



Developing Dietary Guidelines for Americans

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Dietary Guidelines for Americans

- The 1990 National Nutrition Monitoring and Related Research Act requires that the U.S. Departments of Health and Human Services and of Agriculture publish a new edition of the Dietary Guidelines for Americans every 5 years
- The guidelines should reflect current advancements in scientific knowledge on the relationship between nutrition and human health
- The guidelines further translates the science current at the time into sound food-based guidance to promote health in the United States
- The process has evolved from concerns of nutrient deficiencies and malnutrition in the beginning to disease prevention and over nutrition more recently

Purpose of The *Dietary Guidelines for Americans*

Provides evidence-based food and beverage recommendations for Americans ages 2 and older

These recommendations aim to:

- Promote health
- Prevent chronic disease
- Help people reach and maintain a healthy weight
 - Forms the basis of federal nutrition policy and programs
 - Helps guide local, state, and national health promotion and disease prevention initiatives
 - Informs various organizations and industries, such as food product development



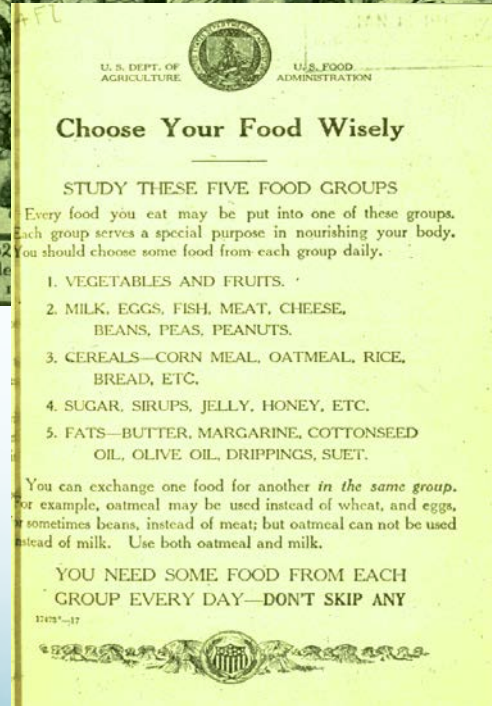
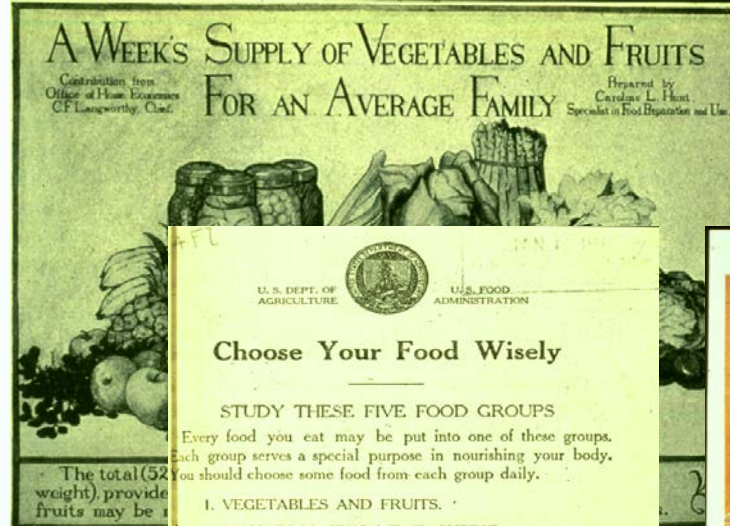


Dietary Guidelines: What It Is, What It Is Not

- Translates science into food-based guidance toward a healthy and enjoyable diet
- Helps individuals improve and maintain overall health, focusing on disease prevention and reducing the risk of chronic diseases
- These Guidelines embody the idea that a healthy eating pattern is an adaptable framework in which individuals can enjoy foods:
 - that meet their personal,
 - cultural, and traditional preferences
 - and fit within their budget
- Is not intended to be used to treat disease

History of The *Dietary Guidelines for Americans*

1917 → 1943 → 1956 → 1979



Concern: Nutrient Deficiencies



From Nutrient based to Food based

- Nutrient based goals
 - Increase consumption of complex carbohydrates and “naturally occurring sugars”
 - Reduce consumption of refined and processed sugars, saturated fat, cholesterol, and sodium
- Food based
 - Increase fruits, vegetables, and whole grains
 - Decrease
 - refined and processed sugars and foods high in such sugars;
 - foods high in total fat and animal fat, and partially replace saturated fats with polyunsaturated fats
 - eggs, butter fat and other high cholesterol foods
 - salt and foods high in salt
 - Choose low-fat and non-fat dairy products instead of high-fat dairy products (except young children)

Dietary Guidelines for Americans



1980



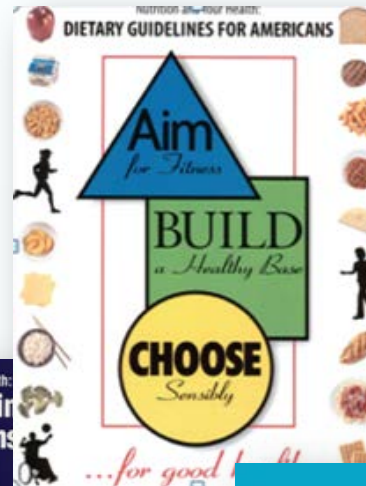
1985



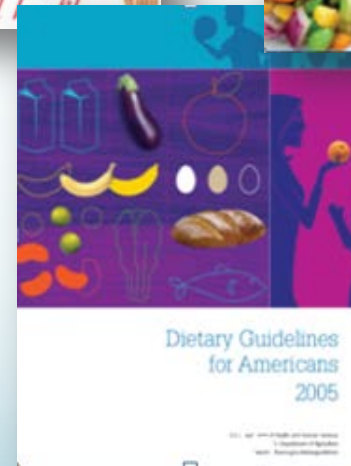
1990



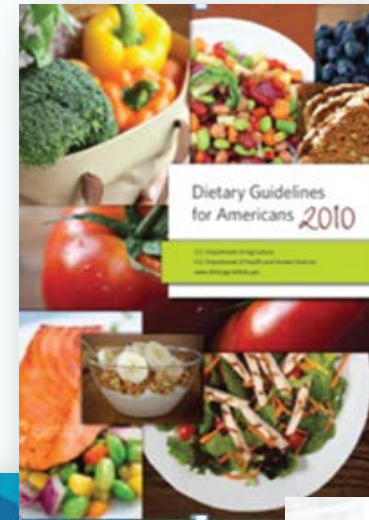
1995



2000



2005



2010



2015



Translating Science for Development of *Dietary Guidelines*

Three Stage Process

| | | |
|---|--|---|
| 1 |  Review the Science | + |
| 2 |  Develop the Dietary Guidelines | + |
| 3 |  Implement the Dietary Guidelines | + |

Approaches

First edition to use a systematic review process

- Original systematic review
- Systematic review, meta analysis and reports
- Data analysis
- Food pattern and modeling analyses



Dietary Guidelines
for Americans
2005



Review of Current Scientific Evidence

- The Secretaries of HHS and of USDA appoint an external Dietary Guidelines Advisory Committee to ensure sound external scientific advice to inform policy decisions
- The Advisory Committee members are prestigious researchers in the fields of nutrition, health, and medicine.
- The committee is thoroughly vetted for conflicts of interest before they are appointed to their positions and are required to submit a financial disclosure form annually
- The committee reviews the previous edition of the Dietary Guidelines to determine the topics for which new scientific evidence was needed to inform the development of the new edition
- The public is invited to submit written/oral comments to the Advisory Committee throughout the entirety of its work



Committee member requirements

- Current knowledge in human nutrition and chronic disease
- Familiarity with the purpose, communication and application of dietary guidelines
- Expertise was sought in several specialty areas:
 - Chronic disease e.g., cancer, cardiovascular disease, type 2 diabetes, overweight and obesity, and osteoporosis);
 - Energy balance;
 - Epidemiology;
 - Food processing science, safety, and technology;
 - General medicine;
 - Gerontology;
 - Nutrient bioavailability; nutrition biochemistry and physiology;
 - Nutrition education and behavior change;
 - Pediatrics; maternal/gestational nutrition;
 - Public health;
 - And/or nutrition-related systematic review methodology



Development of *Dietary Guidelines*

1. Develop research questions
2. Create and implement literature search and sort plans
3. Develop evidence portfolios
4. Synthesize the bodies of evidence
5. Develop conclusion statements and grade the evidence
6. Describe research recommendations



- **Original systematic reviews:** The USDA Nutrition Evidence Library uses a systematic review methodology designed to analyze food, nutrition, and public health science
 - The medical field has used systematic reviews as the standard practice for more than 25 years to inform the development of national guidelines for health professionals
- **Review of existing systematic reviews,** meta-analyses, and reports by Federal agencies or leading scientific organizations
 - The approach involved applying a systematic process to assess the quality of the existing review or report and to ensure that it presented a comprehensive review of the Advisory Committee's question of interest.



- **Data analyses:** The Advisory Committee used national data from Federal agencies to answer questions about chronic disease prevalence rates; food and nutrient intakes of the U.S. population across age, sex, and other demographic characteristics; and nutrient content of foods.
 - Data analyses tailored to a specific question helped inform the Advisory Committee's recommendations
- **Food pattern modeling analyses:**
 - Estimates of diet quality in the USDA recommended Food Patterns
 - The Food Patterns were developed to demonstrate how Dietary Guidelines recommendations can be met within an overall eating pattern.
 - Specific needs such as selecting foods to increase vitamin D intake were assessed
 - The results of the modeling analyses kept recommendations grounded within the structure of an overall healthy eating pattern



Shifts Needed to Align with Healthy Eating Patterns

Shift to healthier food and beverage choices while considering cultural and personal preferences





Overarching themes and Recommendations

- The Problem:
 - ½ of all Americans have one or more preventable chronic diseases that are related to poor quality dietary patterns and physical inactivity
 - 2/3 adults and nearly ½ of children and youth are overweight obese
- The Gap:
 - Dietary patterns are suboptimal and causally related to poor individual and population health and higher chronic disease rates
 - Few improvements in consumers' food choices have been seen in recent decades
 - Diets are low in vegetables, fruits, and whole grain and high in sodium, calories, saturated fat, refined grains, and added sugars
 - Under consumption of Vit. D, calcium, potassium, and fiber and iron in adolescents and females



Fruits



Vegetables



Grains



Dairy



Protein



Results

- Adolescents boys and girls have the lowest intake of vegetables
- Fruit intake low for almost all age and sex groups (with the exception of children aged 1-8 years)

- The average consumption of refined grains was above the recommendations, while the average consumption of whole grains intakes was below the recommendation

- Substantially below recommendations, except for your children, 1-3 years of age

- Seafood consumption was low compared to recommendations

Recommendations in the Dietary Guidelines 2015-2020

Include a variety of vegetables from all of the subgroups – dark green, red and orange, legumes (beans and peas), starchy, and others
Eat fruits, especially whole fruits

Eat grains, at least half of which are whole grains

Fat-free or low-fat dairy, including milk, yogurt, cheese, or fortified soy beverages

Consume a variety of protein foods, including seafood, lean meats and poultry, eggs, legumes (beans and peas), and nuts, seeds, and soy products



Added Sugars



Saturated Fats



Sodium

Results

- The major source of added sugars (47%) in typical U.S. diet is beverages, which include soft drinks, fruit drinks, sweetened coffee and tea, energy drinks, alcoholic beverages, and flavored water.
- Only 29% of the individuals in the U.S. consume amount of saturated fats consistent with the limit of less than 10 percent of calories
- Main source: mixed dishes (pizza, burgers, sandwiches, soups, among others)
- Average intake of sodium in adult men is 4,240 mg per day, and for women the average is 2,980 mg
- Most sodium consumed in U.S. comes from salts added during commercial food processing and preparation

Recommendations in the Dietary Guidelines 2015-2020

- Reduce added sugars consumption to less than 10% of calories per day
- Choose beverages with no added sugars, such as water
- Reduce portions of sugar-sweetened beverages
- Reduce saturated fats intake to less than 10% of calories per day
- Change the ingredients of the mixed dishes to increase the amount of vegetables, whole grains, lean meat, low-fat or fat-free cheese
- Shift to food choices to reduce sodium intake
- Eating at home more often
- Limit sauces, mixes, and “instant” products, including flavored rice, instant noodles, and ready-made pasta

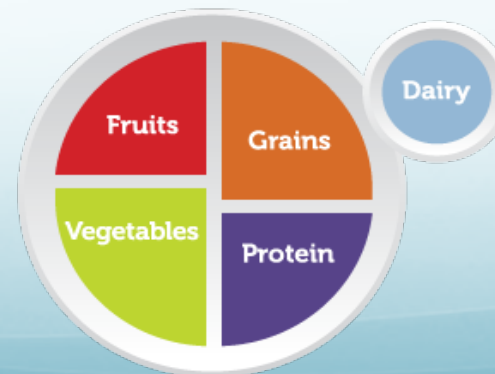
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Implement the Dietary Guidelines

Five Overarching Guidelines

1. Follow a healthy eating pattern across the lifespan
2. Focus on variety, nutrient density, and amount
3. Limit calories from added sugars, saturated fats, and reduce sodium intake
4. Shift to healthier food and beverage choices while considering cultural and personal preferences
5. Support healthy eating patterns for all





Healthy Physical Activity Patterns

- Adults
 - Aim for 150 minutes of moderate intensity physical activity per week, and
 - At least 2 days of muscle-strengthening exercises per week
- Youth ages 6-17 years
 - At least 60 minutes of physical activity per day including aerobic, muscle-strengthening, and bone-strengthening activities



3



Implement the Dietary Guidelines

Translating Science for Development of *Dietary Guidelines*

- Foster partnerships with food producers, suppliers, and retailers to increase access to foods that align with the Dietary Guidelines
- Promote the development and availability of food products that align with the Dietary Guidelines in food retail and food service establishments
- Identify and support policies and/or programs that promote healthy eating and physical activity patterns
- Encourage participation in physical activity programs offered in various settings



Outreach to
consumers about
making healthy
changes



HOME

Meal Planning



SCHOOL

WORKSITE

COMMUNITY

FOOD RETAIL

Active play



Community
gardens



Active breaks





Food Access

- Having access to healthy, safe, and affordable food choices
- Influenced by:
 - Proximity to food retail outlets
 - Individual resources
 - Neighborhood level resources
 - Race/ethnicity, socioeconomic status, geographic location, disabilities



Acculturation

- The process by which individuals adopt the attitudes, values, customs, beliefs, of a new culture
- A gradual exchange between the original attitudes and behaviors associated with the originating country and those of the host culture



Figure D5.1: Elements needed for sustainable diets



THANK YOU !

Any Questions?