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

HEI-2005

Healthy Eating Index-2005

Adequacy
- Total Fruit
- Whole Fruit
- Total Vegetables
- Dark Green/Orange/Legumes
- Total Grains
- Whole Grains
- Milk
- Meat & Beans
- Oils

Moderation
- Saturated Fat
- Sodium
- Calories from Solid Fats, Alcoholic beverages, Added Sugars (SoFAAS)

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

Total Grains
Recommended amounts per 1000 calories

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 85th pct

Scoring Saturated Fat

Scoring Sodium
(mg/1000 calories)

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

HEI-2005 population scores

as a percent of the standard

National Health and Nutrition Examination Survey, 2003-2004

Population HEI-2005 score

\[ \frac{\sum \text{(Food Group)}_{\text{individual}}}{\sum \text{(Energy)}_{\text{individual}}} \rightarrow \text{Assign score} \]

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
HEI-2005 population scores
as a percent of the standard