Unraveling Food Labels

by
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Nutrition Labeling & Education Act (NLEA) of 1990

- Required nutrition labeling for most foods by 1994
  - Exceptions: meat, poultry, seafood, bulk foods, deli items
- Authorized use of **nutrient content claims** and **FDA approved health claims.**
- Purpose:
  - to make it easier for consumers to plan healthy diets.
- FDA rule on trans fats (2003):
  - Required trans fat labeling on January 1, 2006

Food Allergen Labeling & Consumer Protection Act of 2006

- Requires complete ingredient label information on all major food allergens:
  - **Milk**
  - **Egg**
  - **Wheat**
  - **Soy**
  - **Peanuts**
  - **Tree nuts (such as almonds, cashew, walnuts)**
  - **Fish (such as bass, cod, flounder)**
  - **Shellfish (such as crab, lobster, shrimp)**

Food Allergen Labeling & Consumer Protection Act of 2006

- Ingredients are listed in terms that are understandable to the average consumer.
  - **If a product contains casein, a milk-derived protein, the product's label must list the term "milk" in addition to the term "casein."**

Before

NUTRITION INFORMATION	PER SERVING	PERCENTAGE OF US RECOMMENDED DAILY ALLOWANCES (US RDA)
SERVING SIZE	5 OZ	PROTEIN	10
SERVINGS PER CONTAINER	4	VITAMIN A	*
CALORIES	250	VITAMIN C	*
PROTEIN	9g	THIAMINE	8
CARBOHYDRATE	19g	RIBOFLAVIN	15
FAT	11g	NIACIN	2
SODIUM	530mg	CALCIUM	20
		IRON	4

* CONTAINS LESS THAN 2% OF THE US RDA OF THIS NUTRIENT

After →

Nutrition Facts
Serving Size ¾ cup (27g)
Servings Per Container about 16

Amount Per Serving	Wheaties	with ½ cup skim milk
Calories	100	140
Calories from Fat	5	10
	% Daily Value**	
Total Fat 0.5g*	1%	1%
Saturated Fat 0g	0%	0%
Trans Fat 0g		
Polyunsaturated Fat 0g		
Monounsaturated Fat 0g		
Cholesterol 0mg	0%	1%
Sodium 190mg	8%	10%
Potassium 95mg	3%	9%
Total Carbohydrate 22g	7%	9%
Dietary Fiber 3g	11%	11%
Sugars 4g		
Other Carbohydrate 15g		
Protein 3g		

Trends in Food Label Use

	1994	1995	2002
Number who read the food label often or sometimes?	70%	69%	69%
Do you use serving size information?	29%	26%	NA
For those who use the label often:			
To figure out how much to eat.	34%	40%	35%
To see if food is high/low in fat, calories, salt, etc.	77%	83%	67%
To help in meal planning	34%	36%	32%

Source: www.cfsan.fda.gov/~dms/owg-rpt.html

Kessler and Wunderlich –

The Diabetes Educator July/August 1999;25(4):549-559.

- People with diabetes read food labels more often than general consumers (91% vs 71%) looking for "high/low information" "avoiding ingredients" "checking claims" and "portion control".
- "Sugar" content was checked most frequently (88%), followed by fat (75%).
- Less than 60% refer to "Total Carb" or "serving size".
- Percent Daily Values were used the least (35%).

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Most Struggle with Reading Labels

American Journal of Preventative Medicine, Vol 31, Issue 5, Nov 2006

- **Nutrition Label Survey**
  - 68% had some college education
  - 40% had chronic illness for which diet impacts
- **Results:** Ave score was 69%
  - Only 32% would correctly calculate amount of carb in a 20 oz bottle of soda with 2.5 servings per container.
  - Only 60% could calculate number of carb consumed if ate ½ a bagel (when serving size was whole bagel)
  - Only 22% could calculate net carbs in 2 slices low-carb bread and 23% in serving of low carb spaghetti

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5 Keys to Understanding the Food Label

1. Front Label
2. Serving Size
3. Nutrient List
4. Percent Daily Value (DV)
5. Ingredient List

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Front Label

- Nutrient Claims
  - "Fat Free", "Low Fat" "High Fiber" "Sugar Free"
  - What do they mean?
- Health Claims
  - "Diets low in saturated fat and cholesterol may reduce the risk of heart disease"
  - Only allowed if supported by scientific evidence.

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Front Label

- Food Label Symbols
  - Several different companies have them
  - Overload to consumer: confusing and complicated
- Examples
  - AHA Heart Check Mark
  - Kellogg's Diabetes Friendly Seal
  - PepsiCo Smart Spot
- USDA looking for a universal system to make nutrient info on labels simpler.

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AHA Heart Check Mark

(www.heartcheckmark.org)

	Standard certification	Whole Grain certification
Total Fat	≤ 3 grams (g)	< 6.5 grams (g)
Sat Fat	≤ 1 g	≤ 1 grams
Trans Fat	< 0.5 g	< 0.5 grams
Cholesterol	≤ 20 mg	≤ 20 grams
Sodium	≤ 480 mg	≤ 480 grams
Whole Grain	--	51% by weight
Minimum dietary fiber	--	1.7 g/RACC of 30 g 2.5 g/RACC of 45 g 2.8 g/RACC of 50 g 3.0 g/RACC of 55g

- *Based on RACC (reference amount customarily consumed). Trans fat and sodium goals also based on label serving size*

Kellogg's Diabetes Friendly Seal

- Nov 08: found above nutrition facts panel
- ***Cereals (per serving)*:**
  - 30 grams of less carb
  - Low in fat (3 or less grams)
  - 1 gram or less saturated fat and 0 grams trans fats
  - 9 grams or less sugar
  - Examples: Corn Flakes; Crispix, Product 19, All Bran (original, bran buds, complete wheat flakes, extra fiber); Rice Krispies, Rice Krispies with strawberries; Special K (original, protein plus, vanilla almond, cinnamon pecan); Reduced Sugar Frosted Flakes

PepsiCo Smart Spot Criteria for Foods

1. Nourish and Replenish: contains no more than
   - 30% calories from fat, 1 g or less sat fat, 0 g trans fat
   - 60 mg cholesterol and 480 mg sodium
   - 25% calories from added sugar (unless contains 10% DV of fiber)
   - Contains 10% or more DV for at least one: Vit A, Vit C, Ca, Fe, protein or fiber
2. Functional
   - Formulated to have specific health or wellness benefits
3. Reduced
   - Calories, fat, sat fat, sugar or sodium reduced by 25% compared to original or other leading brands in the category

PepsiCo Smart Spot Criteria for Beverages

1. Nourish and Replenish: contains no more than
   - 3 grams fat, 1 gram or less sat fat, 0 grams trans fat
   - 60 mg cholesterol and 480 mg sodium
   - 25% calories from added sugar (unless contains 10% DV of fiber)
   - Contains 10% or more DV for at least one: Vit A, Vit C, Ca, Fe, protein or fiber
2. Functional
   - Formulated to have specific health or wellness benefits
3. Reduced
   - Calories, fat, sat fat, sugar or sodium reduced by 25% compared to original or other leading brands in the category

PepsiCo Smart Spot Criteria for Snacks

1. Sensible: contains no more than
   - 35% calories from fat
   - 1 gram sat fat
   - 0 g trans fat
   - 60 mg cholesterol and 270 mg sodium
   - 25% calories from added sugar (unless contains 10% DV of fiber)
2. Functional
   - Formulated to have specific health or wellness benefits
3. Reduced
   - Calories, fat, sat fat, sugar or sodium reduced by 25% compared to original or other leading brands in the category

PepsiCo Smart Spot

- Found on more than 250 products including:

"*33% less Na than original*": 690 mg sodium per serving

"*rehydrates, replenishes and refuels athletes in ways water can't*"
32 oz = 200 calories, 56 g carb, 440 mg sodium (20% DV)

SoBe Synergy. Healthy Refreshment.
50% juice blend with essential vitamins & minerals
11.5 oz = 120 calories, 32 g carb, 100% Vit C

Cap'n Crunch Choco Crunch: "High in fiber, low in fat"
¾ cup = 100 calories, 23 g carb, 10 g sugars, 3 g fiber

	Serv Size	Cal	Total fat (g)	Sat/Trans fat (g)	Sodium (mg)	Carb (g)
Doritos	15	140	8	1.5/0	180	17
Baked	15	120	3.5	0.5/0	220	21
Cheetos	1 oz	160	10	12/0	290	15
Baked	1 oz	130	5	1/0	240	19

	Serv Size	Cal	Total fat (g)	Sat/Trans fat (g)	Sodium (mg)	Carb (g)
Classic	15 chips	150	10	1/0	180	15
Baked	15 chips	120	2	0/0	180	23
SunChips	1 oz	140	6	1/0	120	18

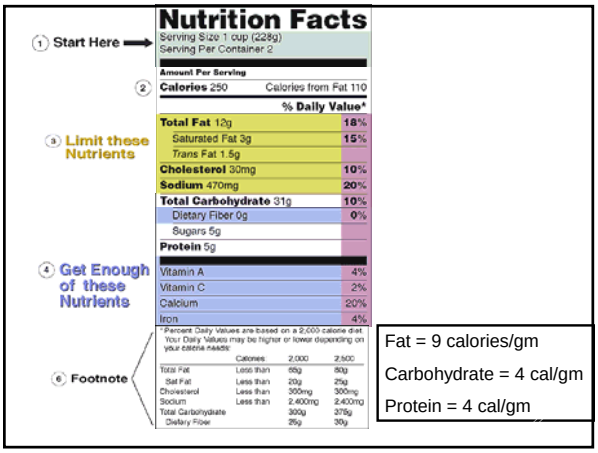
Smart Choices Program TM

(www.smartchoicesprogram.com)

- Voluntary, new front of package nutrition labeling program
- Identified calories per serving and number of servings per container (intent of helping people stay within their daily calorie needs)
- Introduced in 2009, then pulled.

Nutrient Scoring Programs

- Nutritional scoring systems developed by independent panel
  - Hannaford Guiding Stars (www.hannaford.com)
    - 0 stars: doesn't meet criteria
    - 1 star: good nutritional value
    - 2 stars: better nutritional value
    - 3 stars: best nutritional value
  - NuVal (www.nuval.com)
    - Scores all foods on a scale between 1-100. The higher the Score, the higher the nutrition.



Serving Size

- **Most important component**
- **All info is based on the serving size**
- Label portion doesn't always = standard serving size

Food	Std Serving Size	Label Serv Size
Bagel	1 oz	**2-4 oz**
Rice (cooked)	1/3 cup	**1 cup**
Fruit juice	½ cup	**8 oz**
Cooking oil or margarine	1 tsp	**1 Tbsp**

Calories

Nutrition Facts
Serving Size 1 cup (228g)
Serving Per Container 2

Amount Per Serving
Calories 250 Calories from Fat 110

- **Number of servings eaten determines actual number of calories**
- **General Guide to Calories**
  - 40 Calories is low
  - 100 Calories is moderate
  - 400 Calories or more is high
  - *Meals and main dishes: ≤ 120 calories per 100 grams*

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Fat/Cholesterol

Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 1.5g	
Cholesterol 30mg	10%
Sodium 470mg	20%

- Type and amount of fat important
  - Diet high in total fat linked to weight gain
  - Saturated and trans fats linked to ↑ risk of heart disease and cancer, high cholesterol
- Goals:
  - 25-35% of total calories from fat
  - < 7% of total calories from saturated fat
  - < 1% of trans fat
  - < 300 mg cholesterol per serving

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Labels: Fat/Cholesterol

Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 1.5g	
Cholesterol 30mg	10%
Sodium 470mg	20%

- If < 0.5 g per serving, can list as 0 g
- Trans fats **not required** if total fat is < 0.5 g per serving
- Cannot make cholesterol claim if food has ≥ 2 g saturated fat per serving
- Goals per 100 gram of product:
  - ≤ 3 g total fat and < 30% total calories from fat
  - ≤ 1 g saturated fat and < 10% calories from sat fat
  - ≤ 20 mg cholesterol

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Fat Substitutes

- Types
  - Carbohydrate based
    - Cellulose, dextrins, fiber, gums, polydextrose, maltodextrins, starch/modified food starch
  - Protein based
    - Simplesse
  - Fat based
    - Emulsifiers
    - Olean, Olestra
- Safety

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Label Reading - Fat

Total Fat (g)	Fat Servings
0-2	Free
3	½
4-6	1
7-8	1 ½
9-11	2
12-13	2 ½
14-16	3
17-18	3 ½
19-21	4

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Serv Size	Calories	Fat	Sodium
PAM			
1/3 second	0	0g	0 mg
1 second	7	< 1 g	0 mg
ICBINB			
5 sprays	0	0g	0 mg

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Comparison of Butter/Margarines (1 Tbsp)

	Butter	Stick Marg	Tub Marg		
Calories	100	100	60	80	70
Fat	11 g	11 g	7 g	9 g	8 g
Sat Fat	7 g	2 g	1 g	2.5 g	1 g
Trans Fat	0 g	3 g	0 g	0 g	0 g
Cholesterol	30 mg	0 mg	0 mg	0 mg	0 mg

Take total of saturated and trans fats

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French Fries

Nutrition Facts
Serving Size 3oz (84g/ about 12 pieces)
Servings Per Container 11

Amount Per Serving
Calories 160 Calories from Fat 50

% Daily Value*
Total Fat 6g 9%
Saturated Fat 1g 5%
Trans Fat 1.5g
Cholesterol 0mg 0%

Potato Chips

Nutrition Facts
Serving Size 1oz (28g/ about 20 chips)
Servings Per Container 12

Amount Per Serving
Calories 150 Calories from Fat 90

% Daily Value*
Total Fat 10g 15%
Saturated Fat 2g 10%
Trans Fat 0g
Cholesterol 0mg 0%

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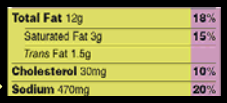
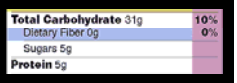
Sodium



- High sodium diet linked to high blood pressure
- Daily Goals: 2000-3000 mg a day
- Sodium label reading goals:
  - ***< 5% Daily value***

Sodium/serving	Foods
≤ 140 mg	beverages, fats, oils, meat, fish, poultry
≤ 240 mg	snack foods, desserts, cereals, breads, grains, pasta, processed fruits/vegetables, nut butters, nuts/seeds, salad dressings or condiments
≤ 480 mg	soups; lunch meats; all other foods
≤ 600 mg	frozen meals, main dishes, sandwiches; fast foods.

Total Carbohydrate



- Combination of:
  - **Dietary Fiber** (Soluble and Insoluble)
  - **Sugars** (naturally occurring and added)
  - **Sugar Alcohols**
  - **Other carbohydrate** (difference between total carbohydrate and sum total of dietary fiber, sugars, sugar alcohol if declared)

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Label Reading - Carbohydrate

Carb (g)	Carb Servings
0-5	Free
6-10	½
11-20	1
21-25	1 ½
26-35	2
36-39	2 ½
40-49	3
50-54	3 ½
55-64	4

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Fiber

- Total Fiber: sum of dietary and functional fiber
  - Dietary Fiber: nondigestible carbohydrate and lignin intrinsic and intact in plants
    - Help with constipation
    - Examples: cellulose, pectin, gums, fibers in oat and wheat bran, inulin, oligosaccharides, fructans, lignin, some resistant starch
  - Functional Fiber: isolated, nondigestible carbohydrate that has beneficial physiologicial effects in humans
    - Delays gastric emptying → fullness and lower pp BG
    - Interfere with dietary fat and cholesterol absorption
    - Examples: resistant starch, pectin, guar gums, chitin, chitosan, inulin, dextrins, polydextrose, psyllium

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Fiber

- **Supplies 1.5-2.5 calories per gram**
- **Type of dietary fiber makes a difference**
  - Insoluble fiber: DOES NOT digest/absorb; provides minimal calories or carbs
  - Soluble fiber: is absorbed/digested; contributes to carb amount.
- **If food has 5 or more gram of fiber/serving: subtract half the fiber from the total carb**
  - If *insoluble fiber* is listed separately, you can subtract all insoluble fiber from total carb

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How many grams of carbs do you count?

NUTRITION FACTS
Serving Size: 1 cup

Amount/Serving
Calories 170 (Fat Calories: 15)
Total Fat 1.5g
Saturated Fat 0g
Trans Fat 0g
Cholesterol 0mg
Sodium 105mg
Carbohydrate 41g
Dietary Fiber 8g
Soluble Fiber 1g
Insoluble Fiber 7g
Sugars 13g
Other Carbohydrate 20 g

NUTRITION FACTS
Serving Size: ¾ cup

Amount/Serving
Calories 160 (Fat Calories: 10)
Total Fat 1g
Saturated Fat 0g
Trans Fat 0g
Cholesterol 0mg
Sodium 340mg
Carbohydrate 38g
Dietary Fiber 5g
Soluble Fiber 1g
Insoluble Fiber 4g
Sugars 5g
Other Carbohydrate 28 g

Fiber Goals
(Institute of Medicine)

	Male	Female
1-3 yrs	19	19
4-8 yrs	25	25
9-13 yrs	31	26
13-18 yrs	38	26
19-50 yrs	38	25
> 50 yrs	30	21

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Getting the Recommended Fiber

- Choose:
  - **5 or more** servings of fruits and veges daily
  - More dried beans and peas, legumes
  - Breads or crackers with **2 or more grams of fiber** per serving and **whole wheat** flour as first ingredient.
  - Cereals with **3 or more grams of fiber** per serving.

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Whole Grains

- Foods made from the entire grain seed, consisting of bran, germ and endosperm
- Provide vitamin E, B-vitamins, magnesium, iron and selenium
- New rec's: 3 or more servings per day.
- Sources include:
  - Whole wheat, rye, cornmeal, barley
  - Bulgur (cracked wheat), buckwheat
  - Oatmeal, corn (popcorn), brown and wild rice
  - Amaranth, millet, quinoa, sorghum

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Labeling of Whole Grains

- FDA has **not** defined any claims re: whole grains
  - Whole grain doesn't always equal 100% whole grain
  - High fiber doesn't always equal whole grain
- Can label
  - how much whole grains are in their products (10 grams of whole grains or 100% whole grain)
  - health claim re: whole grains and heart disease
    - Contains all portions of the grain kernel
    - Has 51% of whole-grain ingredients by weight
    - Meet fat, saturated fat and cholesterol restrictions

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3 Levels of Whole Grains
(www.wholegrainscouncil.org)

Good Source	Excellent Source	100% / Excellent
a half serving of whole grains (8-15 g per serving)	a full serving of whole grains (at least 16 g per serving)	a full serving (at least 16 g) AND all grains are whole grain

Sugars

- Includes naturally occurring and added sugars (does not include sugar alcohols)
- Best to look at total carbohydrate and use common sense
- Labeling
  - "No Added Sugars" and "Without Added Sugars" are allowed if no sugar or sugar containing ingredient is added during processing.
  - "Unsweetened" and "No Added Sweeteners" remain as factual statements

Plain Yogurt

Nutrition Facts
Serving Size 1 container (226g)
Amount Per Serving
Calories 110 Calories from Fat 0
% Daily Value*
Total Fat 0g 0 %
Saturated Fat 0g 0 %
Trans Fat 0g
Cholesterol Less than 5mg 1 %
Sodium 160mg 7 %
Total Carbohydrate 15g 5 %
Dietary Fiber 0g 0 %
Sugars 10g
Protein 13g
Vitamin A 0 % • Vitamin C 4 %
Calcium 45 % • Iron 0 %
*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

INGREDIENTS: CULTURED PASTEURIZED GRADE A NONFAT MILK, WHEY PROTEIN CONCENTRATE, PECTIN, CARRAGEENAN.

Fruit Yogurt

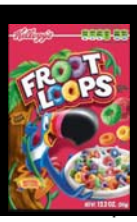
Nutrition Facts
Serving Size 1 container (227g)
Amount Per Serving
Calories 240 Calories from Fat 25
% Daily Value*
Total Fat 3g 4 %
Saturated Fat 1.5g 9 %
Trans Fat 0g
Cholesterol 15mg 5 %
Sodium 140mg 6 %
Total Carbohydrate 46g 15 %
Dietary Fiber Less than 1g 3 %
Sugars 44g
Protein 9g
Vitamin A 2 % • Vitamin C 4 %
Calcium 35 % • Iron 0 %
*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

INGREDIENTS: CULTURED GRADE A REDUCED FAT MILK, APPLES, HIGH FRUCTOSE CORN SYRUP, CINNAMON, NUTMEG, NATURAL FLAVORS AND PECTIN. CONTAINS ACTIVE YOGURT AND L. ACIDOPHILUS CULTURES.

Which is better?

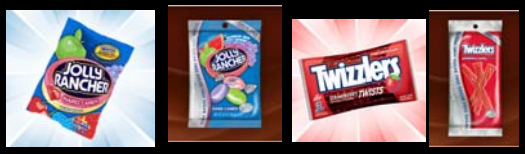
	Original	Light	Whips	Thick & Creamy	Thick & Creamy Light
Serving size	6 oz	6 oz	6 oz	6 oz	6 oz
Calories	170	100	140	190	100
Fat	1.5 g	0 g	2.5 g	3.5g	0 g
Carb	33 g	19 g	25 g	32 g	20 g
Sugars	27 g	14 g	21 g	28 g	14 g

www.yoplait.com



Which is better?

	York Pep. Patty	SF York Pep Patty	Hershey Miniatures	SF Hershey
Serving size	1 (39g)	3 pcs (36g)	5 pcs (43g)	3 pcs (48g)
Calories	140	80	210	240
Fat (Sat fat)	2.5 g (1.5)	3.5 g (2)	13 g (7)	12 g (4.5)
Carb	31 g	28 g	25 g	30 g



	Jolly Rancher	SF Jolly Rancher	Twizzlers	SF Twizzlers
Serving size	3 pcs (14g)	4 pcs (16g) 3 pcs	4 pcs (45g)	6 pcs (43g) 4 pcs
Calories	50	35 26	160	130 85
Carb	13 g	13 g 9.5 g	36 g	33 g 22 g

Sugar Substitutes

- Calorie and carb free
  - Acesulfame K
  - Aspartame
  - Saccharin
  - Sucralose (Splenda)
  - Neotame
- Safety

Comparison of Sweeteners

Sweetener		Cal per gram
Artificial (Aspartame, Saccharin, Splenda)		0
Sugar Alcohols:	Erythritol	0.2
	Mannitol	1.6
	Isomalt	2.0
	Lactitol	2.0
	Maltitol	2.1
	Xylitol	2.4
	Sorbitol	2.6
	Hydrogenated starch hydrolysates	3.0
Glycerine, sucrose, fructose, lactose		4.0

Sugar Alcohols and Carb Counting

- Have ~ ½ - ¾ calories of regular sugar
- Absorbed slowly and incompletely.
- Requires little or no insulin to be metabolized. Don't raise BG.
- Can have laxative effect (bloating, gas, diarrhea) if consumed in large amounts.
  - Sorbitol and mannitol
  - Effect is dose dependent.

Sugar Alcohols and Carb Counting

- If all carb is from sugar alcohols
  - < 10 grams: FREE food
  - > 10 grams: count ½ of the total carb
- If all carb is from number of sources, including sugar alcohols
  - Subtract ½ of the sugar alcohol grams from total carb

How many carbs do you count?

NUTRITION FACTS
Serving Size: 5 cookies (31g)
Servings Per Container: About 5

Amount/Serving
Calories 150
Calories from Fat 70
Total Fat 8g
Saturated Fat 5g
Trans Fat 0 g
Cholesterol 0mg
Sodium 80mg
Carbohydrate 21g
Dietary Fiber 1g
Sugars 0g
Sugar Alcohol 8g

How many carbs do you count?

NUTRITION FACTS
Serving Size: 1 bar (31g)
Servings Per Container: 1

Amount/Serving
Calories 130
Calories from Fat 100
Total Fat 11g
Saturated Fat 7g
Trans Fat 0 g
Cholesterol 10mg
Sodium 15mg
Carbohydrate 18g
Dietary Fiber 7g
Sugars less than 1g
Sugar Alcohols 10g
Protein 1 g

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3 Sandwich Cookies

	Calories	Total Carb (g sugar)	Total Fat
Snackwell Original	110	20 g (10 g)	3 g
Snackwell Sugar Free Lemon Creme	130	24 g (0 g)	6 g
Snackwell Fat Free Devils Food	150	36 g (7 g)	0 g
Oreo	160	22 g (14 g)	8 g
Reduced fat Oreo	150	27 g (14 g)	4.5 g

Ingredient List

- Items are listed in descending order by weight
- Other words for fat:
  - oil, *hydrogenated*, shortening
- Other words for sugar:
  - sucrose, fructose, lactose, dextrose, honey, juice concentrate, corn syrup, molasses
  - Any sugar alcohol

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Strawberry Jam
STRAWBERRIES, HIGH FRUCTOSE CORN SYRUP, CORN SYRUP, SUGAR, FRUIT PECTIN, CITRIC ACID.

Simply Fruit
FRUIT SYRUP, STRAWBERRIES, LEMON JUICE CONCENTRATE, FRUIT PECTIN, RED GRAPE JUICE CONCENTRATE ADDED FOR COLOR, NATURAL FLAVORS.

Low Sugar Jam
STRAWBERRIES, SUGAR, WATER, FRUIT PECTIN, LOCUST BEAN GUM, CITRIC ACID, POTASSIUM SORBATE ADDED AS A PRESERVATIVE, CALCIUM CHLORIDE, RED 40.

Sugar Free Preserves
WATER, STRAWBERRIES, POLDEXTROSE, MALTODEXTRIN, FRUIT PECTIN, LOCUST BEAN GUM, CITRIC ACID, POTASSIUM SORBATE (PRESERVATIVE), SUCRALOSE, CALCIUM CHLORIDE, RED 40.

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	Serving size	Calories	Total Carb (sugars)
Regular	1 Tbsp	50	13 g (12)
Simply Fruit	1 Tbsp	40	10 g (8)
Low Sugar	1 Tbsp	25	6 g (5)
Sugar Free	1 Tbsp	10	5 g (0)

www,smuckers.com

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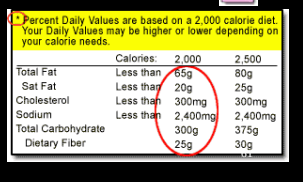
% Daily Value

- Based on 2000 calorie diet.
  - Should total 100% for the day

- No value for trans fat, sugars or protein
- General rule:
  - > 20% DV is high
  - 10-19% is good source
  - < 5% DV is low
- Helpful for sodium, cholesterol, vit/min



NUTRITION FACTS

Serving Size: 1 cup (246g)
Servings Per Container: **2**

Amount/Serving
Calories 120 Calories from Fat 10

		% DV
Total Fat	2.5g	4%
Saturated Fat	0.5g	3%
Trans Fat	0g	
Cholesterol	20mg	
Sodium	**950mg**	**40%**
Carbohydrate	12g	4%
Dietary Fiber	1g	4%
Sugars	1g	
Protein	7g	

Vitamin A 25% Vitamin C 0%
Calcium 4% Iron 8%

NUTRITION FACTS

Serving Size: 1 cup (246g)
Servings Per Container: **2**

Amount/Serving
Calories 70 Calories from Fat 15

		% DV
Total Fat	1.5g	2%
Saturated Fat	0.5g	2%
Trans Fat	0g	
Cholesterol	20mg	7%
Sodium	**680mg**	**28%**
Carbohydrate	10g	3%
Dietary Fiber	2g	8%
Sugars	1g	
Protein	6g	

Vitamin A 20% Vitamin C 0%
Calcium 0% Iron 4%

Low-fat (2%) Milk

Nutrition Facts

Serving Size 1 cup (236ml)
Servings Per Container 1

Amount Per Serving
Calories 120 Calories from Fat 45

	% Daily Value*
Total Fat 5g	8%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 20mg	7%
Sodium 120mg	5%
Total Carbohydrate 11g	4%
Dietary Fiber 0g	0%
Sugars 11g	
Protein 9g	17%

Vitamin A 10% • Vitamin C 4%
Calcium 30% • Iron 0% • Vitamin D 25%

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

Nonfat (Skim) Milk

Nutrition Facts

Serving Size 1 cup (236ml)
Servings Per Container 1

Amount Per Serving
Calories 80 Calories from Fat 0

	% Daily Value*
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol Less than 5mg	0%
Sodium 120mg	5%
Total Carbohydrate 11g	4%
Dietary Fiber 0g	0%
Sugars 11g	
Protein 9g	17%

Vitamin A 10% • Vitamin C 4%
Calcium 30% • Iron 0% • Vitamin D 25%

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

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Practical Applications

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Nutrition Facts

Serving Size ½ cup (114g)
Servings Per Container 4

Amount Per Serving
Calories 90 Calories from Fat 30

	% Daily Value*
Total Fat 3g	5%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 300mg	13%
Total Carbohydrate 13g	4%
Dietary Fiber 3g	12%
Sugars 3g	
Protein 3g	

Vitamin A 80% • Vitamin C 60%
Calcium 4% • 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

- How many:
  - Carb servings?
  - Fat servings?
- High or low in sodium?
- Good source of fiber?

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Cheerios® Comparison

	Original	Honey Nut	Multi-grain	Flavored*	Crunch**
Serving size	1 cup	1 cup	¾ cup	¾ cup	¾ cup
Calories	100	110	110	100-120	100
Fat	2 g	1 g	1.5 g	1-2 g	1 g
Carb (Fiber)	20 g (3)	23 g (3)	22 g (3)	22-25 g (1-2)	22 g (3)
Sugar	1 g	6 g	9 g	9 – 12 g	8 g
Sodium	190 mg	200 mg	190 mg	120-170 mg	140 mg

*Banana Nut, Frosted, Berry Burst, Apple Cinnamon, Fruity, Yogurt Burst

** 1st ingredient is SUGAR (clusters), 2nd: whole grain oats

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	Original	Fruit & Yogurt	Protein Plus
Serving size	1 cup	¾ cup (1 cup)	1 cup
Calories	120	120 (150)	100
Fat	0.5 g	1 g (1.25 g)	3 g
Carb (Fiber)	23 g (<1)	27 g (1) (33 g)	14 g (5)
Protein	6 g	2 g (2.5 g)	10 g

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Breakfast Cereals

- Look for:
  - Whole grains:
    - "Whole" wheat, oat, bran in the ingredient list
  - At least 3 grams fiber per serving
  - Less than 8 grams sugar per serving
  - Less than 240 mg sodium per serving

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Which is better?

LOG CABIN

	Original	Light	Sugar-free
Serving size	4 Tbsp	4 Tbsp	4 Tbsp
Calories	210	100	35
Carb	53	25	12

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Kraft Italian Salad Dressings

	Serving size	Calories	Total Carb	Total Fat	Sodium
Zesty	2 Tbsp	110	2 g	11 g	500 mg
Golden	2 Tbsp	70	2 g	7 g	310 mg
Light Done Right	2 Tbsp	50	2.5 g	4.5 g	228 mg
Fat Free	2 Tbsp	20	3.6 g	0.3	430 mg

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Kraft Ranch Salad Dressings

	Serving size	Calories	Total Carb	Total Fat	Sodium
Regular	2 Tbsp	150	2 g	16 g	310 mg
Light Done Right	2 Tbsp	80	3 g	7 g	300 mg
Fat Free	2 Tbsp	50	11 g	0 g	350 mg

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Resources

- FDA: Center for Food Safety and Applied Nutrition
  - http://www.cfsan.fda.gov/~dms/foodlab.html
- Center for Science in the Public Interest
  - 1875 Connecticut Ave, NW
    Suite 300
    Washington, DC 20009
  - (202) 332-9110
- www.caloriecount.about.com

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Summary

- Through label reading, a person with can learn how to make healthy food choices **AND** fit **any** food into their meal plan.