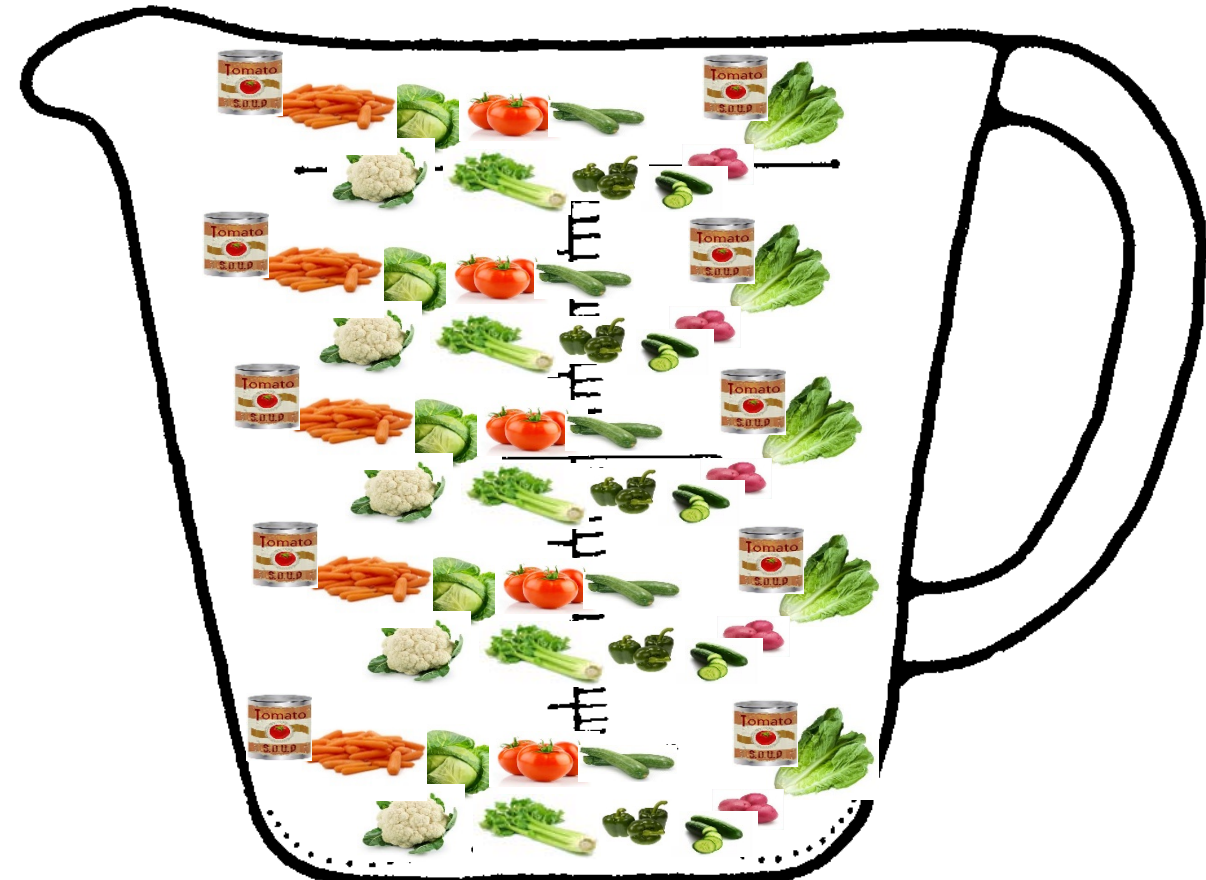




# Boys 14 - 18 years

Provided in the Food  
Package 19.5 Cups  
(22%)

Recommended by the  
USDA 90 Cups (100%)



# Cups of vegetables per day for boys 14 - 18

2/3 cups FDPIR



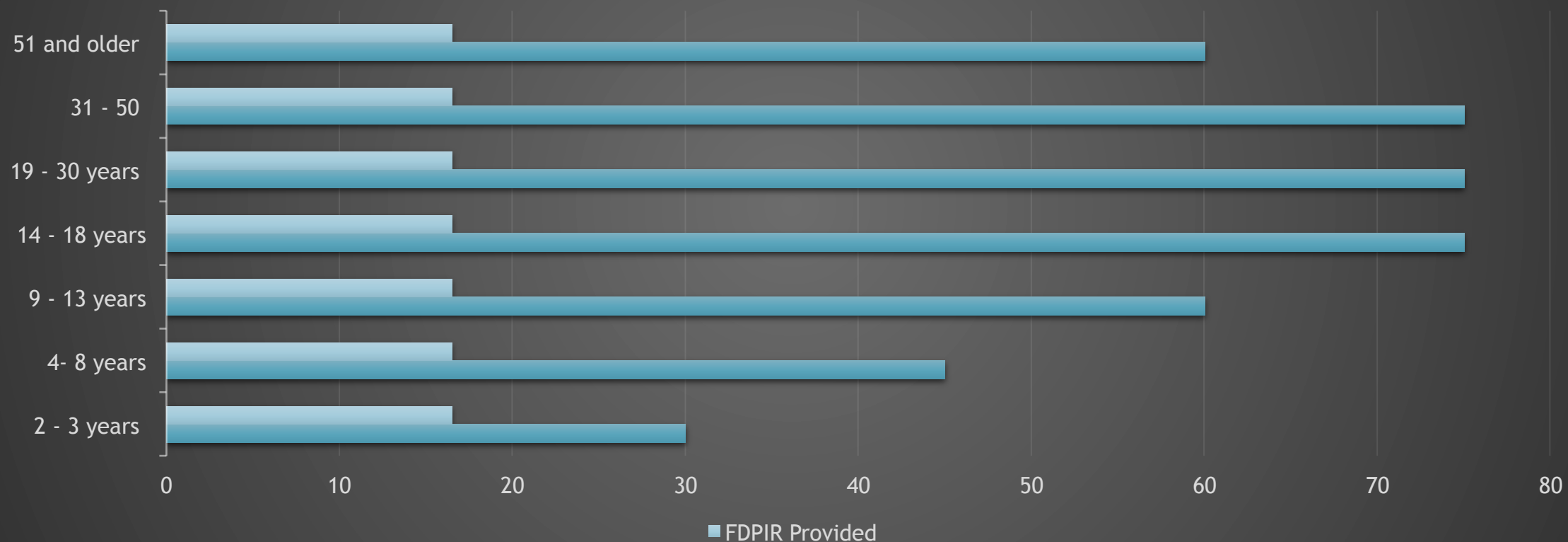
3 cups USDA recommendation





# The need for vegetables changes with age - but FDPIR doesn't

## Daily Vegetable Table for Females



# And what about those soups and stews?

- High vegetable serving numbers...





## VEGETABLE SOUP, CONDENSED, CANNED

Date: November 2012 Code: 100321

### PREPARATION

- Dilute with water to make 2 servings of vegetables?

### PACK/YIELD

- Vegetable soup is packed in about 10 1/2 ounce cans. When diluted with water, it will be about 2 servings (1 cup each).

### STORAGE

### NUTRITION INFORMATION

- 1 cup of prepared vegetable soup counts as 1 cup in the MyPlate.gov Vegetable Group. For a 2,000-calorie diet, the daily recommendation is about 2 1/2 cups of vegetables.
- 1 cup of prepared vegetable soup provides more than 40% of the recommended daily amount of vitamin A needs and 10% of the daily recommended amount of fiber.

### FOOD SAFETY INFORMATION

- If the can is leaking or the ends are bulging, **throw it away.**
- If the canned food has a bad odor or liquid spurts out when the can is opened, **throw it away.**





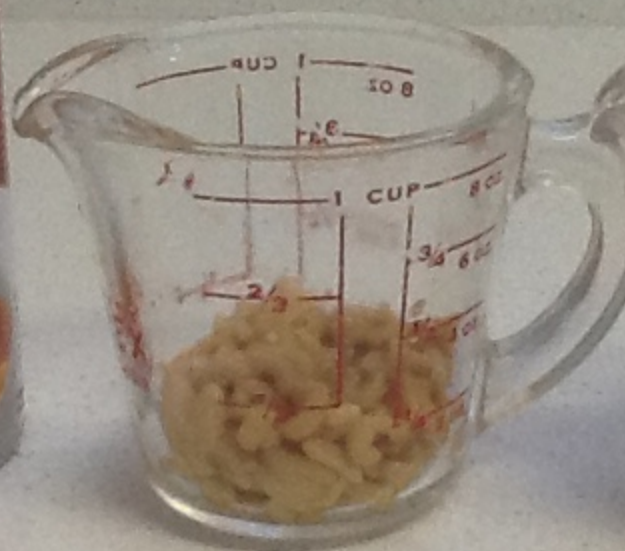




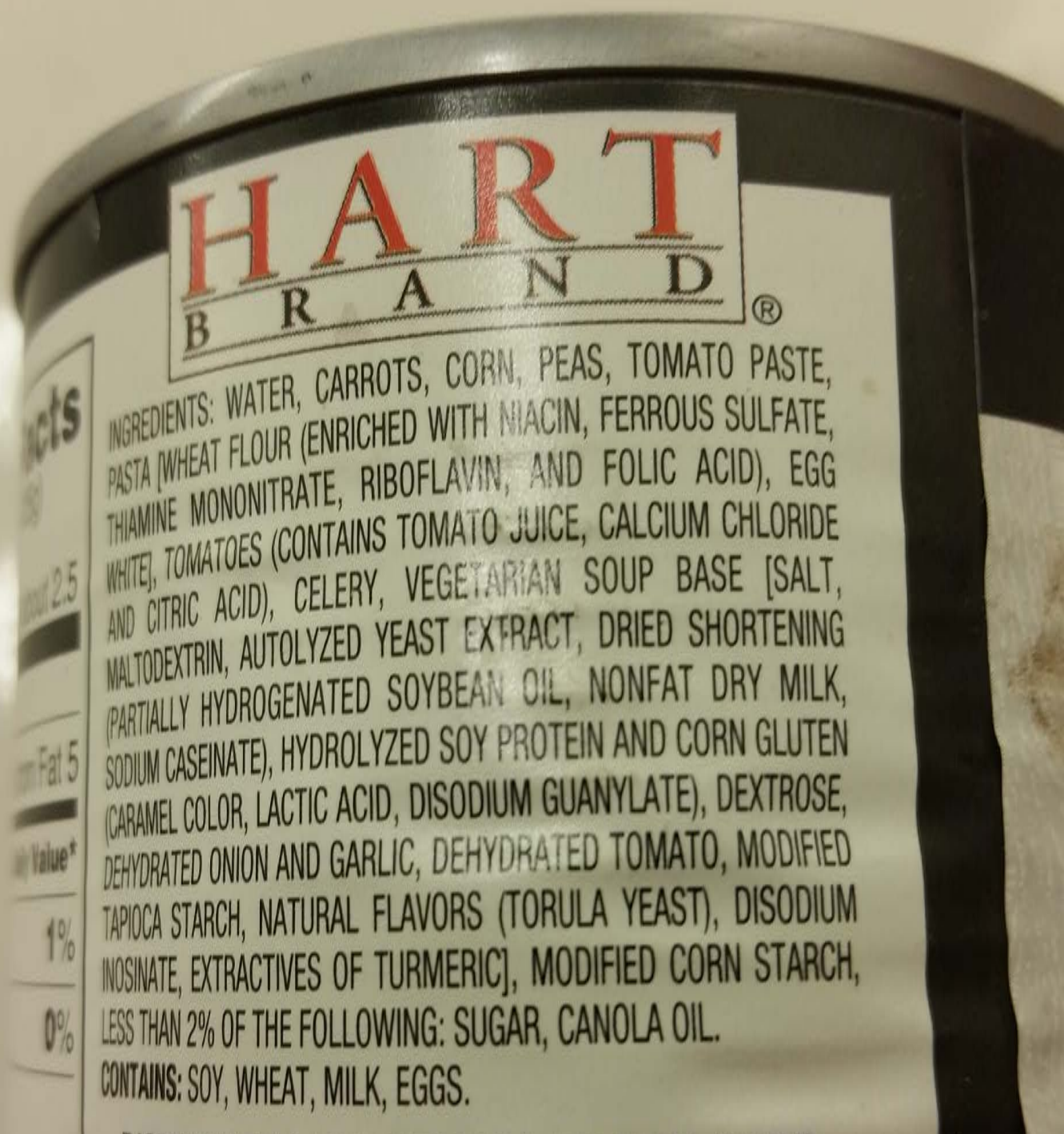
















# CREAM OF MUSHROOM SOUP, Ready to Serve

Date: May 2013

Code: 110164

## PRODUCT DESCRIPTION

- Cream of mushroom soup is a ready-to-eat, cream-based soup.

## PACK/YIELD

- Cream of mushroom soup is packed in 22 ounce cartons. Each carton provides about 3.5 servings (6 fluid ounces each).

## STORAGE

- Store unopened cream of mushroom soup in a cool, clean, dry place.
- After opening, store remaining cream of mushroom soup in the refrigerator tightly closed in its carton.
- Follow the "Best if used by" or "Best by" date on the carton.
- For further guidance on how to store and maintain USDA Foods, please visit the FDD Web site at:  
<http://www.fns.usda.gov/fdd/facts/biubguidance.htm>.

## USES AND PREPARATION TIPS

- Ready-to-serve soups are fully cooked and do not need to be mixed with water or milk.
- If heated, serve right away. Refrigerate leftover soup in a container not made from metal.
- Serve cream of mushroom soup as a main dish or as an appetizer.
- Use cream of mushroom soup as a base for other main dish meals, stews, sauces, or casseroles.

## NUTRITION INFORMATION

- 1 cup of cream of mushroom soup counts as ½ cup from the Vegetable Group of MyPlate. For a 2,000-calorie diet, the daily recommendation is about 2 ½ cups of vegetables.

## FOOD SAFETY

- If the carton is leaking or the ends are bulging, **throw it away**.
- If the food has a bad odor or liquid spurts out when the carton is opened, **throw it away**.

## OTHER RESOURCES

- [www.nutrition.gov](http://www.nutrition.gov)
- [www.choosemyplate.gov](http://www.choosemyplate.gov)
- [www.fns.usda.gov/fdd/](http://www.fns.usda.gov/fdd/)

## NUTRITION FACTS

Serving size: ½ cup (90g) cream of mushroom soup, reduced sodium

### Amount Per Serving

<b>Calories</b>	65	<b>Calories from Fat</b>	0
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### % Daily Value\*

<b>Total Fat</b> 2 g	<b>3%</b>
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Saturated Fat .6g	<b>0%</b>
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Trans Fat 0g	
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<b>Cholesterol</b> 4 mg	
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<b>Sodium</b> 480 mg	<b>19%</b>
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<b>Total Carbohydrate</b> 10 g	<b>1%</b>
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Dietary Fiber .8 g	<b>0%</b>
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Sugars 3 g	
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<b>Protein</b> 1.5 g	
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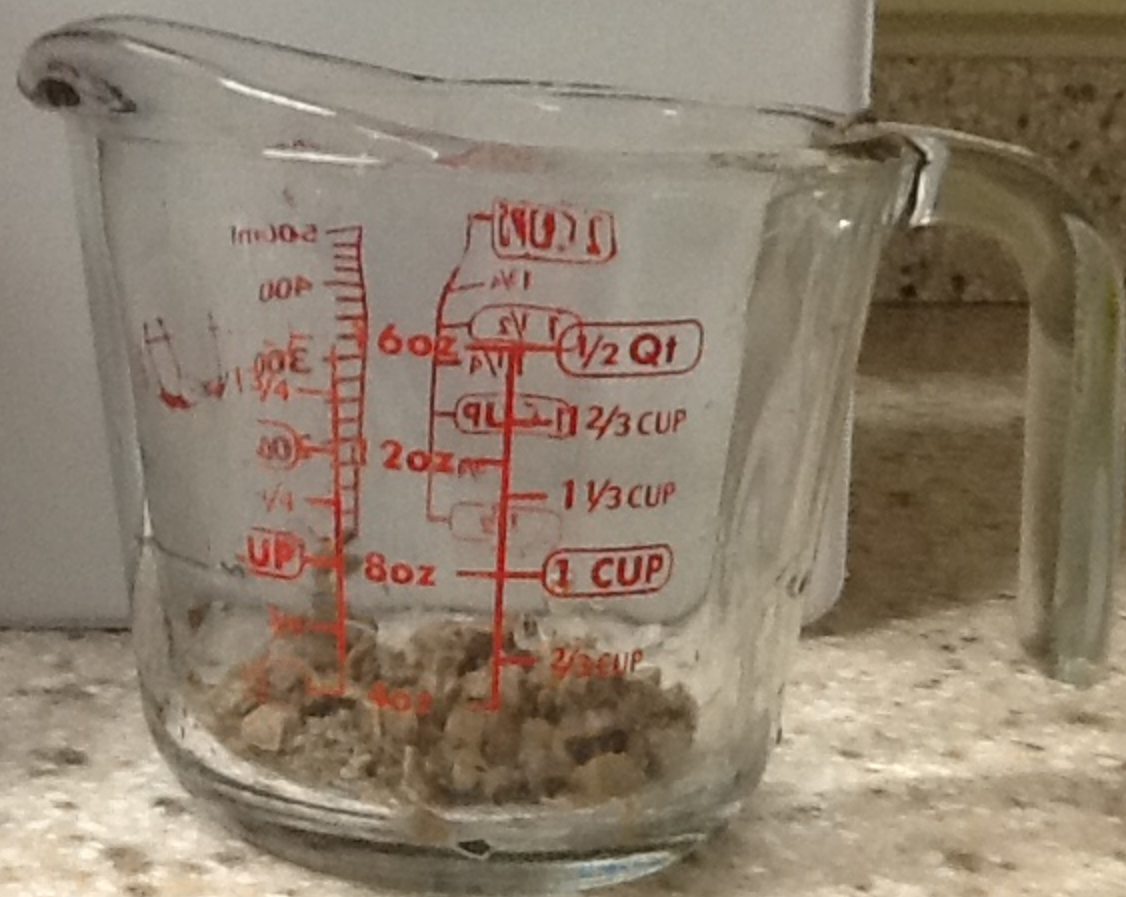
Vitamin A 0 %	Vitamin C 0%
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Calcium 2%	Iron 0%
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\*Percent Daily Values are based on a 2,000 calorie diet.

1 cup of cream of mushroom soup counts as ½ cup from the vegetable group?







**Granby Farms**

Wholesome  
Quality



***Cream of  
Mushroom***  
**SOUP**

***Reduced  
Sodium***



Serving Suggestion

22 FL OZ (650 ML)

INGREDIENTS: WATER, MUSHROOM BASE (MUSHROOMS, SALT, NATURAL FLAVOR, CANOLA OIL, CARAMEL COLOR, DISODIUM INOSINATE AND DISODIUM GUANYLATE, SPICES), MODIFIED FOOD STARCH, CANOLA OIL, NON FAT DRY MILK, SUGAR, CREAM (MILK)/FRESH HEAVY CREAM, AND/OR RECONSTITUTED CREAM FROM WATER AND POWDERED SWEET CREAM), XANTHAN GUM, YEAST EXTRACT, DRIED GROUND MUSHROOMS, TITANIUM DIOXIDE AND SALT.

CONTAINS: MILK, SOY

There are no vegetables listed as an ingredient!



## CREAM OF CHICKEN SOUP, Ready to Serve

Date: December 2012

Code: 110163

### PRODUCT DESCRIPTION

- Cream of chicken soup is a ready-to-eat, cream-based soup.

### PACK/YIELD

- Cream of chicken soup is packed in 22 ounce cartons. Each carton provides about 3.5 servings (6 fluid ounces each).

### STORAGE

- Store unopened cream of chicken soup in a cool, clean, dry place.
- After opening, store remaining cream of mushroom soup in the refrigerator tightly closed in its carton.
- Follow the "Best if used by" or "Best by" date on the carton.
- For further guidance on how to store and maintain USDA Foods, please see our memo [http://www.fns.usda.gov/fdd/policymemo/pmfd107\\_NSLP\\_CACF\\_SFSP\\_CSFP\\_FDPIR\\_TEFAP\\_CI-StorandInvMgmt.pdf](http://www.fns.usda.gov/fdd/policymemo/pmfd107_NSLP_CACF_SFSP_CSFP_FDPIR_TEFAP_CI-StorandInvMgmt.pdf)

### USES AND PREPARATION TIPS

- Ready-to-serve soups are fully cooked and do not need to be mixed with water or milk.
- If heated, serve right away. Refrigerate leftover soup in a container not made from metal.
- Serve cream of mushroom soup as a main dish or as an appetizer.
- Use cream of mushroom soup as a base for other main dish meals, stews, sauces, or casseroles.

### NUTRITION INFORMATION

- 1 cup of cream of chicken soup counts as  $\frac{1}{2}$  cup from the Protein Group of MyPlate.gov For a 2,000-calorie diet, the daily recommendation is about 5 oz of protein daily.

### FOOD SAFETY

- If the carton is leaking or the ends are bulging, **throw it away**.
- If the food has a bad odor or liquid spurts out when the carton is opened, **throw it away**.

### OTHER RESOURCES

- [www.nutrition.gov](http://www.nutrition.gov)
- [www.choosemyplate.gov](http://www.choosemyplate.gov)
- [www.fns.usda.gov/fdd/](http://www.fns.usda.gov/fdd/)

### NUTRITION FACTS

Serving size: 6 fluid ounces soup

#### Amount Per Serving

Calories	50	Calories from Fat	30
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#### % Daily Value\*

Total Fat	3g		5%
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Saturated Fat	1g		
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Trans Fat	0g		
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Cholesterol	5mg		0%
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Sodium	320mg		13%
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Total Carbohydrate	1g		3%
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Dietary Fiber	0g		
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Sugars	<1g		
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Protein	1g		
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Vitamin A	0%	Vitamin C	0%
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Calcium	2%	Iron	0%
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\*Percent Daily Values are based on a 2,000 calorie diet.

1 cup of soup counts as  $\frac{1}{2}$  cup from the protein group?

But wait...1 cup is 8 ounces and the serving size on the label is 6 ounces.

The protein ounce equivalent is 7 grams of protein per ounce - so 4 ounces should be 28 grams.

There is only 1 gram of protein









## NUTRITION FACTS

Serving size: 6 fluid ounces soup

### Amount Per Serving

Calories 50      Calories from Fat 30

### % Daily Value\*

Total Fat	3g		5%
Saturated Fat	1g		5%
Trans Fat	0g		
Cholesterol	5mg		0%
Sodium	320mg		13%
Total Carbohydrate	1g		3%
Dietary Fiber	0g		
Sugars	<1g		
Protein	1g		3%
Vitamin A	0%	Vitamin C	0%
Calcium	2 %	Iron	0%

\*Percent Daily Values are based on a 2,000 calorie diet.

1  
gram

**INGREDIENTS:** WATER, CHICKEN BASE [CHICKEN BROTH, CHICKEN FLAVOR (COOKED CHICKEN, FLAVOR, SALT), SALT, FLAVOR, YEAST EXTRACT, CHICKEN FAT, VEGETABLE JUICE CONCENTRATES (CARROT, ONION, CELERY), TURMERIC, SPICE], MODIFIED FOOD STARCH, CREAM (MILK)(FRESH HEAVY CREAM, AND/OR RECONSTITUTED CREAM FROM WATER AND POWDERED SWEET CREAM), CANOLA OIL, XANTHAN GUM, SUGAR, SALT AND TITANIUM DIOXIDE.

**CONTAINS: MILK, SOY**

**MANUFACTURED FOR:**



# Am I confused about protein?

**OUNCE-EQUIVALENT OF PROTEIN FOODS TABLE**

	AMOUNT THAT COUNTS AS 1 OUNCE-EQUIVALENT IN THE PROTEIN FOODS GROUP	COMMON PORTIONS AND OUNCE-EQUIVALENTS
<b>Meats</b>	1 ounce cooked lean beef 1 ounce cooked lean pork or ham	1 small steak (eye of round, filet) = 3 ½ to 4 ounce-equivalents  1 small lean hamburger = 2 to 3 ounce-equivalents
<b>Poultry</b>	1 ounce cooked chicken or turkey, without skin 1 sandwich slice of turkey (4 ½" x 2 ½" x 1/8")	1 small chicken breast half = 3 ounce-equivalents  ½ Cornish game hen = 4 ounce-equivalents

What counts as an ounce-equivalent in the Protein Foods Group?

In general, 1 ounce of meat, poultry or fish, ¼ cup cooked beans, 1 egg, 1 tablespoon of peanut butter, or ½ ounce of nuts or seeds can be considered as 1 ounce-equivalent from the Protein Foods Group.

Search nutrient table.

Nutrient	Unit	<div>1</div> <div>Value per 100 g</div>	<div>1</div> <div>large 50g</div>	<div>1</div> <div>extra large 56g</div>	<div>1</div> <div>jumbo 63g</div>	<div>1</div> <div>cup (4.86 large eggs) 243g</div>	r
Proximates							
Water	g	76.15	38.08	42.64	47.97	185.04	
Energy	kcal	143	72	80	90	347	
Protein	g	12.56	6.28	7.03	7.91	30.52	
Total lipid (fat)	g	9.51	4.76	5.33	5.99	23.11	

Search nutrient table.

Nutrient	Unit	<div>1</div> <div>Value per 100 g</div>	<div>1</div> <div>cup, chopped or diced 140g</div>	<div>1</div> <div>unit (yield from 1 lb ready-to-cook chicken) 178g</div>	<div>0.5</div> <div>chicken, bone removed 299g</div>
Proximates					
Water	g	59.45	83.23	105.82	177.76
Energy	kcal	239	335	425	715
Protein	g	27.30	38.22	48.59	81.63



Basic Report: 16167, USDA Commodity, Peanut Butter, smooth

Return to Search Results Full Report (All Nutrients) Statistics Report Download (CSV) Print (PDF)

Nutrient values and weights are for edible portion.

Search nutrient table:

Nutrient	Unit	1 Value per 100 g	1.0 tbsp 16g	1 cup 258g
Proximates				
Water	g	1.55	0.25	4.00
Energy	kcal	588	94	1517
Protein	g	21.93	3.51	56.58

Nuts and seeds	<div>½ ounce of nuts (12 almonds, 24 pistachios, 7 walnut halves)</div> <div>½ ounce of seeds (pumpkin, sunflower, or squash seeds, hulled, roasted)</div> <div>1 Tablespoon of peanut butter or almond butter</div>	1 ounce of nuts or seeds = 2 ounce-equivalents
Beans and peas	<div>¼ cup of cooked beans (such as black, kidney, pinto, or white beans)</div> <div>¼ cup of cooked peas (such as chickpeas, cowpeas, lentils, or split peas)</div> <div>¼ cup of baked beans, refried beans</div> <div>¼ cup (about 2 ounces) of tofu</div> <div>1 oz. tempeh, cooked</div>	<div>1 cup split pea soup = 2 ounce-equivalents</div> <div>1 cup lentil soup = 2 ounce-equivalents</div> <div>1 cup bean soup = 2 ounce-equivalents</div>

# FDPIR provides about 15 cups per month

FRUIT and JUICE		
<b>Canned Fruit</b> (15.5 oz. can)	Up to <b>10</b> units per person	Applesauce, Apricots, Peaches, Pears, Mixed Fruit, Dried Plums, Raisins
<b>Fresh Fruit</b> (see attached list)		
<b>Dried Fruit</b> (15-16 oz)		
<b>Juices</b> (64 oz bottles)	Up to <b>2</b> units per person (64 oz)	Apple, Grape, Orange, Grapefruit, Tomato, Cranberry-based



# Fruit

2 cups/day  
= 60 cups  
for 30 days

25% of the  
recommended  
amount

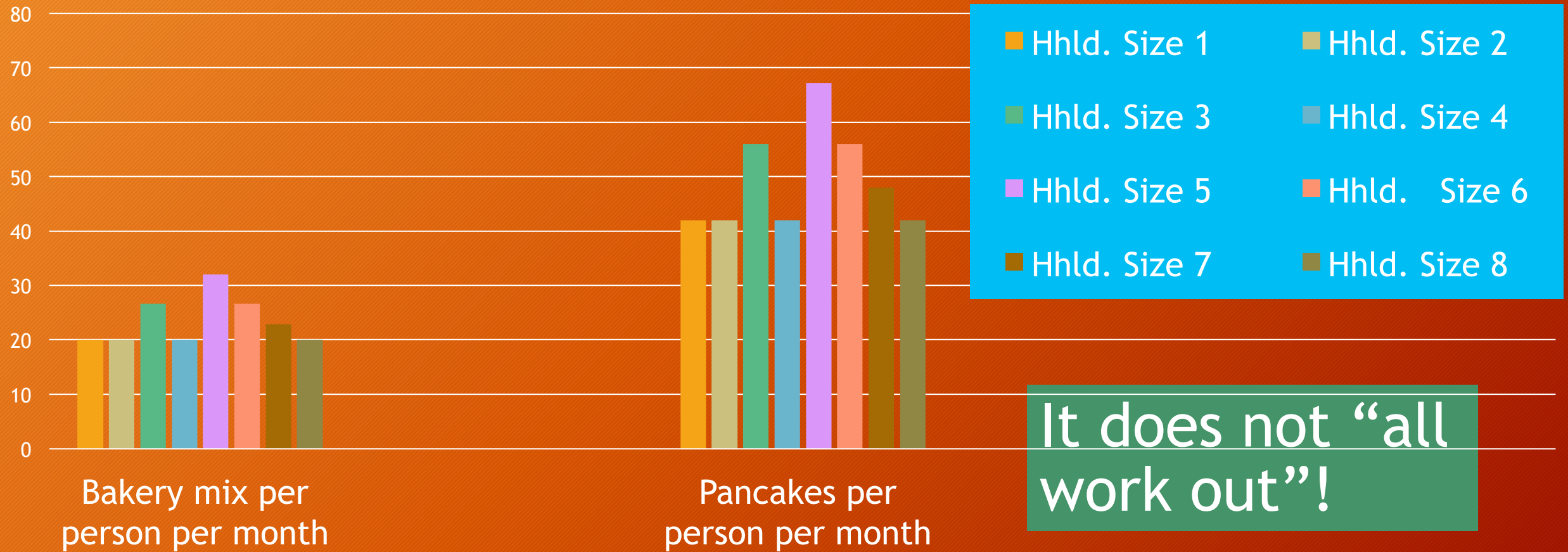
DAILY FRUIT TABLE		
DAILY RECOMMENDATION*		
Children	2-3 years old	1 cup
	4-8 years old	1 to 1 ½ cups
Girls	9-13 years old	1 ½ cups
	14-18 years old	1 ½ cups
Boys	9-13 years old	1 ½ cups
	14-18 years old	2 cups
Women	19-30 years old	2 cups
	31-50 years old	1 ½ cups
	51+ years old	1 ½ cups
Men	19-30 years old	2 cups
	31-50 years old	2 cups
	51+ years old	2 cups

# Household Size Matters

Economies of scale only works for price - not quantity



<b>Rice (2 lb.)</b>									
<b>Cornmeal /Flour (5 lb. bag)</b>	Up to 2 units per person								Cornmeal, All Purpose Flour, Whole Wheat Flour
<b>Bakery Mix (5 lb. bag)</b>	1 per 4 mos.	1 per 2 mos.	1	1	2	2	2	2	
<b>Saltine Crackers (1 lb. box)</b>	1 unit per person 1 – 16 oz. package counts as 1 unit								



# Lactose Intolerance

## How common is lactose intolerance?

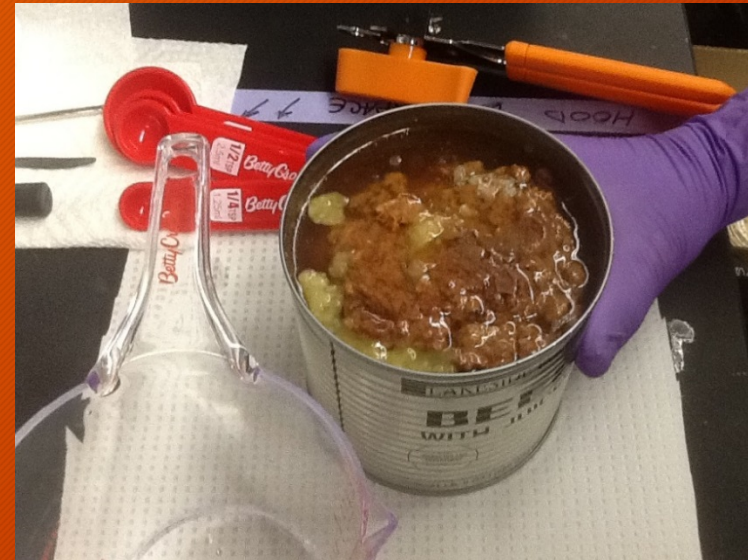
An estimated 30 million to 50 million American adults are lactose intolerant.<sup>4</sup> The pattern of primary lactose intolerance appears to have a genetic component, and specific populations show high levels of intolerance, including approximately: 95 percent of Asians, 60 percent to 80 percent of African Americans and Ashkenazi Jews, 80 percent to 100 percent of American Indians, and 50 percent to 80 percent of Hispanics. Lactose intolerance is least common among people of northern European origin, who have a lactose intolerance prevalence of only about 2 percent.<sup>5</sup>



# National Nutrient Database is how almost everyone calculates the Omega 6 to Omega 3 ratio

USDA says the ratio 7.5

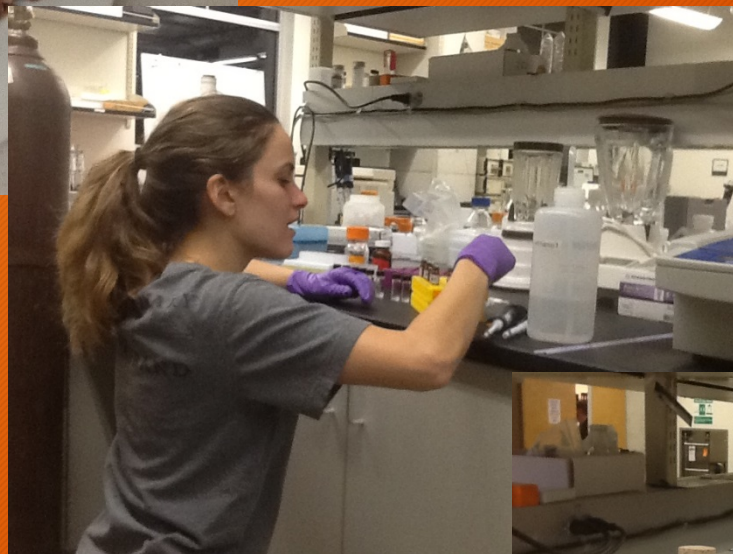
USDA says the ratio is 1.7













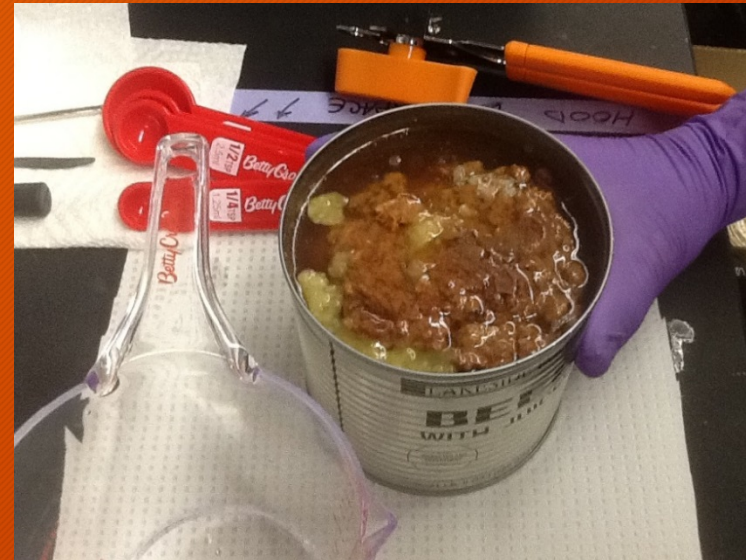
We did the testing ourselves and found what other researchers have found.

58

The ratio is  
2:1



The ratio is 39:1

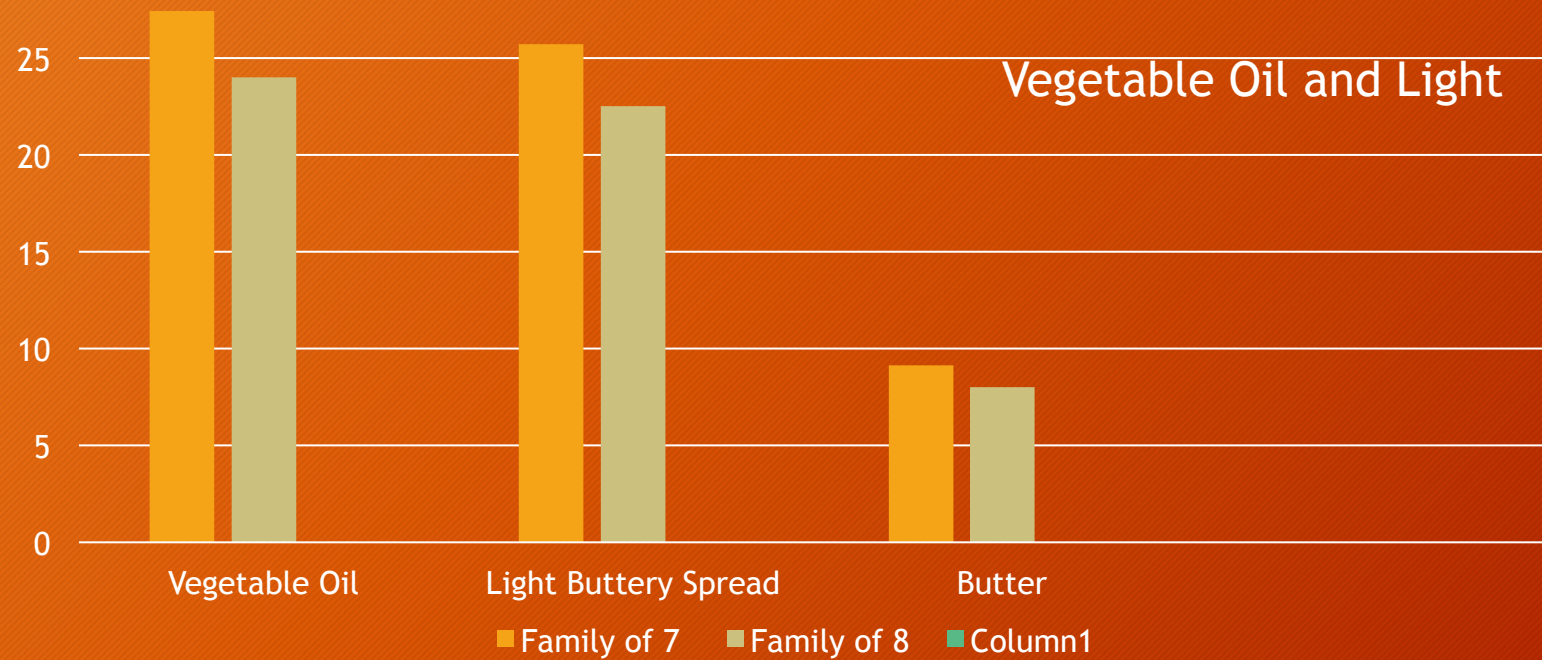




# FDPIR Promotes n-6 oil instead of butter that is lower

- Lots of evidence that full fat dairy reduces Type 2 Diabetes and Obesity compared to skim milk. Many beneficial effects of saturated fat compared to excessive polyunsaturated n-6 fat.

(32 fl. oz. carton)									
OIL									
Vegetable Oil (48 fl. oz.) or	1	1	2	2	3	3	4	4	For 3 person and larger households:  48 fluid ounces of vegetable oil = 45 ounces of light buttery spread = 1 lb. of butter
Light Buttery Spread (15 oz.) or	2	3	6	6	9	9	12	12	
Butter (16 oz.)	1	2	2	2	3	3	4	4	





# Lactose Intolerance

## How common is lactose intolerance?

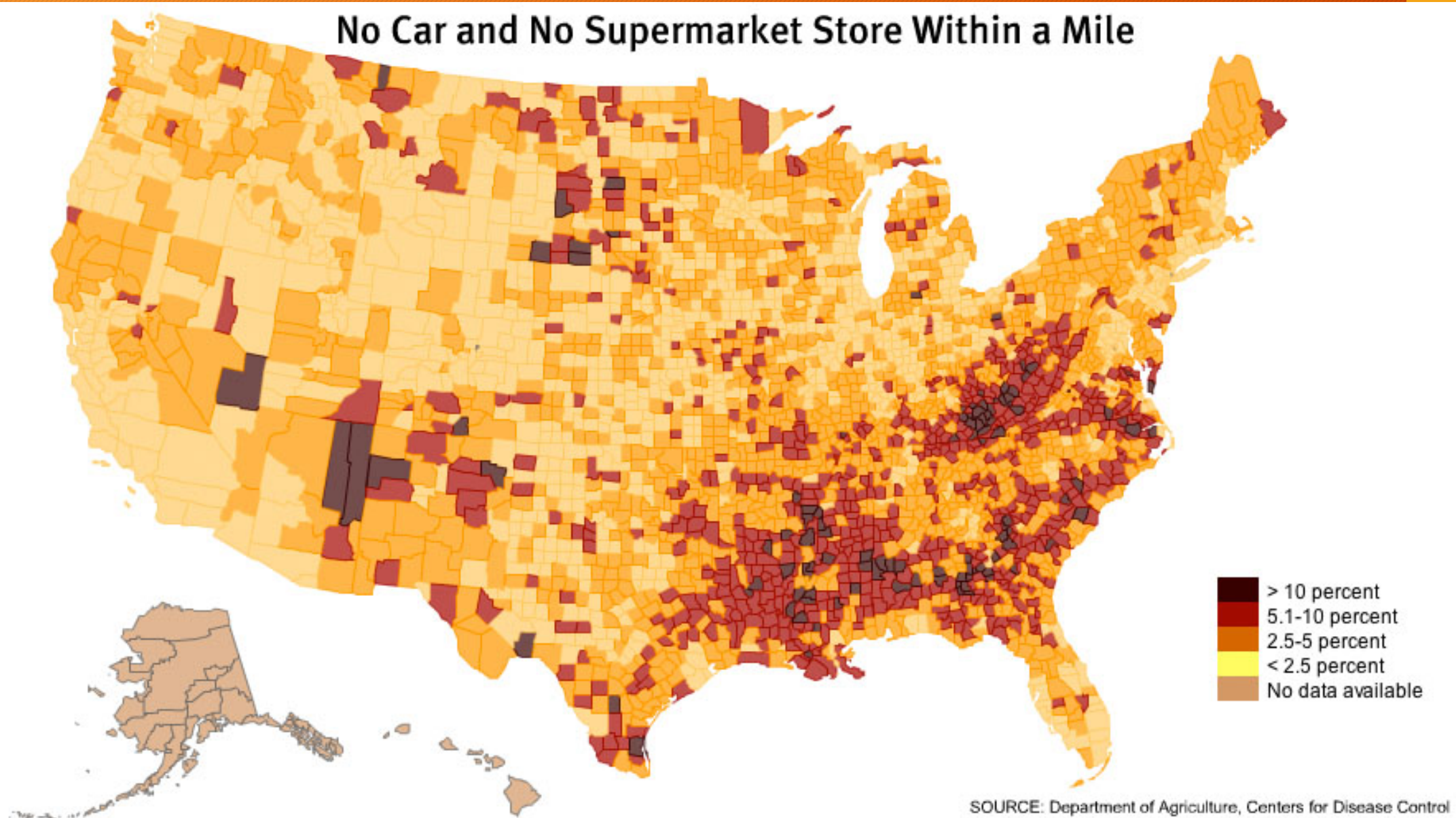
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This is not news...2008 Report to Congress (pp. ES-1 - ES-2)

*“Nevertheless, lactose intolerance potentially limits FDPIR participants’ use of low-cost dairy products and presents a challenge in delivering adequate calcium, potassium, and vitamin D. “*



# A Supplement Program in a Food desert



# Food Deserts

- Lack of access to affordable
  - Fruits
  - Vegetables
  - Meats
  - Dairy (including eggs)
- Best use of USDA dollars would be to provide the foods lacking in food deserts instead of providing cheap grains that are already available.



# Bottom line - the USDA needs to increase the budget for FDPIR

- Can't afford it?
- 1 out of every 3 Indian Health Service dollars is spent on diabetes
- Out of the 4.3 billion dollar IHS budget
- 1.4 BILLION DOLLARS ON DIABETES ALONE!
- 119 million total cost of FDPIR

# Food is Health Care - Medicine is Sick Care

- 1 out of every 3 Indian Health Service dollars is spent on diabetes
- Out of the 4.3 billion dollar IHS budget
- 1.4 BILLION DOLLARS ON DIABETES ALONE!



10 times the total FDPIR budget

1.4 BILLION  
ON DIABETES  
ALONE

119 million

Vegetables are a lot cheaper than dialysis,  
insulin, amputation, death



You may be thinking that  
I came here to talk  
“smack” about FDPIR

But I didn't...

Native peoples in US can lead  
the country and the world to  
better health  
by showing strong health  
improvement through nutrition!



# Heroes in FDPIR





# President Russell Begaye, Navajo Nation



My people  
want to eat  
their own  
food.

USDA Tribal Consult February  
2016



# Six years after the Congressional mandate



Blue  
Cornmeal

Buffalo



# FDPIR food should be Tribal Food





Food Sovereignty is where it is at!

FDPIR food package needs improvement - but  
it can be a key partner in the food  
sovereignty movement

Questions?