

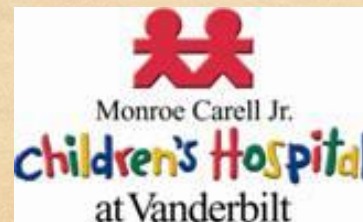
# Nutrition in School

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Martha Upchurch, MS, RD, LDN, CDE

&

Stephanie Kovacs, MS, RD, LDN, CDE



# Objective

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- Discuss the role of nutrition in the school system.
- Review nutrition labels and carbohydrate counting.
- Discuss ways to incorporate healthier eating habits in the school.

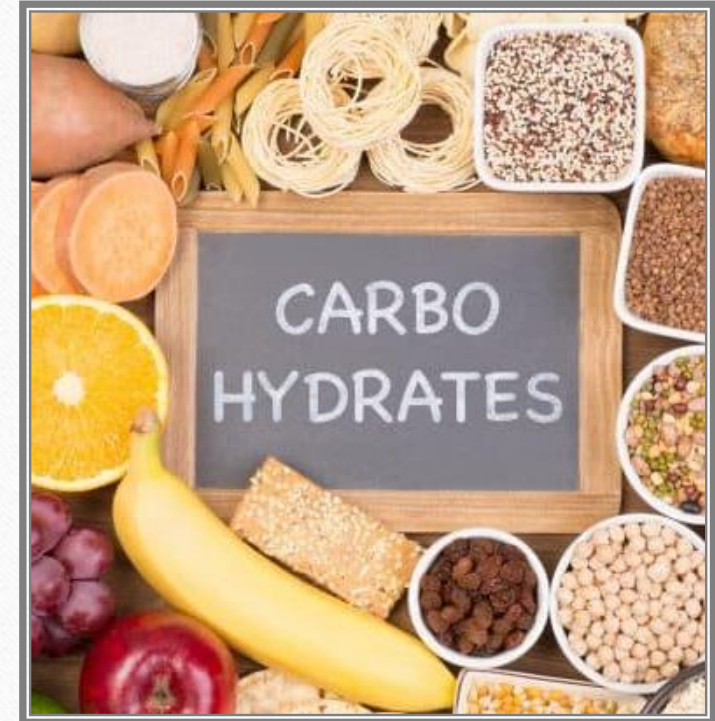




# Carbohydrates

- Provide the body and brain with glucose, which is converted to energy.
- Not a “bad” food
- Foods that contain carbohydrates
  - Grains like rice, oatmeal, and barley - grain-based foods like bread, cereal, pasta, and crackers
  - Starchy vegetables like potatoes, carrots, peas and corn
  - Fruit and fruit juice
  - Milk and yogurt
  - Dried beans/legumes and soy products like veggie burgers
  - Sweets and snack foods like sodas, juice drinks, cake, cookies, candy, and chips

**\*\*non-starchy veggies have very low amounts of carbs**





# So how many carbs?

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- < 5 years old -----30 to 45 grams per meal
- 5–12 years old ----- 45 to 60 grams per meal
- Teens-----60 to 75 grams of carb per meal



# Meal Planning

- Carbohydrate gram counting
  - Match carbs with insulin (insulin to carb ratio)
  - Typically in Type 1 patients
  - Requires math skills
- Consistent carb counting (Type 1 and Type 2)
  - Set amount of carbs at each meal and snack
    - Family on set doses of insulin
    - May help with weight loss goals
- Plate Method
  - Typically used in pre-diabetes
  - Balance of meals



## Reading Labels

Be sure to adjust  
total carbohydrate  
grams when eating  
more than one  
serving!

### Nutrition Facts

Serving Size 1 cup (228g)  
Servings Per Container 2

#### Amount Per Serving

**Calories** 260      **Calories from Fat** 120

#### % Daily Value\*

**Total Fat** 13g      **20%**

Saturated Fat 5g      **25%**

Trans Fat 2g

**Cholesterol** 30mg      **10%**

**Sodium** 660mg      **28%**

**Total Carbohydrate** 31g      **10%**

Dietary Fiber 0g      **0%**

Sugars 5g

**Protein** 5g

Vitamin A 4%      •      Vitamin C 2%

Calcium 15%      •      Iron 4%

\* Percent Daily Values are based on a 2,000 calorie diet.  
Your Daily Values may be higher or lower depending on  
your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

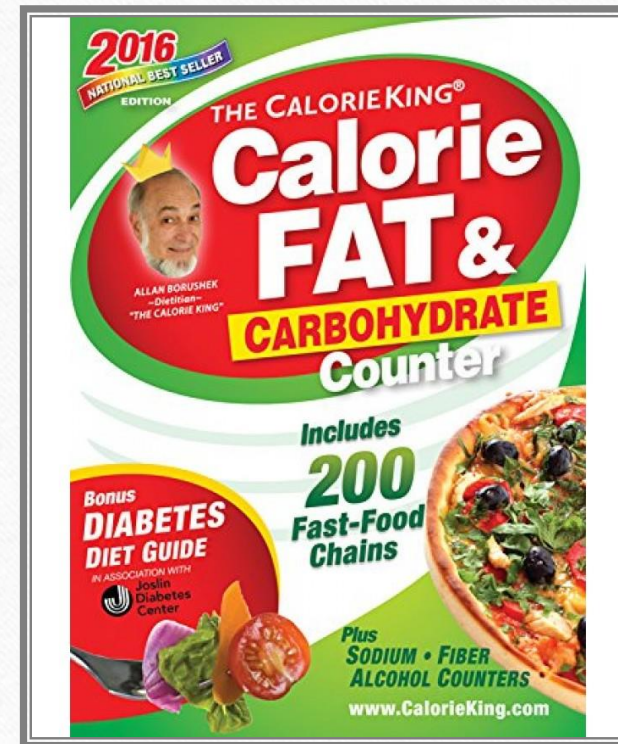
Calories per gram:

Fat 9      •      Carbohydrate 4      •      Protein 4



# Tools for Carb Counting

- ✓ Food labels
- ✓ Measuring cups
- ✓ Resource books
- ✓ [www.calorieking.com](http://www.calorieking.com)
- ✓ [www.calorie-count.com](http://www.calorie-count.com)
- ✓ Phone apps





# Sugar free VS Carb Free

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- “Sugar Free” only means free of table sugar
- Sugar Alcohols: words ending in “ol”, mannitol, sorbitol, lactitol
- Net Carbs



# The New and Improved Nutrition Facts Label – Key Changes



The U.S. Food and Drug Administration has finalized a new Nutrition Facts label for packaged foods that will make it easier for you to make informed food choices that support a healthy diet. The updated label has a fresh new design and reflects current scientific information, including the link between diet and chronic diseases.

## 1. Servings

The number of “servings per container” and the “Serving Size” declaration have increased and are now in larger and/or bolder type. Serving sizes have been updated to reflect what people actually eat and drink today. For example, the serving size for ice cream was previously 1/2 cup and now is 2/3 cup.

There are also new requirements for certain size packages, such as those that are between one and two servings or are larger than a single serving but could be consumed in one or multiple sittings.

## 2. Calories

“Calories” is now larger and bolder.

## 3. Fats

“Calories from Fat” has been removed because research shows the type of fat consumed is more important than the amount.

## 4. Added Sugars

“Added Sugars” in grams and as a percent Daily Value (%DV) is now required on the label. Added sugars includes sugars that are either added during the processing of foods, or are packaged as such (e.g., a bag of table sugar), and also includes sugars from syrups and honey, and

## Current Label

### Nutrition Facts

Serving Size 2/3 cup (55g)  
Servings Per Container About 8

#### Amount Per Serving

**Calories** 230      Calories from Fat 72

% Daily Value\*

**Total Fat** 8g      **12%**

Saturated Fat 1g      **5%**

Trans Fat 0g

**Cholesterol** 0mg      **0%**

**Sodium** 160mg      **7%**

**Total Carbohydrate** 37g      **12%**

Dietary Fiber 4g      **16%**

Sugars 12g

**Protein** 3g

Vitamin A      10%

Vitamin C      8%

Calcium      20%

Iron      45%

\* Percent Daily Values are based on a 2,000 calorie diet.  
Your daily value may be higher or lower depending on your calorie needs.

Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

## New Label

### Nutrition Facts

**1** 8 servings per container  
**Serving size** 2/3 cup (55g)

**2** **Amount per serving**  
**Calories** **230**

% Daily Value\*

**3** **Total Fat** 8g      **10%**

Saturated Fat 1g      **5%**

Trans Fat 0g

**Cholesterol** 0mg      **0%**

**Sodium** 160mg      **7%**

**Total Carbohydrate** 37g      **13%**

Dietary Fiber 4g      **14%**

Total Sugars 12g

**4** Includes 10g Added Sugars      **20%**

**Protein** 3g

**5** Vitamin D 2mcg      10%

Calcium 200mg      15%

Iron 8mg      45%

Potassium 235mg      6%

**6** \* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

sugars from concentrated fruit or vegetable juices. Scientific data shows that it is difficult to meet nutrient needs while staying within calorie limits if you consume more than 10 percent of your total daily calories from added sugar.

## 5. Nutrients

The lists of nutrients that are required or permitted on the label have been updated. Vitamin D and potassium are now required on the label because Americans do not always get the recommended amounts. Vitamins A and C are no longer required since deficiencies of these vitamins are rare today. The actual amount (in milligrams or micrograms) in addition to the %DV must be listed for vitamin D, calcium, iron, and potassium.

The daily values for nutrients have also been updated based on newer scientific evidence. The daily values are reference amounts of nutrients to consume or not to exceed and are used to calculate the %DV.

## 6. Footnote

The footnote at the bottom of the label has changed to better explain the meaning of %DV. The %DV helps you understand the nutrition information in the context of a total daily diet.

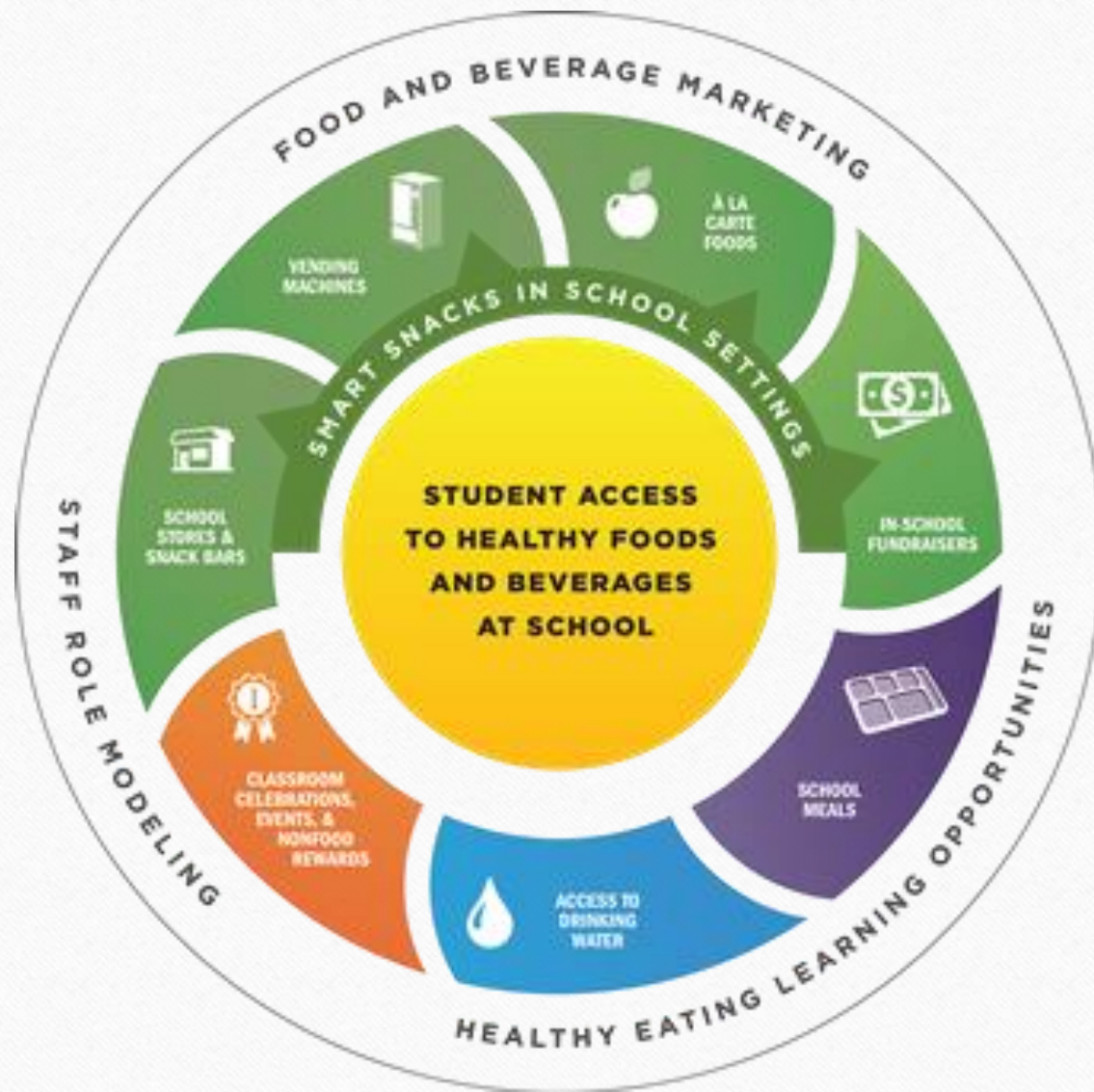
## Transitioning to the New Label

Manufacturers still have time to begin using the new and improved Nutrition Facts label, so you will see both label versions for a while. However, the new label is already starting to appear on products nationwide.

For more information about the new Nutrition Facts label, visit:

[www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm385663.htm](http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm385663.htm)

January 2018





# School Lunch



Established under the National School Lunch Act, signed by President Harry Truman in 1946.

Provides low-cost or free lunches to upwards of 31 million students at 92 percent of U.S. public and private schools.

## National School Lunch Program



## What are the USDA Guidelines for school lunch?

- $\frac{3}{4}$  to 1 cup of vegetables offered per day\*
- $\frac{1}{2}$  to 1 cup of fruits offered per day\*
- Weekly requirements for all vegetable subgroups (i.e., dark green, red/orange, legumes, starchy, and other)
- Juice limited to no more than half of the fruit and vegetable offerings (100% juice – no sugar added)
- Added sugars limited in canned and frozen fruits
- All grains must be whole-grain rich
- Allows tofu to count as a meat alternate
- Only allows fat-free (flavored or unflavored) or unflavored low-fat (1 percent) milk
- Total calories that can be offered in a meal are limited: must be within minimum and maximum range
- Less than 10% of calories can come from saturated fat
- Product must indicate zero grams of trans fat per serving
- Gradual but major sodium reductions through 2020

\*The amount offered varies by age/grade group. It is only required to take a half cup of fruit or vegetable.

# School Nurse role

- Nutritional management is one of the cornerstones of diabetes care and education.
- School nurses play a major role
  - Education/training
  - Safe school environment
  - Assist with IHP from medical orders
  - Supervision
  - Encouragement
- Research suggests that school nurse supervision of students' blood glucose monitoring and insulin dose adjustment significantly improves blood glucose control in children with poorly controlled type 1 diabetes (Nguyen et al., 2008).





# Cafeteria



Adding in salad bar options



Meatless Monday's



Advocate for more plant based options



During 'Mentoring Meals Mondays' in Cincinnati Public Schools, staff and teachers eat school lunch with the kids and talk about good nutrition choices.



# USDA partners up

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- <https://www.usda.gov/media/blog/2014/09/18/team-success-usda-and-partners-help-secure-healthier-school-day>









# School Community

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- School garden program
- Farm to school program
- Expand school breakfast – try breakfast in the classroom
- Fresh fruit and vegetable program
- Student recipe contest
- Monthly nutrition/wellness news letters
- Be an advocate for healthier food in your school district
- Fundraisers



# Classroom

- Educating the staff members/teachers
  - Usually maintain the most direct communication with parents
- Have guidelines/criteria for school celebrations
  - Limited desserts, sweets, juice, soda
- Non-food rewards – pencils, erasers, stickers, etc.
- Learning opportunities for health education/lessons
- Rewards system for trying new foods
- Can model attitudes toward school food



# Healthy Snacks/Parties

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- Fresh fruit/fruit salad, fruit cups in 100% juice
- Vegetables – broccoli, carrots, cucumber, cherry tomatoes
- Low fat yogurt
- Popcorn
- Rice cakes
- Pretzels



# Low carb snacks

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- Beef jerky
- String cheese
- Low carb yogurt
- Tuna or chicken salad
- Deli meat wrapped in cheese
- Cucumbers and ranch dip
- Buffalo dip and celery
- Nuts/sunflower seeds
- Cherry tomatoes and mozzarella cheese







# Creativity

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- Cut up fruits and veggies into shapes
  - Cutting them up makes it easier to eat and fun
- Put fruits in a nice basket or cups for display
- Yogurt parfaits
- Promote healthy eating with fun posters/signage
- Engage students through a menu-planning challenge or taste testing in classrooms
- Thank school nutrition staff for their efforts in preparing and marketing new menu items or participating in special events. (school lunch hero day)

# Creative, descriptive names for featured items

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- What would you rather eat: *Rice with Vegetables* or *Zesty Fiesta Rice Bowl*?
- Brainstorm creative, descriptive names for featured entrees. Think outside the box—how could you relate entrée names to the school mascot, school colors, favorite teacher, or community? How about Vikings' Veggie-loaded Pizza, Bulldogs' Big Bad Bean Burrito or Mrs. Harwood's Famous Baked Beans?



# Handout for nurses

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- <https://onlinenursing.regiscollege.edu/msn-to-doctor-of-nursing-practice/a-nurses-guide-to-the-food-pyramid/>



Thank you!