


# State of the American Diet According to the Healthy Eating Index-2005

Center for Nutrition Policy and Promotion  
US Department of Agriculture  
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## From science to assessment



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HEI-2005

## Healthy Eating Index-2005

<p><b>Adequacy</b></p> <ul style="list-style-type: none"> <li>• Total Fruit</li> <li>• Whole Fruit</li> <li>• Total Vegetables</li> <li>• Dark Green/Orange/Legumes</li> <li>• Total Grains</li> <li>• Whole Grains</li> <li>• Milk</li> <li>• Meat &amp; Beans</li> <li>• Oils</li> </ul>	<p><b>Moderation</b></p> <ul style="list-style-type: none"> <li>• Saturated Fat</li> <li>• Sodium</li> <li>• Calories from Solid Fats, Alcoholic beverages, Added Sugars (SoFAAS)</li> </ul>
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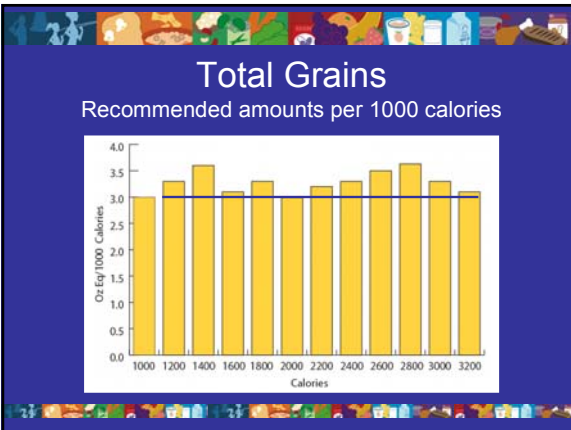
Guenther et al, J Am Dietet Assc, Nov, 2008

## Density standards

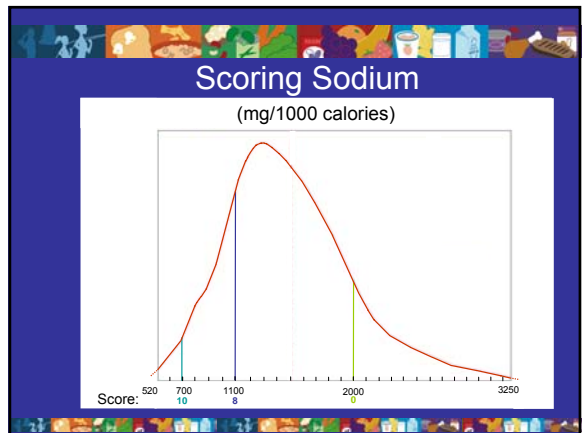
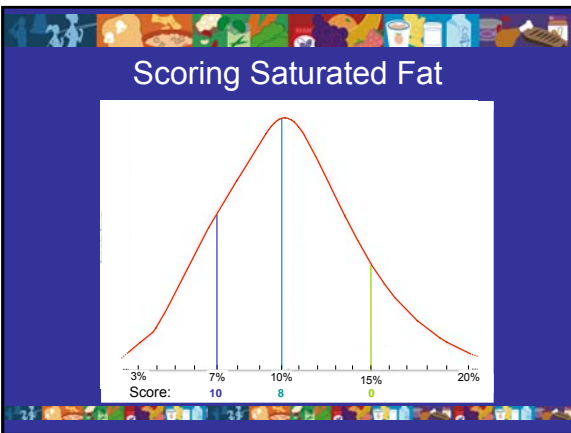
- Density approach
  - Expresses recommended amounts per 1000 calories, or as a percentage of calories
- Assesses the mix of foods
- Allows single index to be used for whole population

## Complementary measures

- Anthropometrics
  - Body Mass Index
  - Waist circumference
- Physical activity



- ### Scoring
- Adequacy components
    - Maximum points for meeting the MyPyramid-based standards
    - 0 points for none
  - Moderation components
    - Maximum points for meeting other science-based standards
    - 0 points set at 85<sup>th</sup> pct



- ### Discretionary calories
- Introduced by the 2005 Dietary Guidelines Advisory Committee
    - “Difference between total energy requirements and energy consumed to meet recommended nutrient intakes”
    - Includes solid fats, alcohol and added sugars
    - Additional amounts of nutrient-rich foods

- ### Discretionary calories
- Discretionary calories difficult to measure
  - Needed a component to address over-consumption

### Proxy measure

- Calories from Solid Fats, Alcoholic beverages and Added Sugars
  - Represents a subset of all discretionary calories
  - Does not cover intake above recommended amounts of Pyramid food groups

### Assessing usual intake

- IOM DRI assessment report
  - Groups
  - Individuals
- IOM and Dietary Guidelines
  - Recommendations to be met over time
  - Assess usual intake
- 1-day means estimate group usual intake

### Population HEI-2005 score

$$\frac{\sum (\text{Food Group})_{\text{individual}}}{\sum (\text{Energy})_{\text{individual}}}$$

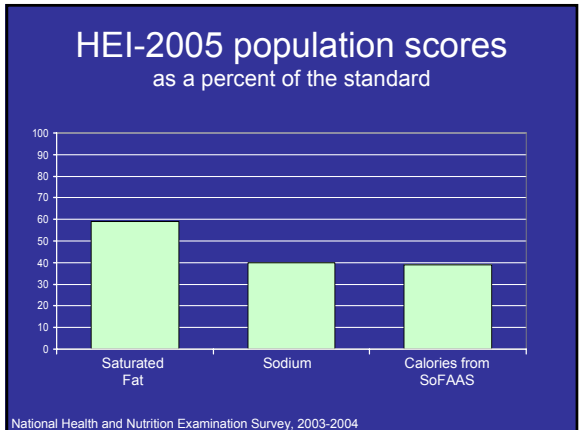
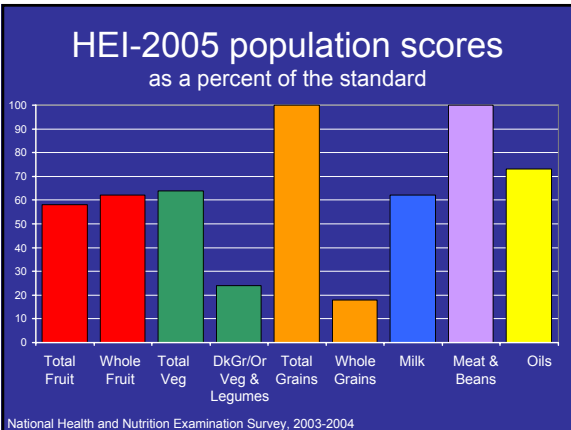
Freedman et al, *J Nutr*, Sept, 2008

### Population HEI-2005 score

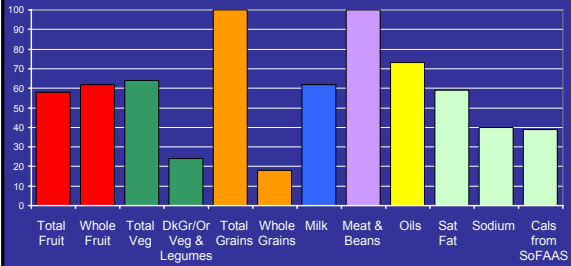
$$\frac{\sum (\text{Food Group})_{\text{individual}}}{\sum (\text{Energy})_{\text{individual}}}$$

→Assign score

Freedman et al, *J Nutr*, Sept, 2008



## HEI-2005 population scores as a percent of the standard



National Health and Nutrition Examination Survey, 2003-2004