Nutrition Basics
for Body and Soul

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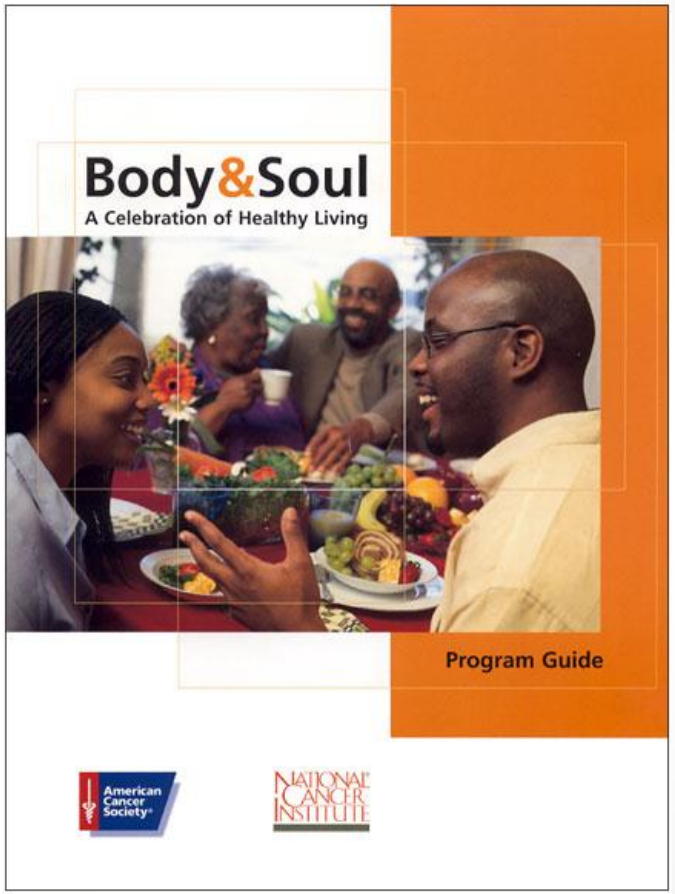
Agenda

- Introductions
- Nutrition Introduction
- Food labels
  - Serving size
  - Calories
- Portion size
- Ingredient lists
- ChooseMyPlate



Introductions

- Jennifer Martin
  - Registered Dietitian
  - MS in Nutrition
  - BS in Dietetics
  - Working on PhD in Nutrition

What is Nutrition?

- ..."Our food should be our medicine and our medicine should be our food." – Hippocrates

- **nu·tri·tion**
- **1.** The process of nourishing or being nourished, especially the process by which a living organism assimilates food and uses it for growth and for replacement of tissues.
- **2.** The science or study that deals with food and nourishment, especially in humans.
- **3.** A source of nourishment; food.

What is a Diet?

- **di·et**
- **1.** The usual food and drink of a person or animal.
- **2.** A regulated selection of foods, as for medical reasons or cosmetic weight loss.

- from Old French *diete,* from Latin *diaeta,* from Greek *diaita* **mode of living**, from *diaitan* to direct one's own life

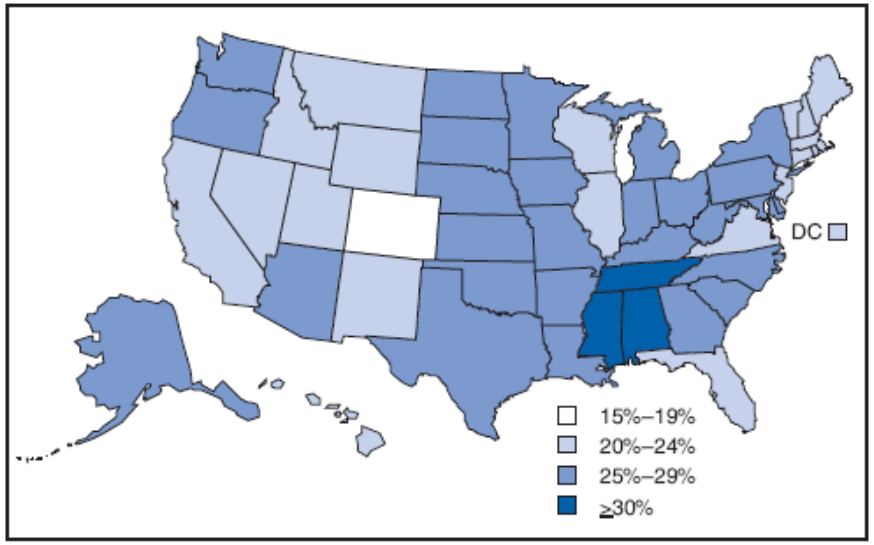
Health Problems with Poor Nutrition

- **Obesity-Related Problems:**
  - Heart Disease
  - High Blood Pressure
  - Diabetes
  - Back/Joint Pain
  - Sleep Apnea
- **Non-Obesity Related Problems:**
  - Nutrient Deficiencies
    - Example: scurvy with vitamin C deficiency
  - Growth Problems
  - Anemia

Obesity

- Obesity prevalence is increasing
- Healthy BMI 18.5-24.5
- Overweight BMI 24.5-29.9
- Obese BMI30-34.5
  - A 5’5” person would be obese if she/he weighs 180lb or more
  - A 6’ person would be obese if she/he weights 221lb or more

FIGURE. Prevalence of obesity* among adults aged ≥18 years – Behaviorial Risk Factor Surveillance System, United States, 2007



* Persons with a body mass index (BMI) of ≥30.0; self-reported weight and height were used to calculate BMI (weight [kg] / height [m]^2)

Nutrition Information

- Know where your information comes from!
- Nutrition for healthy people is really quite simple--no need for gimmicks, special products, etc

- Good resources
  - Nutrition.gov
  - Eatright.org

Decoding Food Labels

- Know how to read and understand a Nutrition Facts Label →

- **The guide to what is in our food!**

Nutrition Facts

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

Amount Per Serving	
Calories 280	**Calories from Fat** 120
	% Daily Value*
Total Fat 13g	20%
Saturated Fat 5g	25%
Trans Fat 2g	
Cholesterol 2mg	10%
Sodium 660mg	28%
Total Carbohydrate 31g	10%
Dietary Fiber 3g	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
Fiber		25g	30g

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

What is Important?

Sample label for Macaroni & Cheese

1 Start Here

2 Check Calories

3 Limit these Nutrients

4 Get Enough of these Nutrients

5 Footnote

6

Nutrition Facts

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

Amount Per Serving	
Calories 250	Calories from Fat 110
	% Daily Value*
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

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Dietary Fiber		25g	30g

Quick Guide to % DV

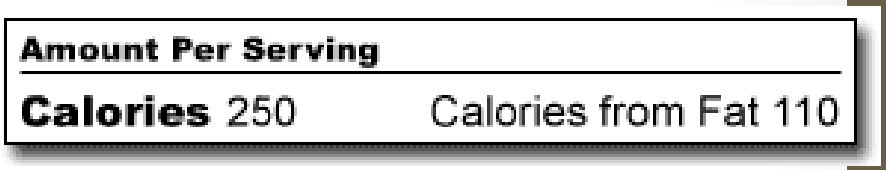
- 5% or less is Low
- 20% or more is High

Food Labels- Serving Sizes

Example					
	Single Serving	**%DV**		**Double Serving**	**%DV**
Serving Size	1 cup (228g)			2 cups (456g)	
Calories	250			500	
Calories from Fat	110			220	
Total Fat	12g	18%		24g	36%
Trans Fat	1.5g			3g	
Saturated Fat	3g	15%		6g	30%
Cholesterol	30mg	10%		60mg	20%
Sodium	470mg	20%		940mg	40%
Total Carbohydrate	31g	10%		62g	20%
Dietary Fiber	0g	0%		0g	0%
Sugars	5g			10g	
Protein	5g			10g	
Vitamin A		4%			8%
Vitamin C		2%			4%
Calcium		20%			40%
Iron		4%			8%

Calories

- Calories provide a measure of how much energy you get from a serving of this food
- The calorie section of the label can help you manage your weight (i.e., gain, lose, or maintain)
- **Remember: the number of servings you consume determines the number of calories you actually eat (your portion amount)**



- **Example**: there are 250 calories in one serving of this macaroni and cheese
- What if you ate the whole package content?

You would eat two servings
500 calories

Calories

- **General Guide to Calories (from the USDA)**
  - 40 Calories is low
  - 100 Calories is moderate
  - 400 Calories or more is high

Which options are better choices based on the calories?

Nutrition Facts	Serving Size	Calories
Sandwiches		
Hamburger	3.5 oz (100 g)	250
Cheeseburger	4 oz (114 g)	300
Double Cheeseburger	5.8 oz (165 g)	440
McDouble	5.3 oz (151 g)	390
Quarter Pounder® with Cheese+	7 oz (198 g)	510
Double Quarter Pounder® with Cheese++	9.8 oz (279 g)	740
Premium Asian Salad (without chicken)**	8.6 oz (243 g)	150
Premium Asian Salad with Crispy Chicken**	12.7 oz (362 g)	420
Premium Asian Salad with Grilled Chicken**	12.3 oz (348 g)	270

Calories

- Foods high in fat have approximately twice the Calories for the same amount than those that are packed with proteins or carbohydrates instead
- The amount of calories each person needs is different!
  - Depends on age, male/female, activity level, genetics, etc.

Nutrients- To Limit

- The nutrients listed first are the ones we eat in adequate amounts, or even too much
- Eating too much fat, saturated fat, *trans*fat, cholesterol, or sodium may **increase** your risk of certain chronic diseases

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

Health experts recommend that you keep your intake of saturated fat, *trans* fat and cholesterol as low as possible as part of a nutritionally balanced diet.

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Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
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Calcium	20%
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Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

1. **Start Here**
2. **Check Calories**
3. **Limit these Nutrients**
4. **Get Enough of these Nutrients**
5. **Footnote**
6. **Quick Guide to % DV**
   - **5% or less is Low**
   - **20% or more is High**

Nutrients- Get Enough

- Most of us don't get enough dietary fiber, vitamin A, vitamin C, calcium, and iron in our diets
- Eating enough of these nutrients can improve your health and help **reduce** the risk of some diseases and conditions

Dietary Fiber 0g	0%
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

- Getting enough **calcium** may reduce the risk of osteoporosis, a condition that results in brittle bones as one ages
- Eating a diet high in dietary **fiber** promotes healthy bowel function

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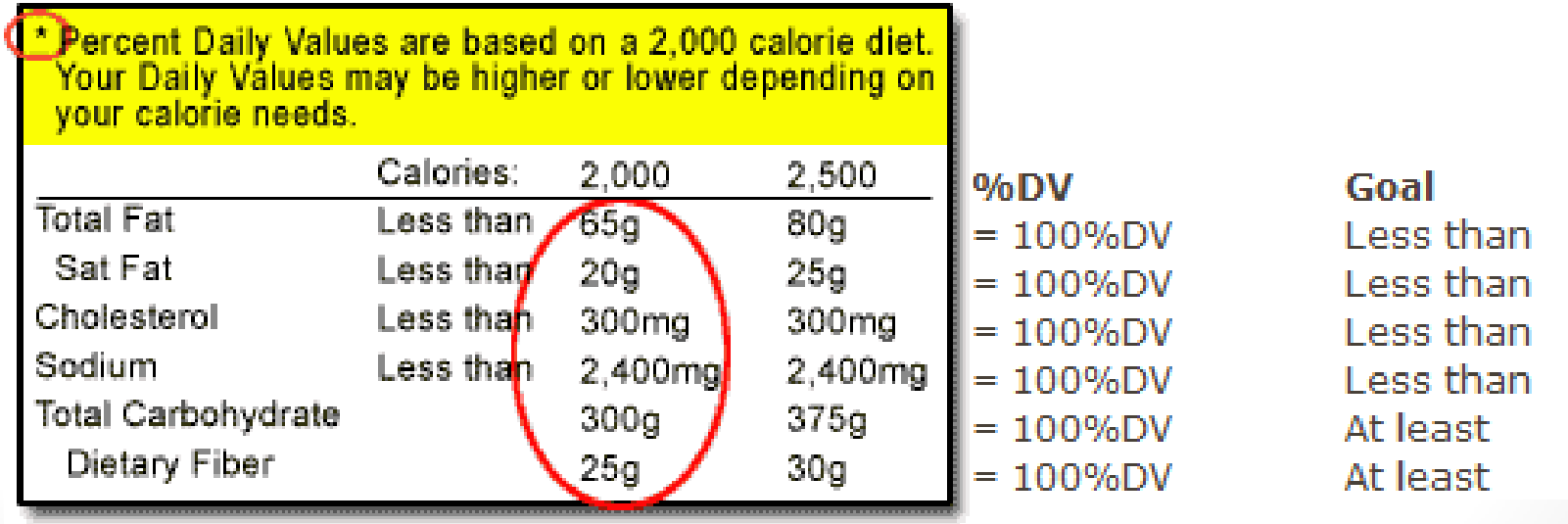
Food Label- Footnote

- The footnote at the bottom is the same on all labels
- Shows amounts needed of nutrients based on 2,000 and 2,500 calorie diets



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	Calories:	2,000	2,500	%DV	Goal
Total Fat	Less than	65g	80g	= 100%DV	Less than
Sat Fat	Less than	20g	25g	= 100%DV	Less than
Cholesterol	Less than	300mg	300mg	= 100%DV	Less than
Sodium	Less than	2,400mg	2,400mg	= 100%DV	Less than
Total Carbohydrate		300g	375g	= 100%DV	At least
Dietary Fiber		25g	30g	= 100%DV	At least

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Sugars 5g	
Protein 5g	
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What Else is on That Box?

- FDA has guides regarding statements made on boxes and packages
  - Nutrient Content Claims
  - Health Claims
- Others:
  - Organic
  - Natural
  - And More!

NUTRIENT CONTENT CLAIMS

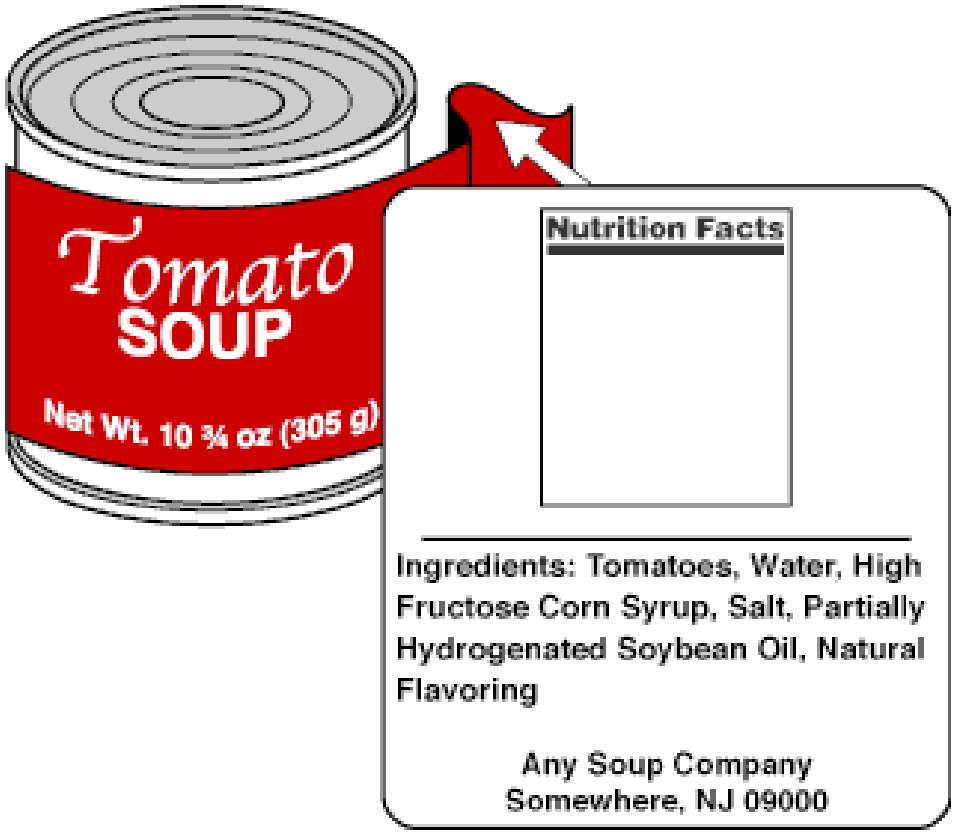
Claim	Definition	Nutrient
"Free"	No amount of or only trivial amounts.	Fat Saturated Fat Cholesterol Sodium Sugars Calories
"Very Low"	Not an overall definition.	Sodium
"Low"	May be used on foods that can be eaten frequently without exceeding dietary guidelines. Amount varies depending on the nutrient.	Fat Saturated Fat Sodium Cholesterol Calorie
"Lean" and "Extra Lean"	Used to describe fat in meat, poultry, seafood, and game meats.	Fat
"High"	May be used if the food contains 20% or more of the Daily Value per serving.	Vitamins and Minerals Dietary Fiber Protein
"Good Source"	May be used if the food contains 10% to 19% of the Daily Value per serving.	Vitamins and Minerals Dietary Fiber Protein
"Reduced"	Nutritionally altered to contain at least 25% less of a nutrient, or of calories, than the reference food. Reduced claim cannot be made if it is already labeled low.	Fat Saturated Fat Sodium Cholesterol Calorie
"Less"	Contains 25% less of a nutrient, or of calories, than the reference food.	Fat Saturated Fat Sodium Cholesterol Calorie
"Light"	One third fewer calories, or half the fat, of the reference food. If the food derives 50% or more of calories from fat, the reduction must be 50%.	Calories Fat
"Light in Sodium"	Sodium has been reduced by at least 50%.	Sodium
"More"	Contains at least 10% of the Daily Value of the nutrient present in reference food. "Fortified," "enriched," "added," "extra," and "plus" are all synonyms of "more."	Vitamins and Minerals Dietary Fiber Protein

Portion Size vs. Serving Size

- Serving Size:
  - The USDA Center for Nutrition Policy and Promotion sets the standards for these meanings in the U.S.
- Portion Size:
  - The amount that you eat OR the amount you should eat

Ingredient Lists

- The ingredient list is the listing of each ingredient in descending order of predominance by weight

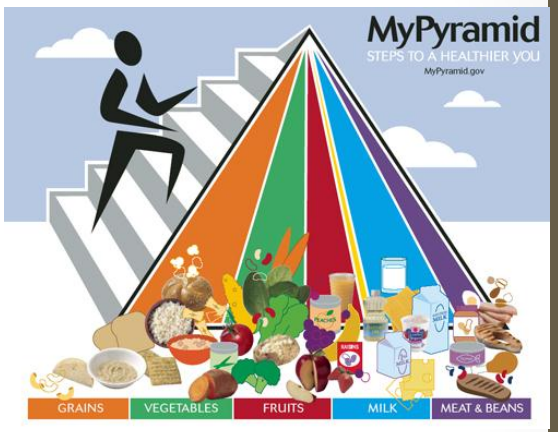


Ingredient Lists

- Things to look for on ingredient lists:
  - Whole Grains
  - Sugars

Nutrition Tools

- Nutrition Facts Labels
- Portion and Serving Sizes
- Ingredient Lists



- Tools for planning meals
  - MyPyramid
  - ChooseMyPlate

ChooseMyPlate

- Balancing Calories
  - Enjoy your food, but eat less
  - Avoid oversized portions
- Foods to Increase
  - Make at least half your grains whole grains
  - Switch to fat-free or low-fat (1%) milk
- Foods to Reduce
  - Compare sodium in foods like soup, bread, and frozen meals- and choose the foods with lower numbers
  - Drink water instead of sugary drinks

ChooseMyPlate

- Tips and help on the website
  - Choosemyplate.gov
- Sample menus for a week
- Tip sheets
- Recipes

Making Healthy Choices

- Use the great tools that are available to you!
  - Tip sheets/handouts from Body and Soul
  - Nutrition labels
  - Ingredient labels
  - ChooseMyPlate

- Remember that the food we eat is what powers us through each day and gives us the energy to be our best and succeed!

Questions?