

## ***BI 199 Discussion 5***

Happy Halloween! Dietary analyses @ last!



***I. Announcements*** Send outlines to [lombardi@uoregon.edu](mailto:lombardi@uoregon.edu) Q?  
Dietary Analyses questions will be sent to you by e-mail.

***II. Nutrition in the News*** Eat Real America! NAHL

***III. Can a Halloween Treat Be Healthy?***

Ghost or marshmallow?

***IV. Carbohydrates: Sugar, Starch, Glycogen & Fiber***

S&W 2014 pp 111-33

- A. Carbohydrates & photosynthesis pp 112-15
- B. Importance of glucose & carbohydrates pp 115-17
- C. If I want to lose weight & stay healthy should I avoid carbohydrates? p 117
- D. Recommendations for carbohydrate intake p 118
- E. Fibers, soluble vs. insoluble & health effects pp 119-29
- F. From carbohydrates to glucose pp 129-30
- G. ***Consumers' Guide*** Finding whole grain foods pp 127-8
- H. Lactose intolerance? pp 130, 132-3

***III. Dietary Analyses*** Review of Diet Analysis Plus (DA+) & SuperTracker, then meet in Science Library B90 CD



# Nutrition Action

OCTOBER 2011 \$2.50

HEALTH LETTER®  
CENTER FOR SCIENCE IN THE PUBLIC INTEREST

## Eat Real, America!

“With the right food choices, physical activity, and not smoking, we could prevent about 80 percent of heart disease, about 90 percent of diabetes, and 70 percent of stroke,” says Walter Willett, chair of the nutrition department at the Harvard School of Public Health in Boston. “Those are the three pillars. They really do make a difference.”

The right food choices are simple: Eat less red meat, sweets, refined grains, and salt, and drink fewer sugary beverages. Replace unhealthy foods with vegetables, fruit, beans, and whole grains, and with smaller amounts of fish, poultry, and low-fat dairy. Those foods aren't just good for our health. They can also help protect the Earth.

Here's why—and how—to eat real.

*Continued on page 3.*

Photo: © MarteeiaBezuidenhout/foto12.com

**FOOD DAY**

OCTOBER 24, 2011

JOIN US AT [FOODDAY.ORG](http://FOODDAY.ORG)

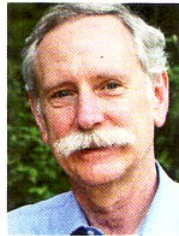
**40**

CSPI • 1971-2011

FOOD DAY 2011

# EAT LIKE IT MATTERS

## How diet can prevent disease



**Walter Willett** is chair of the Department of Nutrition at the Harvard School of Public Health and professor of medicine at the Harvard Medical School. He has published over 1,400 scientific articles on diet and disease. Willett spoke to Nutrition Action's Bonnie Liebman from Boston.

### **Q: Can food keep us healthy?**

**A:** The foods we choose have a huge impact on our long-term health and well-being. We've learned that in the last few decades.

We've seen that, say, rates of heart disease in northern Europe are ten times higher than in southern Europe and that rates of cancer vary tenfold or more around the world. The foods we choose—along with physical activity and not smoking—are a major factor in those huge differences in rates of almost every disease that we look at, including heart disease, stroke, diabetes, and many cancers.

### **Q: What are the right foods?**

### **Q: And low in salt?**

**A:** Keeping salt on the low side is definitely important for preventing heart attacks and strokes, but that tends to happen automatically if you eat fruits, vegetables, and whole grains that have been minimally processed.

You still need to pay attention because you can find whole grains even at places like Whole Foods that are extremely high in salt even though they are marketed as healthy. If you go the processed, prepackaged route, you run the risk of a high salt intake. But if you prepare your own intact foods, most of the time your salt intake will be low.

### **Q: How does red meat affect diabetes?**

**A:** We're not sure. There may be multiple factors in meat. Some evidence suggests that the heme iron increases risk. The link with diabetes hasn't been appreciated until recently, but now it's been seen in many studies.

### **Q: Does meat promote colon cancer?**

**A:** Yes, particularly if it's processed red meat. So much happens in the processing that we're not sure what matters, but the evidence is quite strong.

Breast cancer does not seem to be related to red meat consumption during midlife and later, but we have seen a relationship

# Can Halloween Treats Be Healthy?



**Choose an item w/@ least some redeeming value – nuts? raisins? popcorn? fruits?...**



**Where's the line?  
Are choices possible?  
Volume/calorie control?**

??



**A degree of nutrient density?**

**Entirely empty calories?**

**[http://www.clemson.edu/extension/hgic/food/nutrition/nutrition/life\\_stages/hgic4112.html](http://www.clemson.edu/extension/hgic/food/nutrition/nutrition/life_stages/hgic4112.html)**



# Raisinets, 1 standard package

Nutrient	Your Intake	Recommendation or Acceptable Range
<u>Food Energy/Total Calories (kcal)</u>	111	<u>2331</u>
<u>Protein (gm)</u>	1	56
<u>Carbohydrate (gm)</u>	19	130
<u>Total Fiber (gm)</u>	1	30
<u>Total Fat (gm)</u>	4.2	2.5 - 4.3
<u>Saturated Fat (gm)</u>	2.5	< 1.2
<u>Monounsaturated Fat (gm)</u>	1	**
<u>Polyunsaturated Fat (gm)</u>	0	**
<u>Linoleic (omega 6) (gm)</u>	0.1	14
<u>Alpha Linolenic (omega 3) (gm)</u>	0	1.6
<u>Cholesterol (mg)</u>	1	< 300
<u>Vitamin A (mcg RAE)</u>	6.8	900
<u>Vitamin C (mg)</u>	0.1	90
<u>Vitamin E (mg a-TE)</u>	0.3	15
<u>Thiamin (mg)</u>	0	1.2
<u>Riboflavin (mg)</u>	0	1.3



## ***Raisinets, 1 standard package***

<b><u>Niacin (mg)</u></b>	0.1	16
<b><u>Folate (mcg, DFE)</u></b>	2	400
<b><u>Vitamin B6 (mg)</u></b>	0	1.7
<b><u>Vitamin B12 (mcg)</u></b>	0.1	2.4
<b><u>Calcium (mg)</u></b>	24.4	1200
<b><u>Phosphorus (mg)</u></b>	40.5	700
<b><u>Magnesium (mg)</u></b>	12.8	420
<b><u>Iron (mg)</u></b>	0.5	8
<b><u>Zinc (mg)</u></b>	0.2	11
<b><u>Selenium (mcg)</u></b>	0.7	55
<b><u>Potassium (mg)</u></b>	146	4700
<b><u>Sodium (mg)</u></b>	10	1300 - 2300

# Reese's Peanut Butter Cup, 1 standard cup



<b>Nutrient</b>	<b>Your Intake</b>	<b>Recommendation or Acceptable Range</b>
<b><u>Food Energy/Total Calories (kcal)</u></b>	88	<a href="#">2331</a>
<b><u>Protein (gm)</u></b>	2	56
<b><u>Carbohydrate (gm)</u></b>	9	130
<b><u>Total Fiber (gm)</u></b>	1	30
<b><u>Total Fat (gm)</u></b>	5.2	1.9 - 3.4
<b><u>Saturated Fat (gm)</u></b>	1.8	< 1
<b><u>Monounsaturated Fat (gm)</u></b>	2	**
<b><u>Polyunsaturated Fat (gm)</u></b>	1	**
<b><u>Linoleic (omega 6) (gm)</u></b>	0.9	14
<b><u>Alpha Linolenic (omega 3) (gm)</u></b>	0	1.6
<b><u>Cholesterol (mg)</u></b>	1	< 300
<b><u>Vitamin A (mcg RAE)</u></b>	2.9	900
<b><u>Vitamin C (mg)</u></b>	0.1	90
<b><u>Vitamin E (mg a-TE)</u></b>	0	15
<b><u>Thiamin (mg)</u></b>	0	1.2
<b><u>Riboflavin (mg)</u></b>	0	1.3



# Reese's Peanut Butter Cup, 1 standard cup

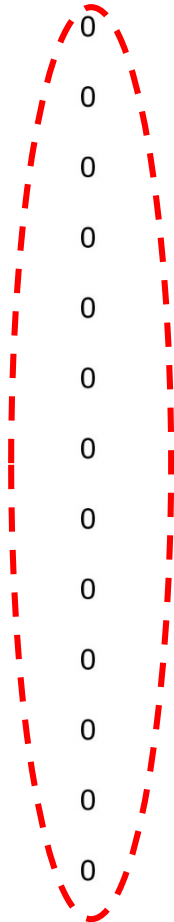


<u>Niacin (mg)</u>	0.8	16
<u>Folate (mcg, DFE)</u>	8.5	400
<u>Vitamin B6 (mg)</u>	0	1.7
<u>Vitamin B12 (mcg)</u>	0.1	2.4
<u>Calcium (mg)</u>	13.3	1200
<u>Phosphorus (mg)</u>	27.4	700
<u>Magnesium (mg)</u>	10.5	420
<u>Iron (mg)</u>	0.2	8
<u>Zinc (mg)</u>	0.2	11
<u>Selenium (mcg)</u>	0.2	55
<u>Potassium (mg)</u>	58	4700
<u>Sodium (mg)</u>	53	1300 - 2300



# Candy Corn, 12 pieces

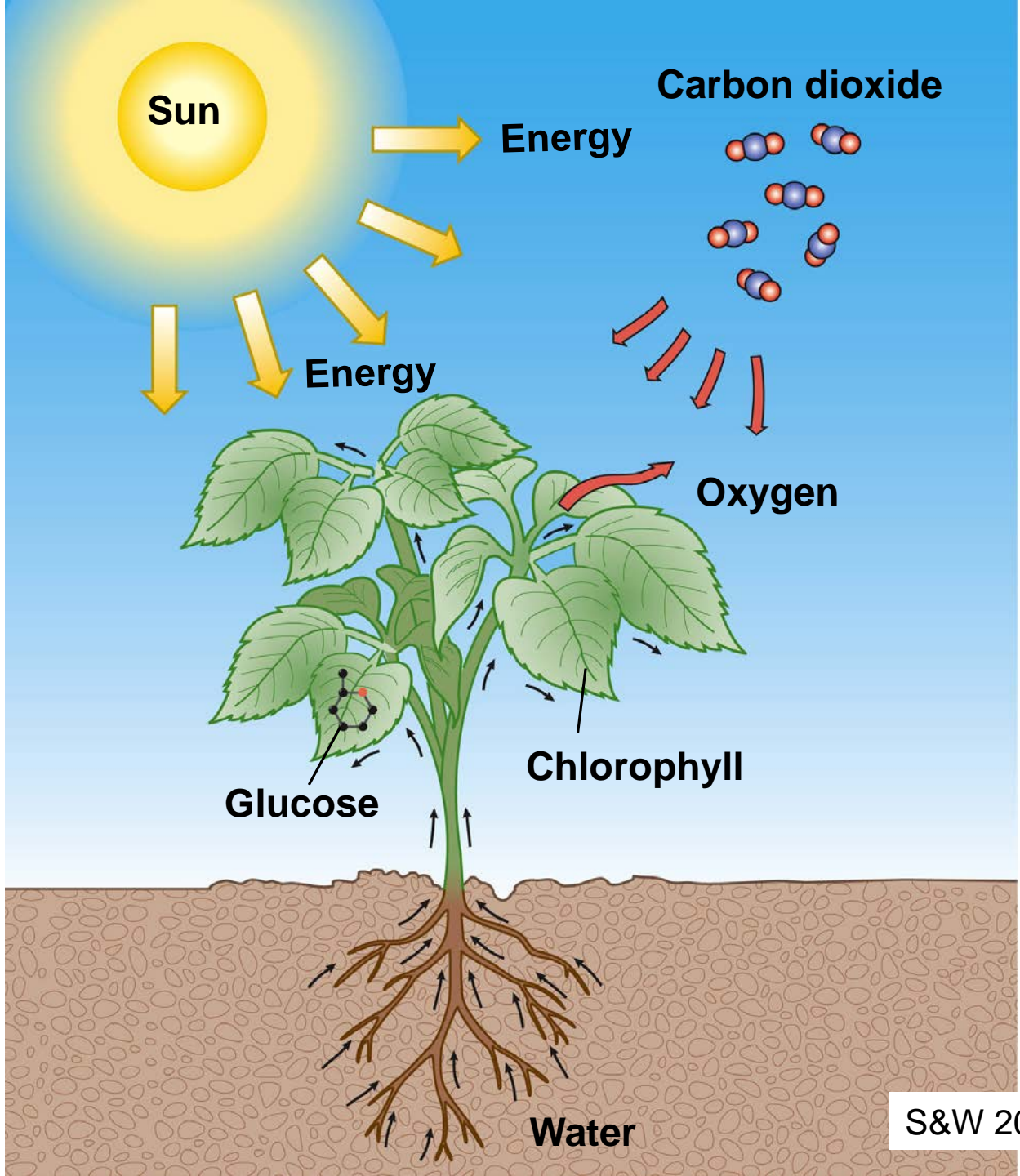
Nutrient	Your Intake	Recommendation or Acceptable Range
<u>Food Energy/Total Calories (kcal)</u>	494	<u>2331</u>
<u>Protein (gm)</u>	0	56
<u>Carbohydrate (gm)</u>	123	130
<u>Total Fiber (gm)</u>	0	30
<u>Total Fat (gm)</u>	0	11 - 19.2
<u>Saturated Fat (gm)</u>	0	< 5.5
<u>Monounsaturated Fat (gm)</u>	0	**
<u>Polyunsaturated Fat (gm)</u>	0	**
<u>Linoleic (omega 6) (gm)</u>	0	14
<u>Alpha Linolenic (omega 3) (gm)</u>	0	1.6
<u>Cholesterol (mg)</u>	0	< 300
<u>Vitamin A (mcg RAE)</u>	0	900
<u>Vitamin C (mg)</u>	0	90
<u>Vitamin E (mg a-TE)</u>	0	15
<u>Thiamin (mg)</u>	0	1.2
<u>Riboflavin (mg)</u>	0	1.3





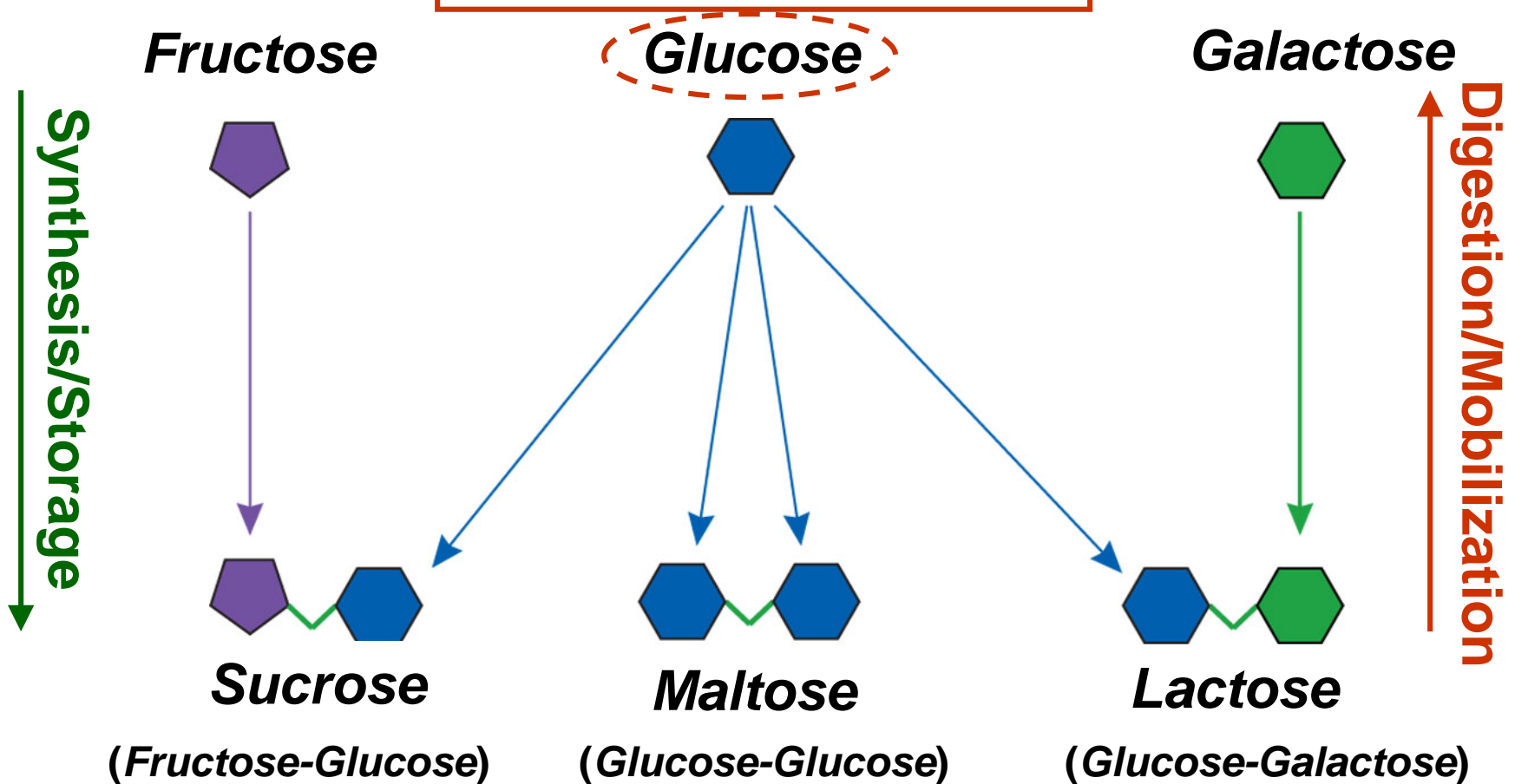
## ***Candy Corn, 12 pieces***

<b><u>Niacin (mg)</u></b>	0	16
<b><u>Folate (mcg, DFE)</u></b>	0	400
<b><u>Vitamin B6 (mg)</u></b>	0	1.7
<b><u>Vitamin B12 (mcg)</u></b>	0	2.4
<b><u>Calcium (mg)</u></b>	2.6	1200
<b><u>Phosphorus (mg)</u></b>	0	700
<b><u>Magnesium (mg)</u></b>	0	420
<b><u>Iron (mg)</u></b>	0	8
<b><u>Zinc (mg)</u></b>	0	11
<b><u>Selenium (mcg)</u></b>	0.8	55
<b><u>Potassium (mg)</u></b>	5	4700
<b><u>Sodium (mg)</u></b>	21	1300 - 2300

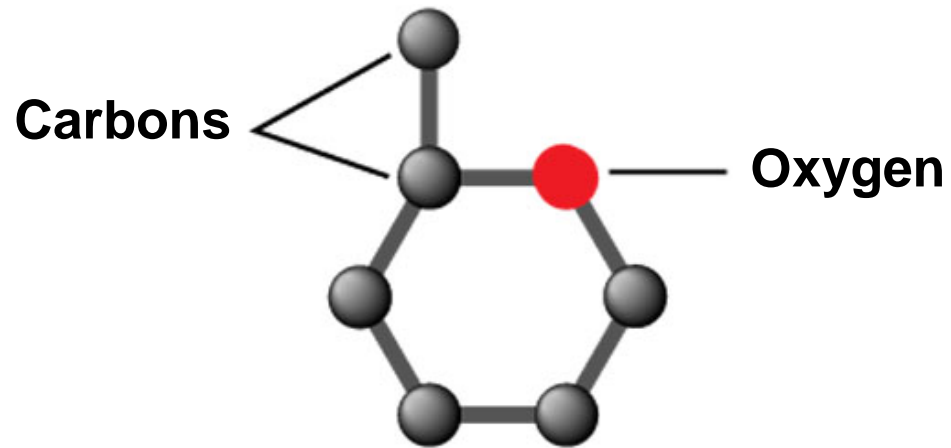


# Monosaccharides (Monomers) & Disaccharides (Dimers)

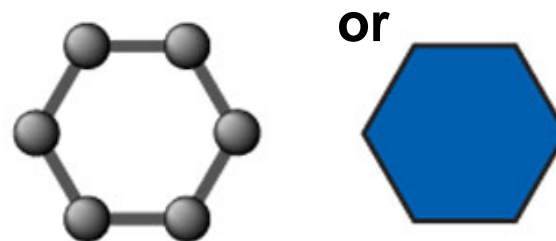
~80% of end-products of carbohydrate digestion



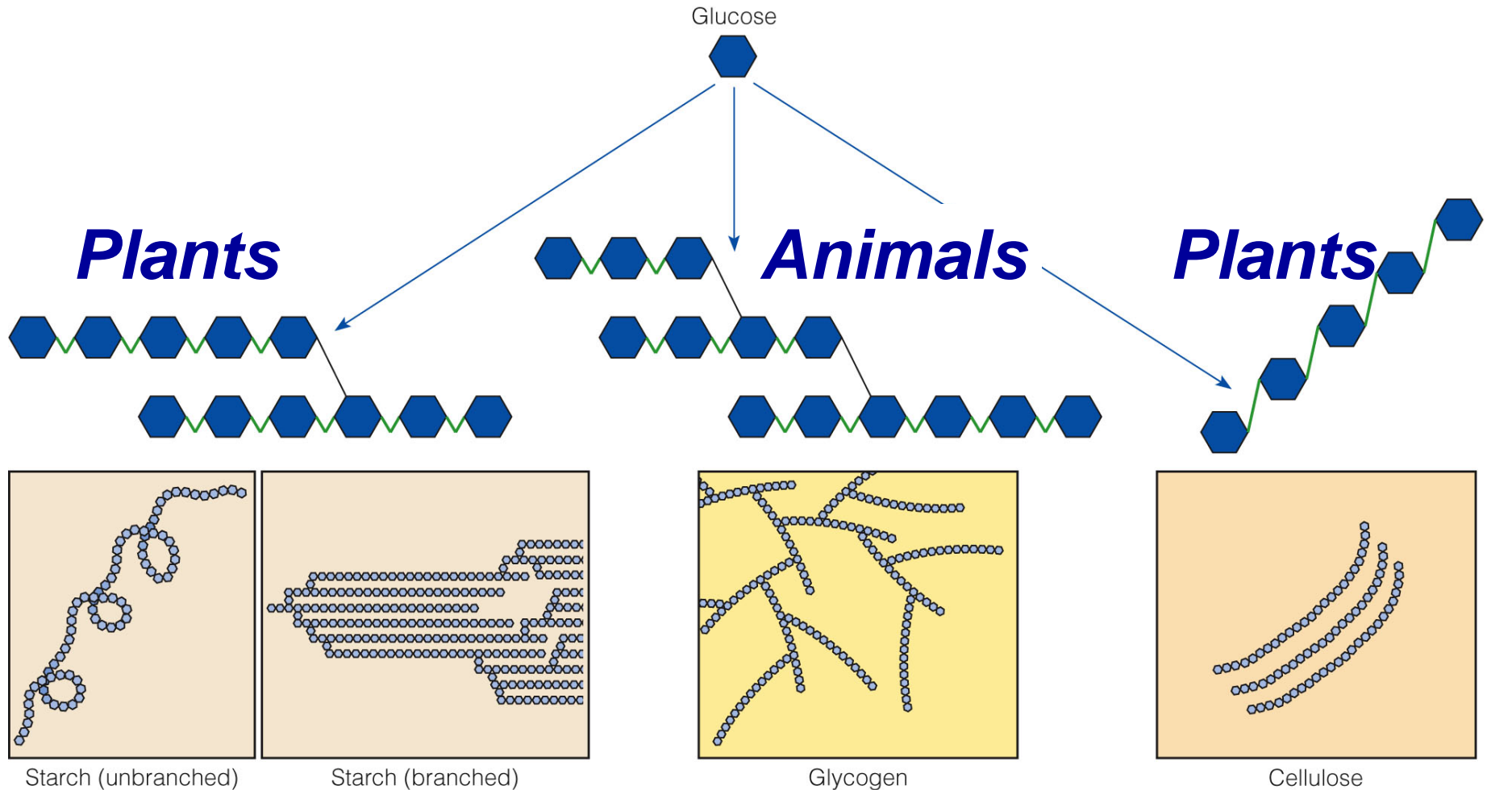
**A glucose molecule is really a ring of 5 Carbons & 1 Oxygen plus a carbon “flag” (so 6 Carbons total!). Also, includes Hydrogens...**



**For convenience, glucose is symbolized as**



# Glucose Polymers for Storage?



**Starch** Glucose units are linked in long, occasionally branched chains to make starch. Human digestive enzymes can digest these bonds, retrieving glucose. Real glucose units are so tiny that you can't see them, even with the highest-power light microscope.

**Glycogen** Glycogen resembles starch in that the bonds between its glucose units can be broken by human enzymes, but the chains of glycogen are more highly branched.

**Cellulose (fiber)** The bonds that link glucose units together in cellulose are different from the bonds in starch or glycogen. Human enzymes cannot digest them.

# *Carbohydrate Intake Recommendations*

- 1. 45-65% of total calories, so for 2000 kcal diet  $\sim$ 1/2 or 1000 kcal, for 2500 kcal, 1250 kcal from carbohydrates.**
- 2. Absolute minimum of 130 g/d (DRI) for CNS (+rbcs)!**
- 3. Choose & prepare foods & beverages with little added sugars. Insufficient evidence exists to set UL, but DRI says a high maximum of 25% or less of total kcal.**
- 4. Added sugars may provide discretionary calories after all nutrient recommendations are met! (USDA)**
- 5. Not more than 1/2 of discretionary calories should come from sugars. For women  $\leq$  100 kcal, for men  $\leq$  150 kcal.**
- 6. Increase intakes of whole fruits & vegetables & make  $\geq$  1/2 grain choices whole grain. Legumes several times/wk.**
- 7.  $\leq$  50 yr, women 25 g fiber/d, men 38 g fiber/d.**





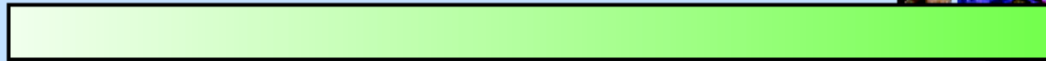
# Dietary Composition & Physical Endurance

eg, Atkins!

High-fat diet



Normal mixed diet



High-carbohydrate diet



**~ 1/3 endurance!**

Maximum endurance time:

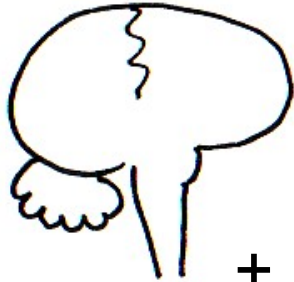
57 min

114 min

167 min

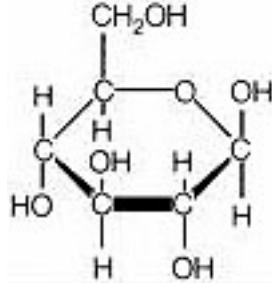


2



+

glucose



rbcs



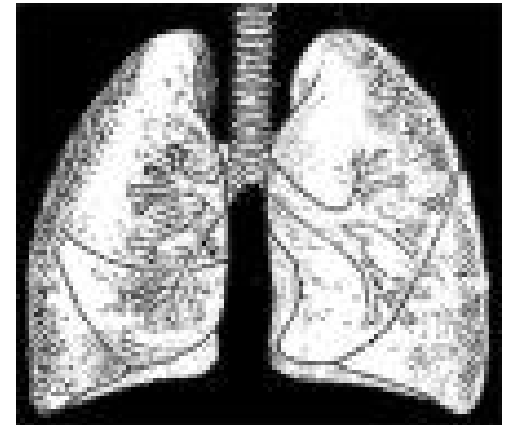
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# Negative Effects of Low Carbohydrate

4



- ① ↑ fatigue/exhaustion central & peripheral!
- ② ↓ glucose – brain+spinal cord, rbcs thrive upon.
- ③ ↓ variety which reduces intake of phytochemicals, vitamins, minerals & fiber.
- ④ ↑ risk of respiratory infections.



+ gall stones,  
↓ thermoregulation...

# *We're better at storing fat vs carbohydrate!*

**Dietary Fat**



**3 % Kcal**

**Body Fat**



**23 % Kcal**

**Dietary  
Carbohydrate**



**To Help Lower Body Wt & %Fat  
EXERCISE!! +*Minimize* These!!**



**FAT            9 Kcal/g**

**ETOH          7 Kcal/g**

**CARB         4 Kcal/g**

**PRO            4 Kcal/g**

**NB:    *Minimize* not *Eliminate!*  
*Moderation* not *Abstinence!!***

***I'm not sure I believe you!  
Why can't I just starve to  
lose weight?***



**TOTAL FAST =**  
**No Energy Nutrients**  
**(No Carbohydrates, Fats  
or Proteins)**

**ONLY**

- 1. Water**
- 2. Vitamins**
- 3. Minerals**



# 60-day Fast???

Lost 60 lb!! Wow!!

Yet

76.7% {  
26 lb Water  
20 lb Lean Body Mass  
14 lb Fat

Fat < 1/4 total wt loss!

***You can lose weight by  
starving – but it's mostly  
water & muscle! Also, there  
can be complications!***



# **Potential Complications of Total Fasting**

**Nausea, diarrhea, persistent vomiting,  
postural hypotension, nutritional  
deficiencies, menstrual irregularities,  
and...sudden death.**

## **Positive Aspect??**

**General loss of appetite within  
first 2 days, maintained  
throughout fasting period.**

# Council on Nutrition, Physical Activity and Metabolism (NPAM) Spring 2009



## Dietary Carbohydrate, Fat and Protein in Weight-Loss Diets: A Report and Insider's Reflections on the Pounds Lost Trial

Frank M. Sacks, MD

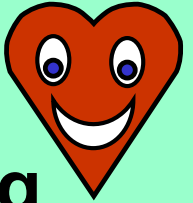
**W**ell-controlled studies of energy-reduced diets conducted in controlled environments showed that the macronutrient composition of the diet did not affect weight loss (1). Nonetheless, theories persisted that specific macronutrients would be superior for weight loss. For example, the traditional paradigm for low-fat, high-carbohydrate diets was based on the lower energy density of carbohydrate compared to fat, and the metabolic efficiency of converting dietary fat to body fat (2). Indeed strict vegetarians sustain lower body weight for

that Mediterranean diets were superior to low-fat diets for weight loss (5,6). Others claimed that a radically different approach that used low-carbohydrate, high-fat, and high-protein foods could produce weight loss without attention to reducing intake because of the satiety of protein-rich foods. Low-carbohydrate diets succeeded in the first few months with more rapid weight loss than low-fat diets but by one year, none of the trials found that weight loss on low-carbohydrate

*Continued on page 26*



years on low-fat diets (3). However, meaningful differences in body weight usually were not achieved in population-based trials of conventional low-fat diets (4). Thus, higher-fat, Mediterranean-style diets were proposed to be better for long-term weight loss because of their variety and satisfaction. Two trials found



## ***Dr. Sacks' Conclusions:***

**We conclude that healthful diets with varying emphases on carbohydrate, fat & protein levels can all achieve clinically meaningful weight loss & maintenance of weight loss over a 2-yr period. The results give people who need to lose weight the flexibility to choose a diet that they can stick with, as long as it's heart healthy. Such diets can also be tailored for individuals based on their personal & cultural preferences & in this regard may have the best chance for long-term success.**

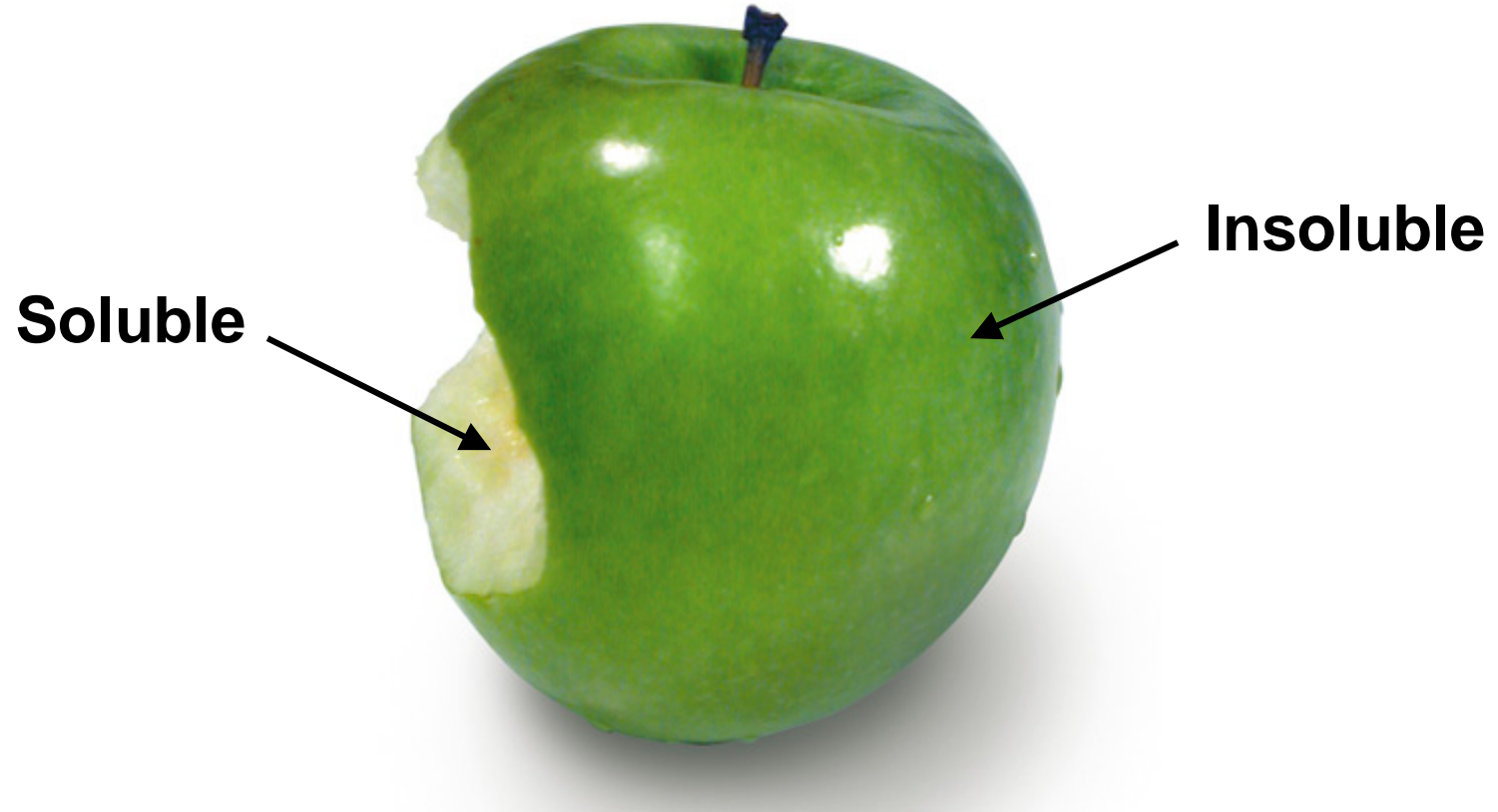
***US Dietary Recommended Intakes (DRI)  
Committee Acceptable Macronutrient  
Distribution Ranges (AMDR)!***

<b><u>Energy Nutrient</u></b>	<b><u>% Total Calories</u></b>
<b>Carbohydrate</b>	<b>45-65%</b>
<b>Fat</b>	<b>20-35%</b>
<b>Protein</b>	<b>10-35%</b>

# Emphasize ABCs + Variety & Moderation!



# ***Soluble vs. Insoluble Fiber***





# Why fiber?

People who eat these foods...



- Barley, oats, oat bran, rye, fruits (apples, citrus), legumes (especially young green peas and black-eyed peas), seaweeds, seeds and husks, many vegetables, fibers used as food additives

obtain these types of fibers...

*Viscous, soluble, more fermentable*

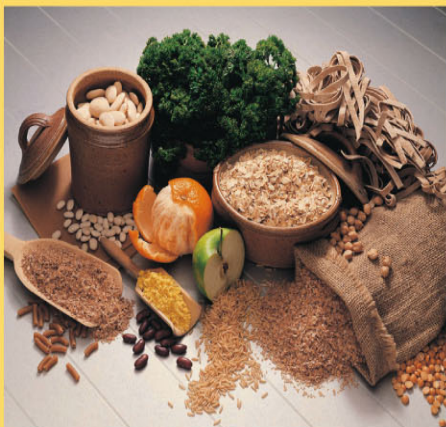
- Gums
- Pectins
- Psyllium<sup>a</sup>
- Some hemicellulose

with these actions in the body...

- Lower blood cholesterol by binding bile
- Slow glucose absorption
- Slow transit of food through upper GI tract
- Hold moisture in stools, softening them
- Yield small fat molecules after fermentation that the colon can use for energy
- Increase satiety

and these probable health benefits...

- Lower risk of heart disease
- Lower risk of diabetes
- Lower risk of colon and rectal cancer
- Increased satiety, and may help with weight management



- Brown rice, fruits, legumes, seeds, vegetables (cabbage, carrots, brussels sprouts), wheat bran, whole grains, extracted fibers used as food additives

*Nonviscous, insoluble, less fermentable*

- Cellulose
- Lignins
- Resistant starch
- Hemicellulose

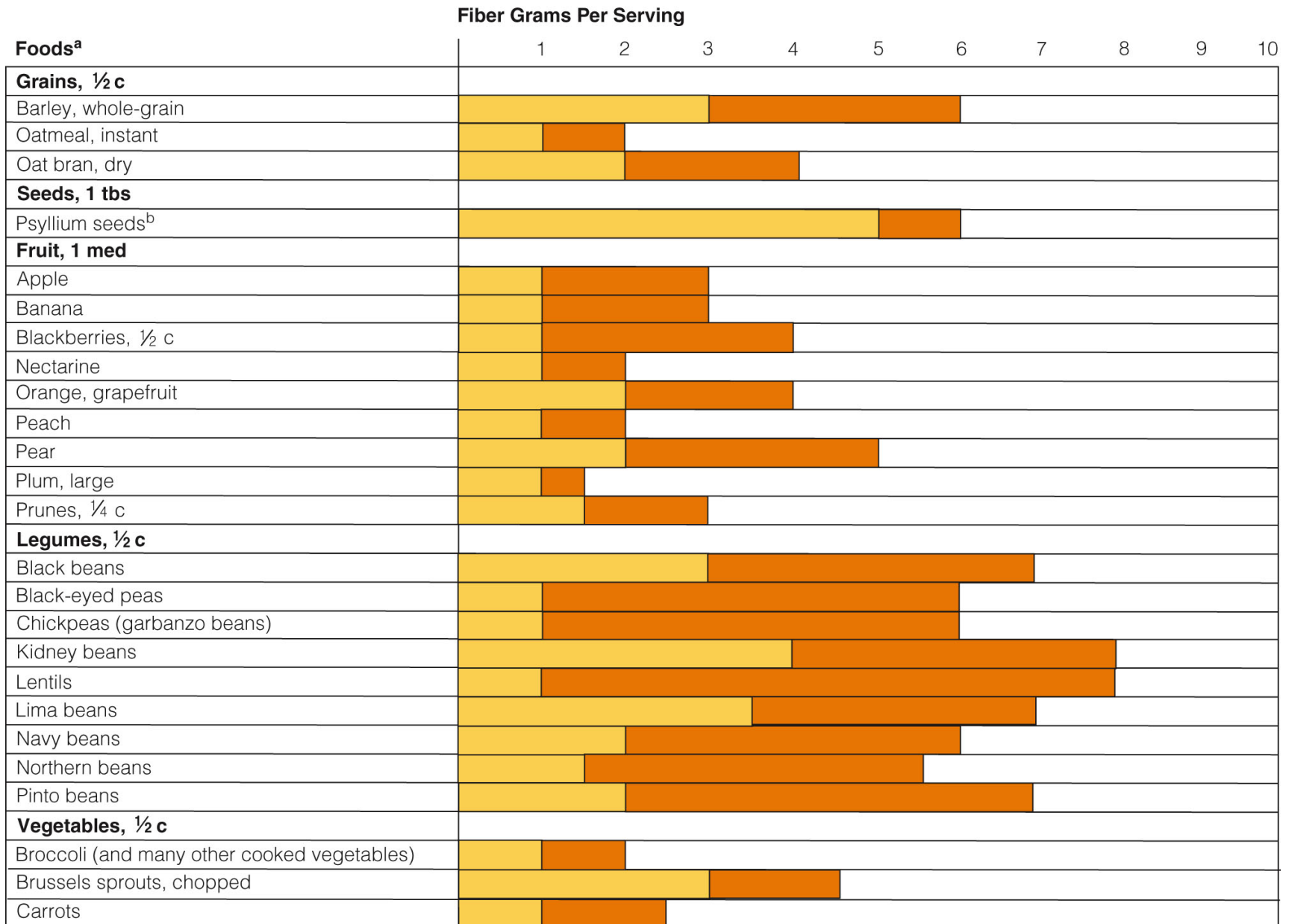
- Increase fecal weight and speed fecal passage through colon
- Provide bulk and feelings of fullness

- Alleviate constipation
- Lower risk of diverticulosis, hemorrhoids, and appendicitis
- Lower risk of colon and rectal cancer

<sup>a</sup>Psyllium, a soluble fiber derived from seeds, is used as a laxative and food additive.

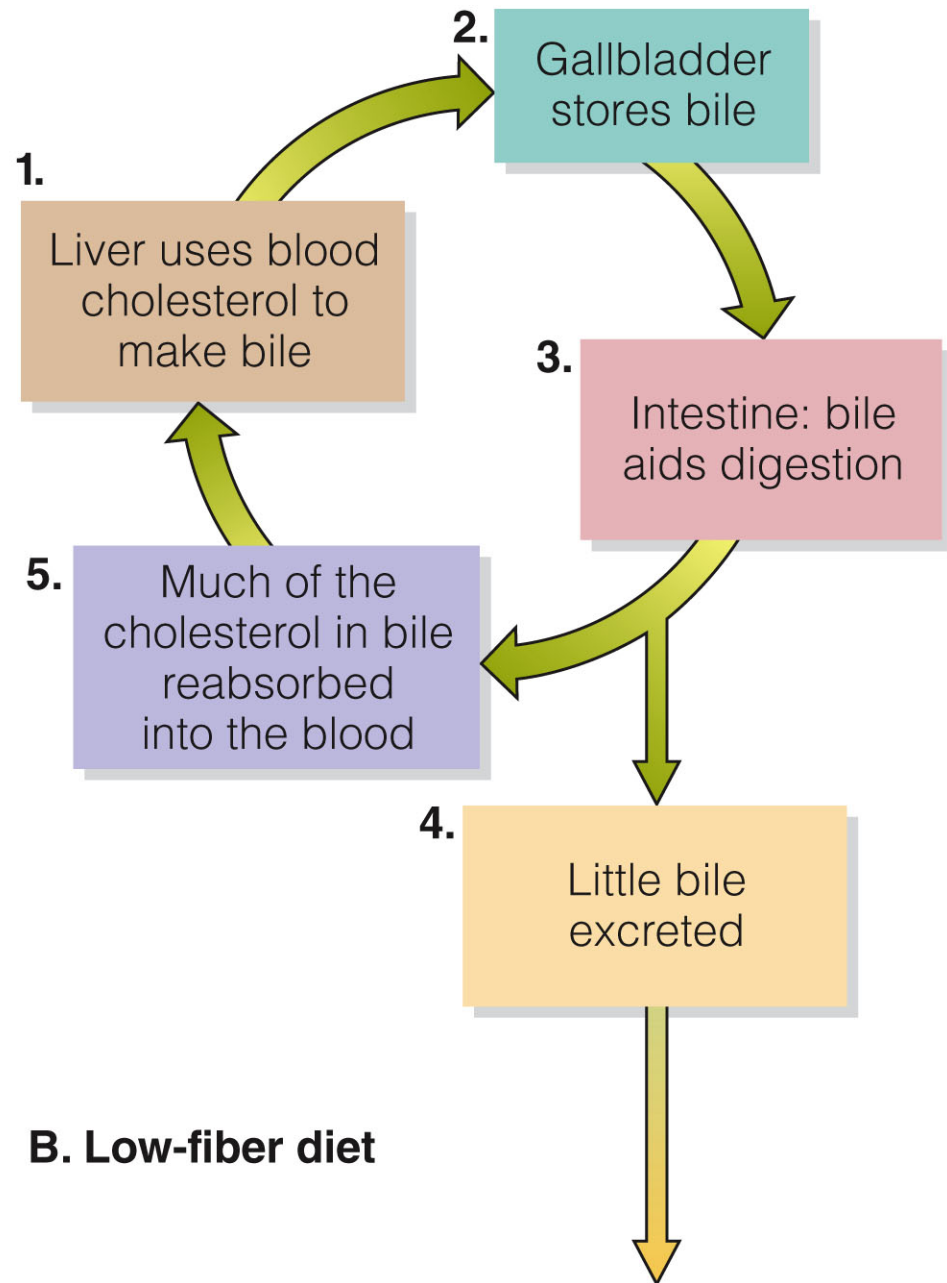
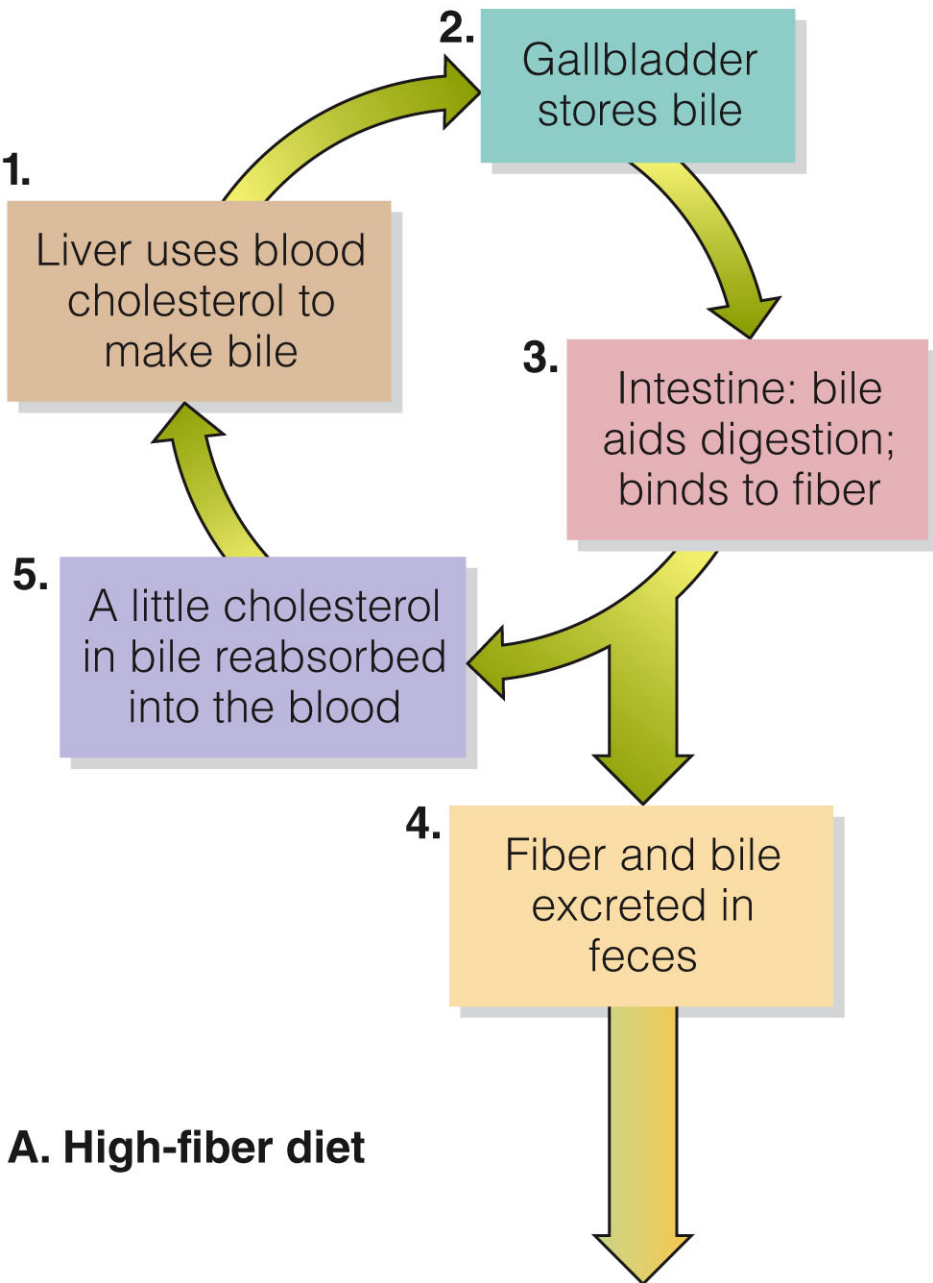


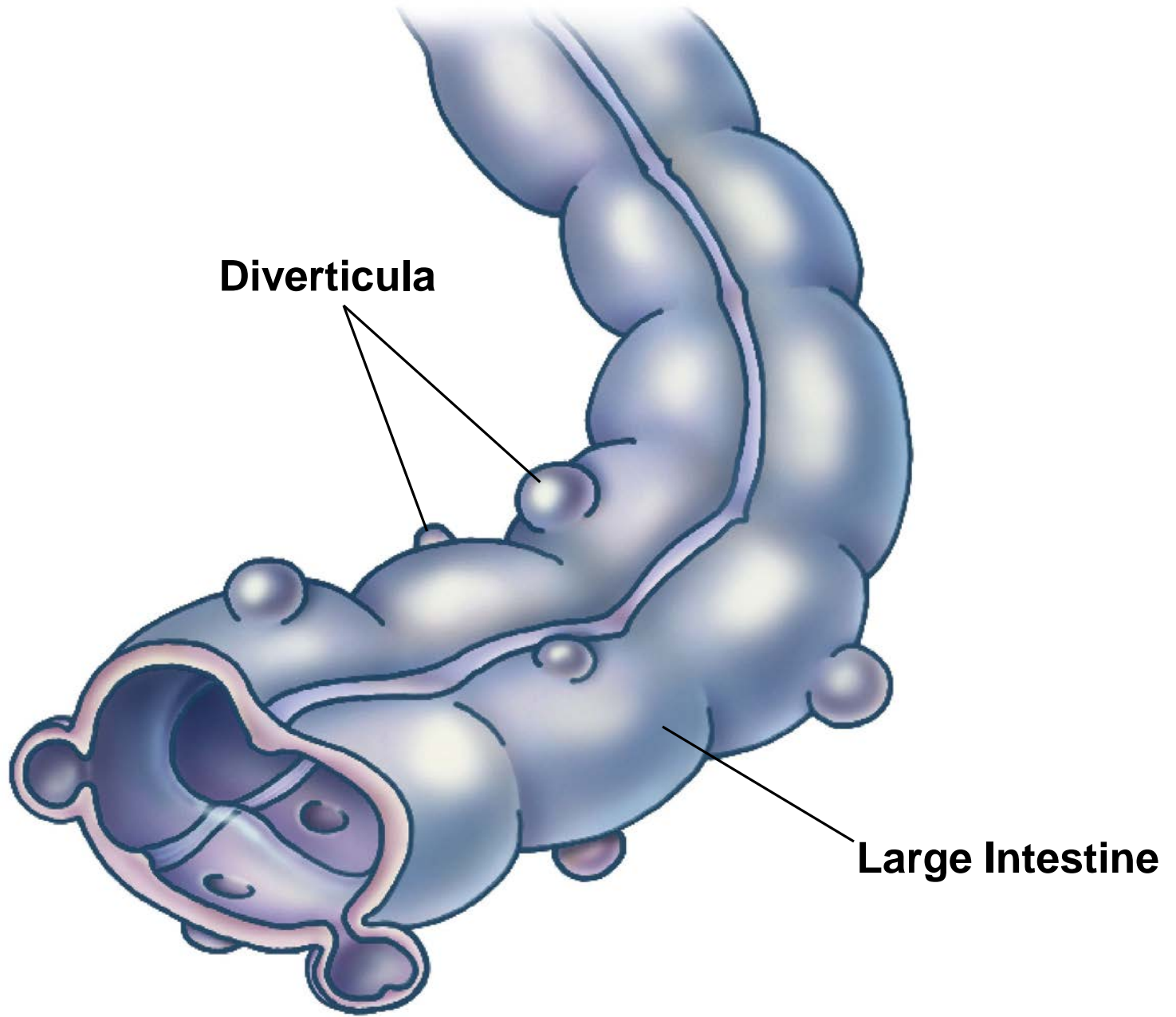




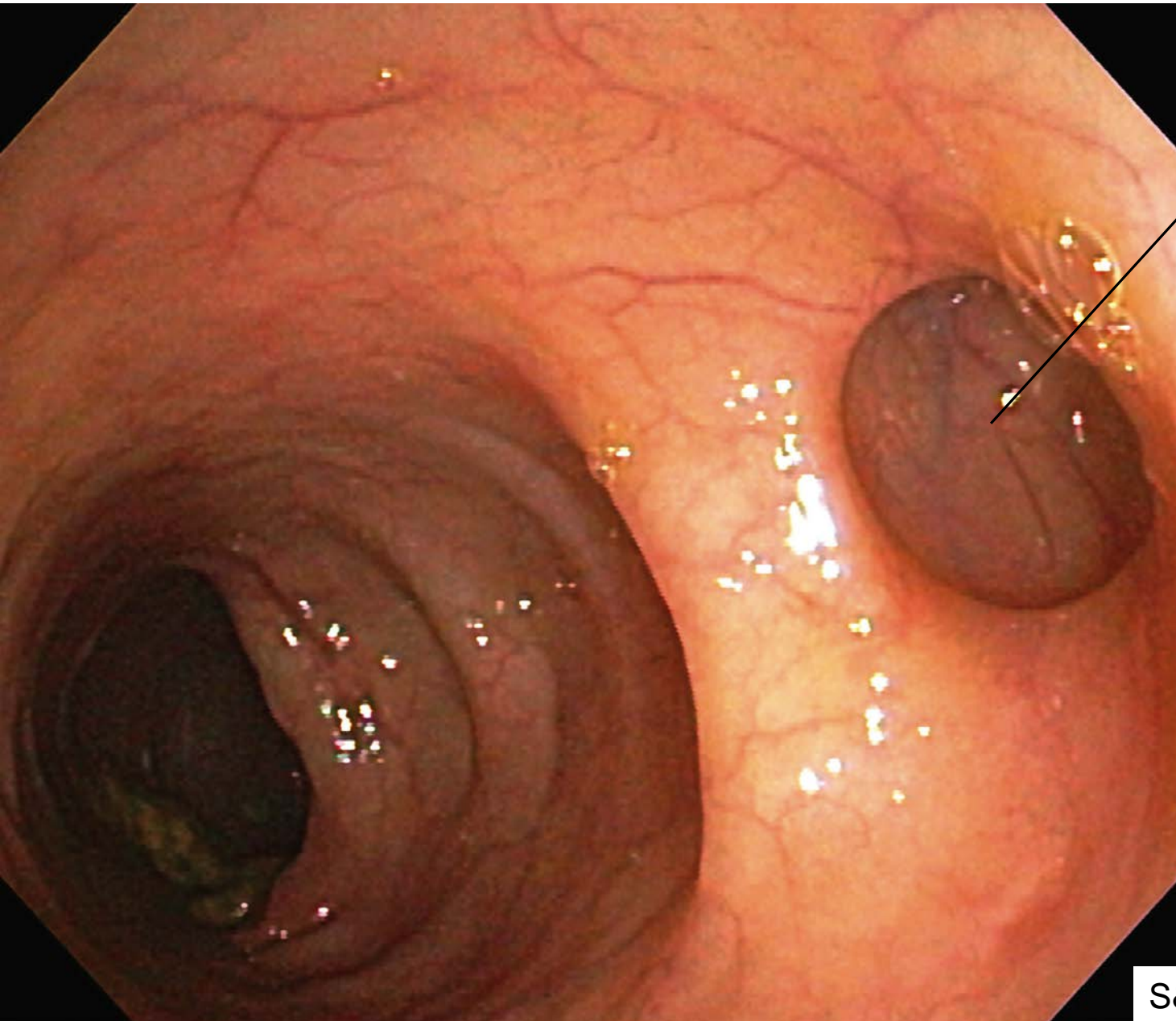
<sup>a</sup>Values are for cooked or ready-to-serve foods unless specified.

<sup>b</sup>Psyllium is used as a fiber laxative and fiber-rich food additive.





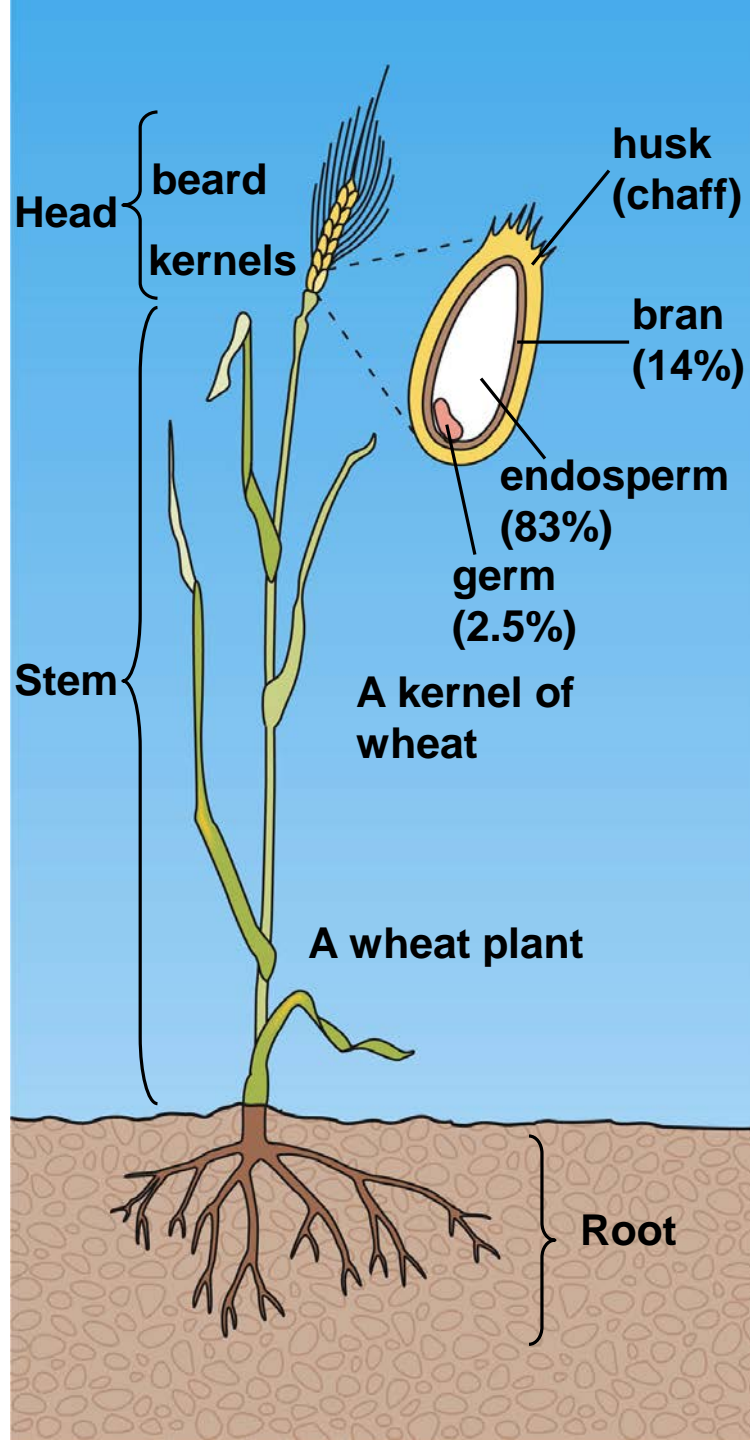
# *Diverticulosis?*

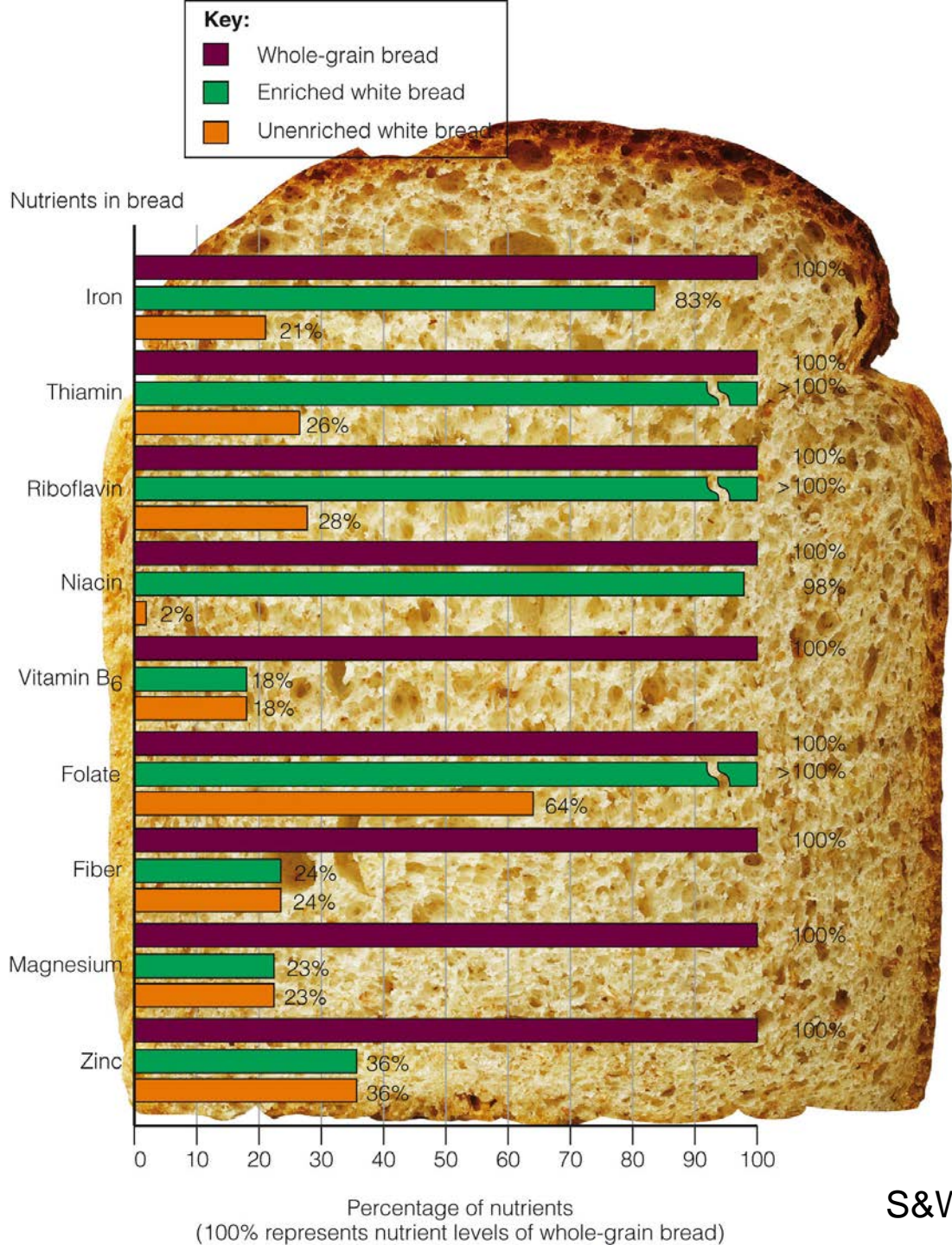


**Diverticulum**









# Grams of Fiber in 1 Cup of Flour



Dark Rye

Barley Flour

Whole Wheat

Buckwheat



Whole-grain Cornmeal

Light Rye

Enriched White



31 g

15 g

13 g

12 g

9 g

8 g

3 g



Organic Barley Flour

# Whole Grain

## WHOLE WHEAT

### Nutrition Facts

Serving size 1 slice (30g)  
Servings Per Container 18

#### Amount per serving

**Calories** 90      **Calories from Fat** 14

% Daily Value\*

**Total Fat** 1.5g      **2%**

**Trans Fat** 0g

**Sodium** 135mg      **6%**

**Total Carbohydrate** 15g      **5%**

**Dietary fiber** 2g      **8%**

Sugars 2g

**Protein** 4g

**MADE FROM:** UNBROMATED STONE GROUND 100% WHOLE WHEAT FLOUR, WATER, CRUSHED WHEAT, HIGH FRUCTOSE CORN SYRUP, PARTIALLY HYDROGENATED VEGETABLE SHORTENING (SOYBEAN AND COTTONSEED OILS), RAISIN JUICE CONCENTRATE, WHEAT GLUTEN, YEAST, WHOLE WHEAT FLAKES, UNSULPHURED MOLASSES, SALT, HONEY, VINEGAR, ENZYME MODIFIED SOY LECITHIN, CULTURED WHEY, UNBLEACHED WHEAT FLOUR AND SOY LECITHIN.

# Natural

## Wheat Bread

### Nutrition Facts

Serving size 1 slice (30g)  
Servings Per Container 15

#### Amount per serving

**Calories** 90      **Calories from Fat** 14

% Daily Value\*

**Total Fat** 1.5g      **2%**

**Trans Fat** 0g

**Sodium** 220mg      **9%**

**Total Carbohydrate** 15g      **5%**

**Dietary fiber** less than 1g      **2%**

Sugars 2g

**Protein** 4g

**INGREDIENTS:** UNBLEACHED ENRICHED WHEAT FLOUR [MALTED BARLEY FLOUR, NIACIN, REDUCED IRON, THIAMIN MONONITRATE (VITAMIN B1), RIBOFLAVIN (VITAMIN B2), FOLIC ACID], WATER, HIGH FRUCTOSE CORN SYRUP, MOLASSES, PARTIALLY HYDROGENATED SOYBEAN OIL, YEAST, CORN FLOUR, SALT, GROUND CARAWAY, WHEAT GLUTEN, CALCIUM PROPIONATE (PRESERVATIVE), MONOGLYCERIDES, SOY LECITHIN.

# Multi-fiber

## Low carb

### Nutrition Facts

Serving size 1 slice (30g)  
Servings Per Container 21

#### Amount per serving

**Calories** 60      **Calories from Fat** 15

% Daily Value\*

**Total Fat** 1.5g      **2%**

**Trans Fat** 0g

**Sodium** 135mg      **6%**

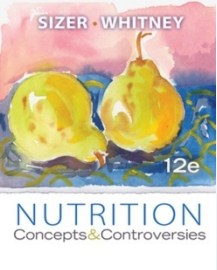
**Total Carbohydrate** 9g      **3%**

**Dietary fiber** 3g      **12%**

Sugars 0g

**Protein** 5g

**INGREDIENTS:** UNBLEACHED ENRICHED WHEAT FLOUR, WATER, WHEAT GLUTEN, CELLULOSE, YEAST, SOYBEAN OIL, CRACKED WHEAT, SALT, BARLEY, NATURAL FLAVOR PRESERVATIVES, MONOCALCIUM PHOSPHATE, MILLET, CORN, OATS, SOYBEAN FLOUR, BROWN RICE, FLAXSEED, SUCRALOSE.



# *Why Do Some People Have Trouble Digesting Milk?*

- Ability to digest milk carbohydrates varies
  - Lactase
    - Made by small intestine
- Symptoms of intolerance
  - Gas, diarrhea, pain, nausea?
- Milk allergy?
- Nutritional consequences
- Milk tolerance and strategies



# BI 199 Nutritional Analyses

- I. Attendance – Cards
- II. Goals Analyze at least one day's diet with **Diet Analysis Plus (DA+)** <http://cengagebrain.com> & the USDA's **SuperTracker** <https://www.supertracker.usda.gov>
- III. Save 6 .pdfs : 3 from DA+ & 3 from mypyramidtracker
  - A. For DA Plus
    1. DRI Report (Dietary Recommended Intakes)
    2. Intake vs Goals (bar graph)
    3. MyPlate Analysis
  - B. For USDA SuperTracker (My Reports)
    1. Food Groups & Calories
    2. Nutrients
    3. Meal Summary (*Food Details optional*)
- IV. Analyze Results & Answer Q You Received by e-mail
- V. Submit Your Answers & the Above 6 Reports to:  
[lombardi@uoregon.edu](mailto:lombardi@uoregon.edu)



...send your answers  
to the questions & all  
6 .pdfs by e-mail  
attachment to:

[lombardi@uoregon.edu](mailto:lombardi@uoregon.edu)

*Diet Analysis Plus* System is  
now an on-line access program  
with Cengage Learning.

<http://www.cengagebrain.com>

Your access code is required.  
Let us know if you need help!

DA

# Profile: What You Need

## Profile

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Profile Name	phantom
Sex	Male
Height	5 ft. 10 inch.
Weight	173
Age	56 years
BMI	25
Activity Level	Active
Smoker	no
Vegetarian	no

## DRI Goals

Nutrient	DRI
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### Energy

Calories	2888 kcal	
Carbohydrates	325 - 469 g	45%-65% of kilocalories
Fat	64 - 112 g	20%-35% of kilocalories
Protein	72 - 253 g	10%-35% of kilocalories
Protein	62.78 g	Daily requirement based on grams per kilogram of body weight

### Fat

Saturated Fat	32 g	less than 10% of calories recommended
Monounsaturated Fat	-	No recommendation
Polyunsaturated Fat	-	No recommendation
Cholesterol	300 mg	less than 300mg recommended












# Intake vs. Goals: What You Got

Oct 12, 2011

Pat Lombardi, lombardi@uoregon.edu

Profile: Phantom, Intake vs. Goals for Oct 12, 2011 - Oct 12, 2011

 Nutrient	DRI	Intake	0%	25%	50%	75%	100%
<b>Energy</b>							
Kilocalories	2398 kcal	2,111.85 kcal					88%
Protein	62.41 g	110.83 g					178%
Carbohydrate	258.0 - 373.0 g	244.63 g					
Fat, Total	51.0 - 89.0 g	80.04 g					
<b>Fat</b>							
Saturated Fat	< 23 g	17.71 g					77%
Monounsaturated Fat	*	36.5 g					
Polyunsaturated Fat	*	16.75 g					
Trans Fatty Acid	*	0.15 g					
Cholesterol	< 300 mg	403.4 mg					134%
<b>Essential Fatty Acids</b>							
Omega-6 Linoleic	14 g	10.94 g					78%
Omega-3 Linolenic	1.6 g	1.79 g					112%
<b>Carbohydrates</b>							
Dietary Fiber, Total	30 g	28.72 g					96%
Sugar, Total	*	92.5 g					
<b>Other</b>							
Water	3.7 L	1.43 L					39%
Alcohol	*	0 g					

# *MyPlate Analysis*

## *How This Compares to the Food Guidance System*

Oct 12, 2011

Pat Lombardi, lombardi@uoregon.edu

Profile: Phantom, MyPlate Analysis for Oct 12, 2011 - Oct 12, 2011

	Goal*		Actual	% Goal
<b>Grains</b>	8.0 oz. eq.	tips	6.9 oz. eq.	85.7%
<b>Vegetables</b>	3.0 cup eq.	tips	3.1 cup eq.	104%
<b>Fruits</b>	2.0 cup eq.	tips	3.8 cup eq.	190.9%
<b>Dairy</b>	3.0 cup eq.	tips	1 cup eq.	33.3%
<b>Protein Foods</b>	6.5 oz. eq.	tips	10.9 oz. eq.	168.2%
<b>Empty Calories</b>	362.0		337.4	93.2%



Your results are based on a 2398 calorie pattern.

**Make Half Your Grains Whole!** Aim for at least 4.0 oz. eq. whole grains.

# Food List is Helpful, Too!

Oct 12, 2011

Pat Lombardi, lombardi@uoregon.edu

Profile: Phantom, Daily Food Log for Oct 12, 2011

## Breakfast

ODWALLA B MONSTER Fruit Smoothie Blend, Blueberry	4 fl. oz.	70 kCal
Oatmeal, Cooked with Water	0.75 c.	125 kCal
CANNOLA Margarine, Soft	2 t.	67 kCal
Sugar, Brown	2 t.	23 kCal
Juice, Orange, Chilled, Includes from Concentrate, Fortified w Calcium	4 fl. oz.	59 kCal
ODWALLA Fruit Smoothie Blend, Strawberry Banana	4 fl. oz.	65 kCal
Beef, Chuck, Blade Roast, Select, Separable Lean, 0" Fat, Braised	0.5 oz.	34 kCal
Tomatoes, Red	0.25 item	6 kCal
Cucumber	1 t.	0 kCal
Eggs, Fried	1 item	90 kCal

## Lunch

Bagel, Sesame Seed, Enriched	0.25 item	46 kCal
Mustard, Yellow	0.5 t.	2 kCal
Beef, Chuck, Blade Roast, 0" Fat, Braised	2 oz.	197 kCal
Cucumber	0.2 c.	3 kCal
Tomatoes, Red	0.25 item	6 kCal

## Dinner

Pepper, Black, Ground	0.33 t.	2 kCal
Basil, Ground	0.12 t.	0 kCal
Pepper, Black, Ground	0.25 t.	1 kCal
Juice, Lemon	0.25 t.	0 kCal
Parsley, Dried	0.25 t.	0 kCal
Couscous, Cooked	0.75 c.	132 kCal
Snapper, Mixed Species, Cooked, Dry Heat	3 oz.	109 kCal

Today  
07/01/12

### Physical Activity Target

Week of 07/01/12 to 07/07/12 [i](#)

<b>Target</b>	AT LEAST 150 minutes per week
<b>Actual</b>	0 minutes

### Daily Calorie Limit

<b>Allowance</b>	2600
<b>Eaten</b>	3307
<b>Remaining</b>	0

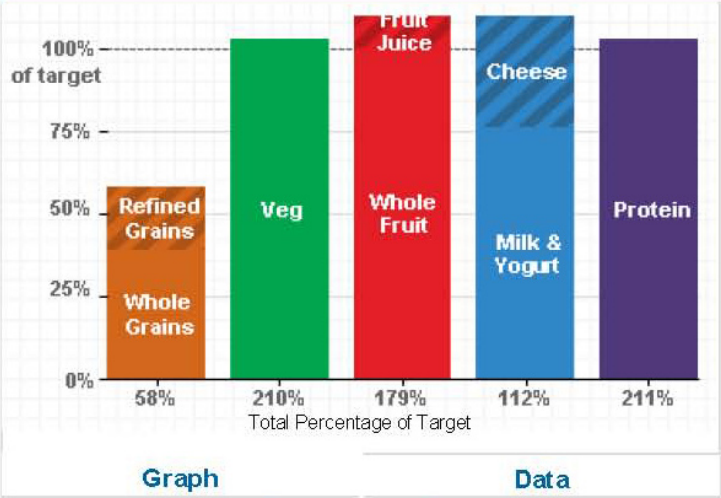
### Daily Food Group Targets [More Info>](#)

	Grains	Vegetables	Fruits	Dairy	Protein Foods
<b>Target</b>	9 oz.	3½ cup(s)	2 cup(s)	3 cup(s)	6½ oz.
<b>Eaten</b>	5½ oz.	7¼ cup(s)	3½ cup(s)	3¼ cup(s)	13½ oz.
<b>Status</b>	Under	Over	Over	OK	Over

## Food Tracker

Search and add food to view how your daily choices stack up to your food group targets and daily limits. Make tracking and planning ahead simple by using the Copy Meals and Create a Combo features.

Search:  for  [Go](#) [Search Tips](#)



Related Links: [Nutrient Intake Report](#) | [View By Meal](#)

### Daily Limits

**Total Calories Eaten: 3307**

**Empty Calories\* Eaten: 444**



# phantom's Food Groups and Calories Report 07/01/12 - 07/01/12

Your plan is based on a **2600 Calorie** allowance.

Food Groups	Target	Average Eaten	Status
<b>Grains</b>	<b>9 ounce(s)</b>	<b>5½ ounce(s)</b>	<b>Under</b>
Whole Grains	≥ 4½ ounce(s)	3½ ounce(s)	Under
Refined Grains	≤ 4½ ounce(s)	1½ ounce(s)	OK
<b>Vegetables</b>	<b>3½ cup(s)</b>	<b>7¼ cup(s)</b>	<b>Over</b>
Dark Green	2½ cup(s)/week	½ cup(s)	Under
Red & Orange	7 cup(s)/week	½ cup(s)	Under
Beans & Peas	2½ cup(s)/week	½ cup(s)	Under
Starchy	7 cup(s)/week	0 cup(s)	Under
Other	5½ cup(s)/week	6 cup(s)	Over
<b>Fruits</b>	<b>2 cup(s)</b>	<b>3½ cup(s)</b>	<b>Over</b>
Whole Fruit	No Specific Target	2 cup(s)	No Specific Target
Fruit Juice	No Specific Target	1½ cup(s)	No Specific Target
<b>Dairy</b>	<b>3 cup(s)</b>	<b>3¼ cup(s)</b>	<b>OK</b>
Milk & Yogurt	No Specific Target	2¼ cup(s)	No Specific Target
Cheese	No Specific Target	1 cup(s)	No Specific Target
<b>Protein Foods</b>	<b>6½ ounce(s)</b>	<b>13½ ounce(s)</b>	<b>Over</b>
Seafood	10 ounce(s)/week	13 ounce(s)	Over
Meat, Poultry & Eggs	No Specific Target	0 ounce(s)	No Specific Target
Nuts, Seeds & Soy	No Specific Target	½ ounce(s)	No Specific Target
<b>Oils</b>	<b>8 teaspoon</b>	<b>16 teaspoon</b>	<b>Over</b>
<b>Limits</b>	<b>Allowance</b>	<b>Average Eaten</b>	<b>Status</b>
<b>Total Calories</b>	<b>2600 Calories</b>	<b>3307 Calories</b>	<b>Over</b>
<b>Empty Calories*</b>	<b>≤ 362 Calories</b>	<b>444 Calories</b>	<b>Over</b>
<b>Solid Fats</b>	<b>*</b>	<b>293 Calories</b>	<b>*</b>
<b>Added Sugars</b>	<b>*</b>	<b>152 Calories</b>	<b>*</b>

\*Calories from food components such as added sugars and solid fats that provide little nutritional value. Empty Calories are part of Total Calories.

**Note:** If you ate Beans & Peas and chose "Count as Protein Foods instead," they will be included in the Nuts, Seeds & Soy subgroup.

# phantom's Nutrients Report 07/01/12 - 07/01/12

Your plan is based on a **2600** Calorie allowance.

Nutrients	Target	Average Eaten	Status
<b>Total Calories</b>	<b>2600 Calories</b>	<b>3307 Calories</b>	<b>Over</b>
<b>Protein (g)***</b>	<b>56 g</b>	<b>181 g</b>	<b>OK</b>
<b>Protein (% Calories)***</b>	<b>10 - 35% Calories</b>	<b>22% Calories</b>	<b>OK</b>
<b>Carbohydrate (g)***</b>	<b>130 g</b>	<b>357 g</b>	<b>OK</b>
<b>Carbohydrate (% Calories)***</b>	<b>45 - 65% Calories</b>	<b>43% Calories</b>	<b>Under</b>
<b>Dietary Fiber</b>	<b>30 g</b>	<b>51 g</b>	<b>OK</b>
<b>Total Fat</b>	<b>20 - 35% Calories</b>	<b>38% Calories</b>	<b>Over</b>
<b>Saturated Fat</b>	<b>&lt; 10% Calories</b>	<b>9% Calories</b>	<b>OK</b>
<b>Monounsaturated Fat</b>	<b>No Daily Target or Limit</b>	<b>15% Calories</b>	<b>No Daily Target or Limit</b>
<b>Polyunsaturated Fat</b>	<b>No Daily Target or Limit</b>	<b>11% Calories</b>	<b>No Daily Target or Limit</b>
<b>Linoleic Acid (g)***</b>	<b>14 g</b>	<b>32 g</b>	<b>OK</b>
<b>Linoleic Acid (% Calories)***</b>	<b>5 - 10% Calories</b>	<b>9% Calories</b>	<b>OK</b>
<b>α-Linolenic Acid (g)***</b>	<b>1.6 g</b>	<b>4.2 g</b>	<b>OK</b>
<b>α-Linolenic Acid (% Calories)***</b>	<b>0.6 - 1.2% Calories</b>	<b>1.1% Calories</b>	<b>OK</b>
<b>Omega 3 - EPA</b>	<b>No Daily Target or Limit</b>	<b>1808 mg</b>	<b>No Daily Target or Limit</b>
<b>Omega 3 - DHA</b>	<b>No Daily Target or Limit</b>	<b>2530 mg</b>	<b>No Daily Target or Limit</b>
<b>Cholesterol</b>	<b>&lt; 300 mg</b>	<b>340 mg</b>	<b>Over</b>
<b>Minerals</b>	<b>Target</b>	<b>Average Eaten</b>	<b>Status</b>
<b>Calcium</b>	<b>1000 mg</b>	<b>1814 mg</b>	<b>OK</b>
<b>Potassium</b>	<b>4700 mg</b>	<b>7348 mg</b>	<b>OK</b>
<b>Sodium**</b>	<b>1500 mg</b>	<b>3805 mg</b>	<b>Over</b>
<b>Copper</b>	<b>900 µg</b>	<b>3407 µg</b>	<b>OK</b>
<b>Iron</b>	<b>8 mg</b>	<b>22 mg</b>	<b>OK</b>
<b>Magnesium</b>	<b>420 mg</b>	<b>692 mg</b>	<b>OK</b>
<b>Phosphorus</b>	<b>700 mg</b>	<b>3165 mg</b>	<b>OK</b>
<b>Selenium</b>	<b>55 µg</b>	<b>325 µg</b>	<b>OK</b>
<b>Zinc</b>	<b>11 mg</b>	<b>17 mg</b>	<b>OK</b>
<b>Vitamins</b>	<b>Target</b>	<b>Average Eaten</b>	<b>Status</b>
<b>Vitamin A</b>	<b>900 µg RAE</b>	<b>1270 µg RAE</b>	<b>OK</b>
<b>Vitamin B6</b>	<b>1.7 mg</b>	<b>4.0 mg</b>	<b>OK</b>
<b>Vitamin B12</b>	<b>2.4 µg</b>	<b>16.1 µg</b>	<b>OK</b>

# Meals from 07/01/12 - 07/01/12

## phantom's Meals

phantom, your plan is based on a **2600 Calorie** allowance.

Date	Breakfast	Lunch	Dinner	Snacks
07/01/12	<ul style="list-style-type: none"> <li>• 1 medium (7" to 7-7/8" long) Banana, raw</li> <li>• ¾ cup Blueberries, raw</li>   <li>• ½ cup Milk, fat free (skim)</li>   <li>• ½ cup Orange juice, frozen, calcium added (reconstituted with water)</li> <li>• 1 cup, spoon size biscuits Shredded Wheat Cereal, 100%</li> <li>• 3 large (1-3/8" across) Strawberries, raw</li> </ul>	<ul style="list-style-type: none"> <li>• 1½ tablespoon Blue or roquefort cheese dressing</li> <li>• ½ cup Chickpeas (garbanzo beans), canned (no fat added)</li>   <li>• 1¼ cup Lettuce, green or red leaf</li>   <li>• 1½ medium leaf Lettuce, green or red leaf</li> <li>• 1 tablespoon Mayo, regular</li>   <li>• ¼ cup Mushroom, fresh, cooked (no salt or fat added)</li> <li>• 2 teaspoon Mustard</li>   <li>• 1 cup Orange juice, freshly squeezed</li> <li>• 1 hamburger or hot dog bun Roll, wheat or cracked wheat</li> <li>• 1½ slice (1 oz) Swiss cheese</li> <li>• 1 patty Vegetarian or soy burger (Boca burger, Gardenburger), no bun</li> </ul>	<ul style="list-style-type: none"> <li>• 1 tablespoon Blue or roquefort cheese dressing</li> <li>• 1 regular slice (3-3/4" x 5" x 1/2") Bread, 100% whole wheat, homemade or bakery</li> <li>• ½ cup, cut stalks Broccoli, fresh, cooked (no salt or fat added)</li> <li>• ½ bar (1.5 oz) Chocolate candy, sweet or dark (Hershey's Special Dark)</li> <li>• 5 slice Cucumber, raw</li>   <li>• 1 packet Hot pepper sauce</li>   <li>• 1 sandwich Ice cream sandwich, light vanilla ice cream</li> <li>• 1½ tablespoon Jam, preserves, all flavors</li> <li>• 2 pat (teaspoon) Margarine, stick, salted</li>   <li>• 1 tablespoon Mayo, regular</li>   <li>• 1 cup Mushrooms, fresh, cooked (no salt or fat added)</li> <li>• 2 tablespoon Olive oil</li>   <li>• 1 cup Onion, fresh, cooked (no salt or fat added)</li> <li>• ½ small porgy Porgy, (snapper), baked or broiled with oil</li> <li>• 2 cup Salad, with lettuce, avocado, tomatoes, and/or carrots, no dressing</li> </ul>	<p><i>EMPTY</i></p>