

Chapter 2
Think Before You Eat:
Developing a Nutrition Plan for Health

Hewlings/Medeiros

PowerPoint presentation created by
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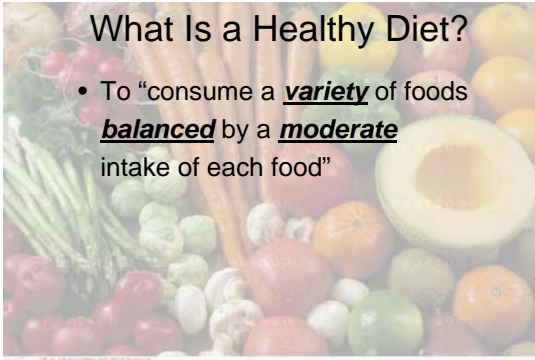
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Tips for a Healthy Diet

- THINK BEFORE YOU EAT!
- NO SUCH THING AS GOOD OR BAD FOODS!
- NO NEED TO OMIT FOODS!
- ALL FOODS CAN FIT!

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What Is a Healthy Diet?



- To “consume a **variety** of foods **balanced** by a **moderate** intake of each food”

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Variety, Balance and Moderation

Variety - Choose different foods

Balance - Select foods from the major food groups

Moderation - Plan your intake; control portion size

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All Foods Are Not Created Equal

- Nutrient density
- Empty calories
- Energy density

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Nutrient Dense

Empty Calories



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Tools and Guidelines for Planning Healthy Diets

- The Dietary Guidelines
- DRI
- EER
- AMDR
- MyPyramid

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What Are the *Dietary Guidelines*?

- Science-based advice for ages 2+
Promote health, prevent chronic disease
- Federal nutrition policy/programs
- HHS/USDA – Legislated every 5 years
- Can be adapted for special populations
– The DASH Eating Plan for hypertension

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The *Dietary Guidelines*

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Nine *DG* Focus Areas

- Adequate Nutrients Within Calorie Needs
- Weight Management
- Physical Activity
- Food Groups to Encourage
- Fats
- Carbohydrates
- Sodium and Potassium
- Alcoholic Beverages
- Food Safety

Note: The Dietary Guidelines for Americans 2005 contains additional recommendations for specific populations. The full document is available at:
<http://www.health.gov/dietaryguidelines>

**Dietary Guidelines are similar around the world.*

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Recommendations for Specific Nutrients: Dietary Reference Intake (DRI)

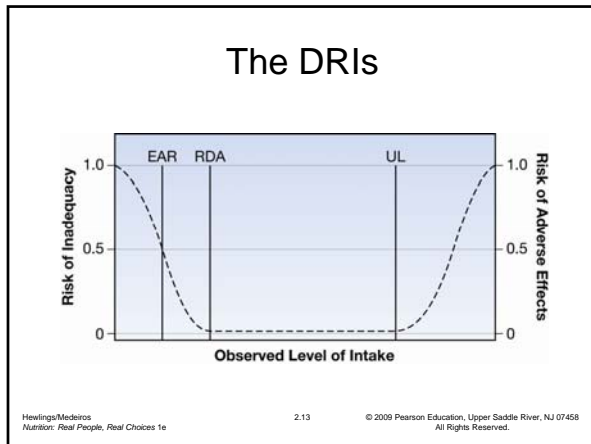
- New nutrient recommendations
- Focus to prevent chronic diseases
- DRI set for all vitamins and minerals
- May consider phytochemicals

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Standards Under the DRI

- Recommended Dietary Allowances (RDAs)
- Adequate Intake (AI)
- Tolerable Upper Intake Levels (ULs)
- Estimated Average Requirements (EARs)

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RDA for Energy?

- Estimated Energy Requirement
- Rough estimate
- Dependent on energy use
- Maintain healthy weight
- Many online sites to calculate
<http://www.mypyramid.gov>

— See formula text appendix

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Acceptable Macronutrient Distribution Range (AMDR)

- Protein: 10–35% of total calories
- Fat: 20–35%
- Carbohydrates: 45–65%

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2005 MyPyramid

Activity

Moderation

Personalization

MyPyramid.gov
STEPS TO A HEALTHIER YOU

Proportionality

Variety

Gradual Improvement

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The Traditional Healthy Vegetarian Diet Pyramid

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Cultural and diet-specific pyramids are available.

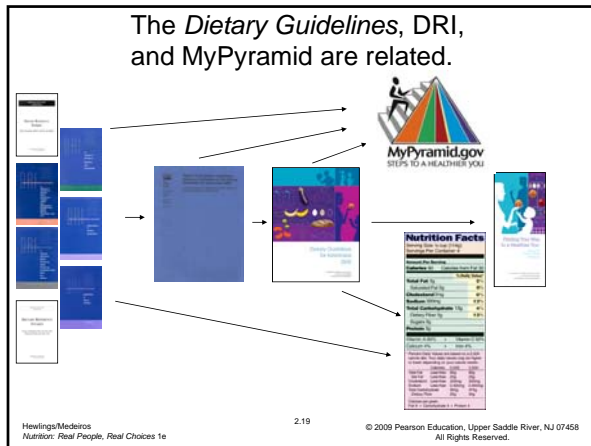
http://www.oldwayspt.org/vegetarian_pyramid.html

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Serving Sizes

- Portion distortion: a “huge” problem

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Sample label for Macaroni & Cheese

Nutrition Facts

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%

* Percent Daily Values are based on a diet of other people's misdeeds.

Quick Guide to % DV

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

Footnote: Your daily values may be higher or lower depending on your calorie needs.

	Calories	2,000	2,500
Total Fat	Less Than	65g	78g
Sat Fat	Less Than	20g	25g
Cholesterol	Less Than	300mg	300mg
Sodium	Less Than	2,400mg	2,400mg
Total Carbohydrate	Less Than	300g	375g
Dietary Fiber	Less Than	25g	25g

http://www.cfsan.fda.gov/~dms/foodlab.html

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Standards for Food Labeling

- DRIs not used on food labels because they are gender and age specific
- FDA developed the Daily Values using two standards:
 - Reference Daily Intake (**RDI**) for vitamins and minerals (based on 1968 RDAs)
 - Daily Reference Value (**DRV**) for nutrients without RDAs, like carbohydrates, fats, proteins
 - Only used on food labels

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Nutrient Panel on the Food Label

RDI: Nutrients that have RDAs or other established standards

DRVs: Nutrients that do not have RDAs or any other established standards

Daily Values used on the food label

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Daily Values

Nutrient	Daily Value
Fat	65 grams (g)
Saturated fatty acids	20 g
Cholesterol	300 milligrams (mg)
Total carbohydrate	300 g
Fiber	25 g
Sodium	2,400 mg
Potassium	3,500 mg

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Quick Guide to % DV

5% DV or less is low.

20% DV or more is high.

Limit these nutrients

Get enough of these nutrients

No % Daily Value

- *Trans Fat*
- Sugars
- Protein

Nutrition Facts	
Serving Size 1 cup (228g) Servings Per Container 2	
Amount Per Serving	Calories from Fat 110
Calories 250	
Total Fat 12g	16%
Saturated Fat 5g	10%
Trans Fat 3g	6%
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	10%
Protein 5g	10%
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

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General Guide to Calories*

40 calories is **low**.

100 calories is **moderate**.

400 calories is **high**.

*Based on a 2,000-calorie diet.

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What must be on the food label?

- Product name
- Manufacturer's name and address
- Uniform serving size
- Amount in the package
- Ingredients in descending order by weight

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Which foods require a label?

- Nearly all packaged foods and processed meat products
- Health claims
- Fresh fruit, vegetable, raw single-ingredient meal, poultry, and fish are **voluntary**.

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Which foods do not require a label?

- Food for immediate consumption
- Ready-to-eat foods not for immediate consumption but prepared on site
- Bulk foods sold to consumer
- Medical foods
- Foods that contain very few nutrients
- Food produced by small businesses
- Food packaged in small containers

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Health Claims Allowed on Food Labels

- Osteoporosis
- Cancer
- Heart disease
- Hypertension
- Neural tube defects
- Tooth decay
- Stroke

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Cage-Free or Free-Roaming Eggs



Are they really "free"?



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