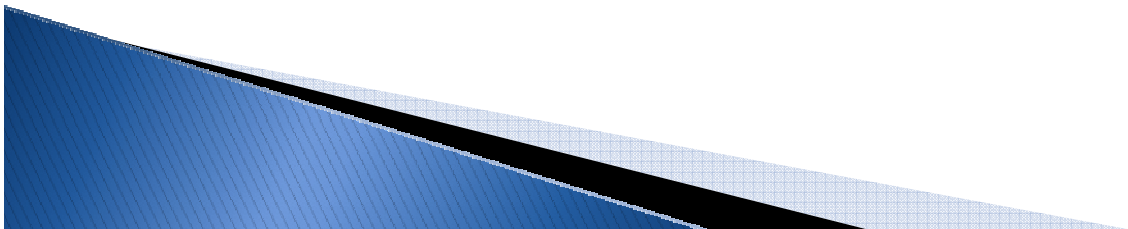# Menu Planning for Customer Satisfaction

Linda Netterville, MA, RD, LD
Meals On Wheels Association of America

# Polling Question:

Are you funded through an Area Agency on Aging or State Unit on Aging?

Yes/No

# Objectives

- Overview
- Menu Planning
- Menu Options
- Menu Planning Principles

# Overview

- Goals
- Requirements of OAA
- DRIs
- Dietary Guidelines for Americans

# Goals of Community Based Nutrition Programs

▸ Improve health and nutritional status
▸ Prevent of hunger and food insecurity
▸ Continuation of the ability to live independently for older adults
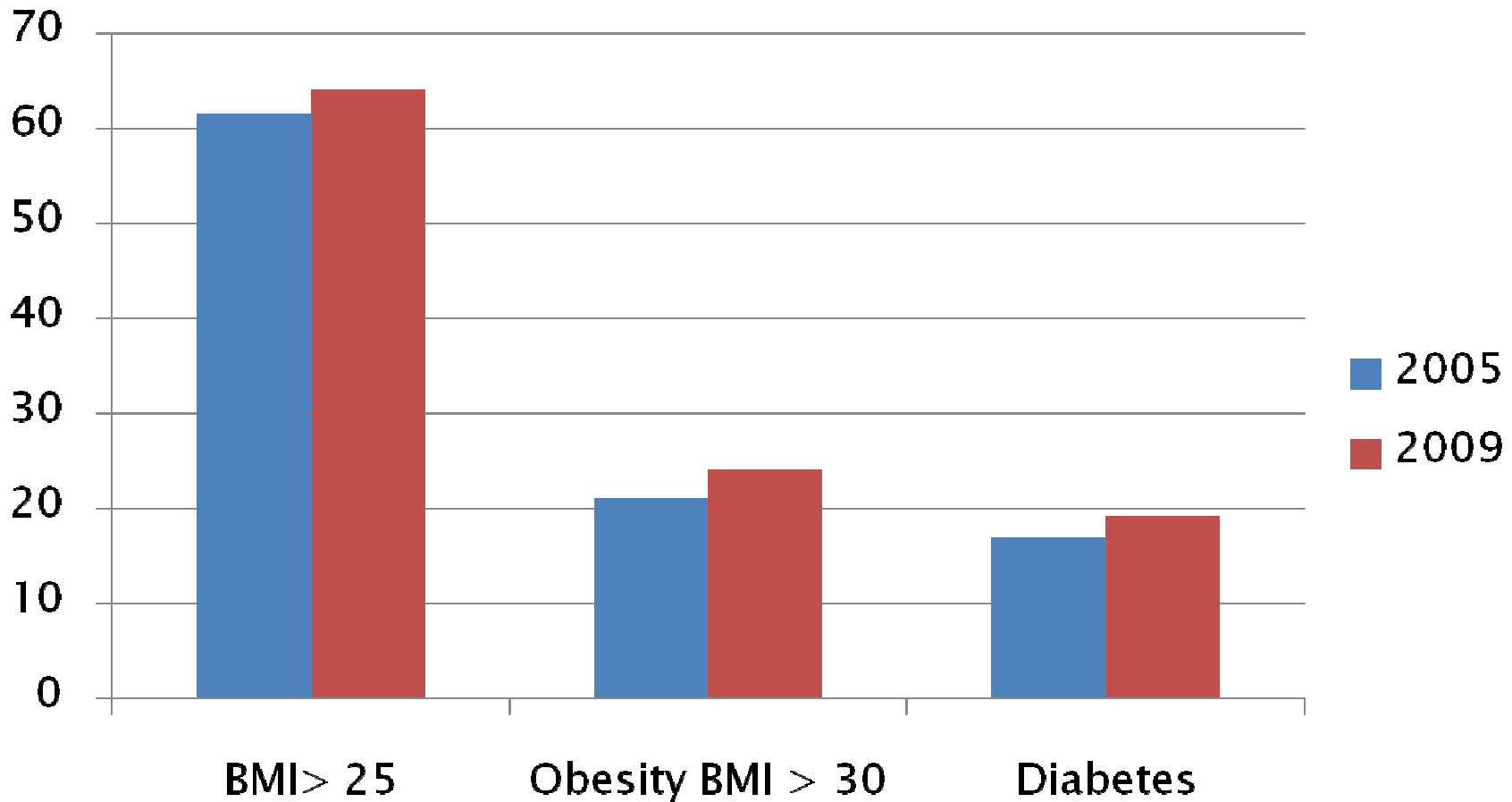▸ Provide nutritious, tasty, appropriate, and safe meals

# Healthy Eating & Physical Activity

▸ Increase longevity
  ◦ Even with cancer, heart disease
▸ Diabetes prevention
▸ Manage hypertension
▸ Best evidence for
  ◦ Fruits, vegetables
  ◦ Whole grains
  ◦ Less salt
  ◦ Less saturated fat (animal fat)
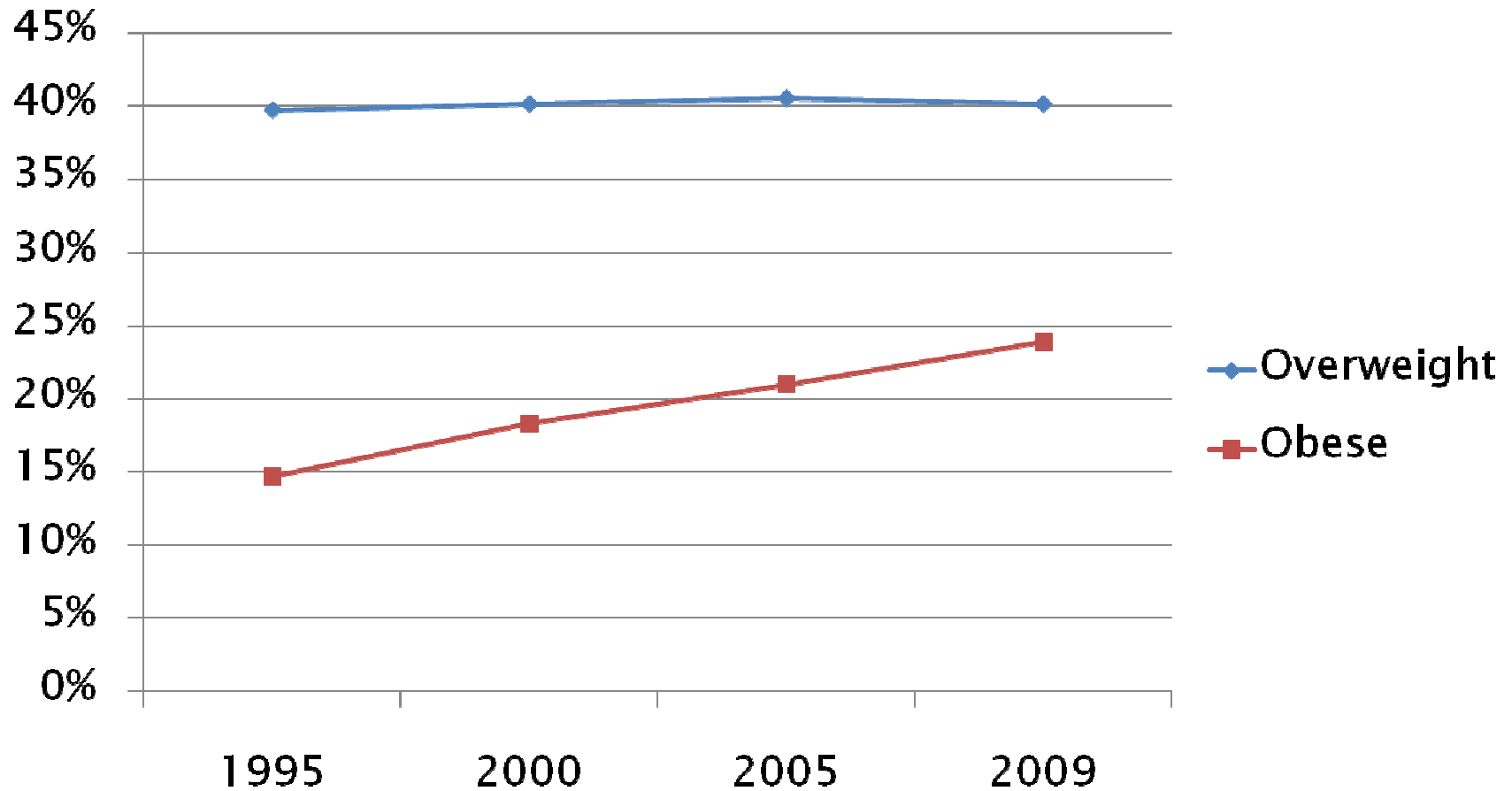  ◦ Vitamin D, calcium supplements
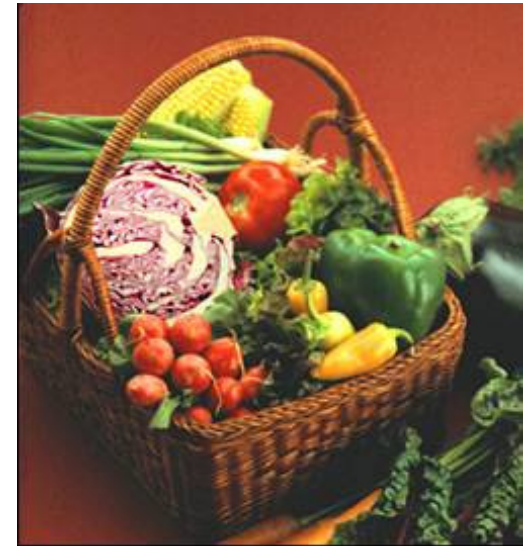
# Health Profile of Older Adults



Behavioral Risk Factor Surveillance System 65+ Age Group

# Health Profile of Older Adults



Behavioral Risk Factor Surveillance System 65+ Age Group

# Consumers Value Program Participation

| | Home Delivered | Congregate |
|---|---|---|
| Eat more balanced meals | 86% | 79% |
| Better able to avoid sodium & fat | 81% | 76% |

# Services Are Targeted to Vulnerable Populations

| Indicators | Home-delivered | Congregate | National |
|---|---|---|---|
| Age 75+ | 70% | 57% | 32% |
| Live Alone | 56% | 48% | 27% |
| Below Poverty | 24% | 14% | 7% |
| 3+ ADLs | 31% | 8% | 6% |

Issue Brief, July 2010, Mathematica Policy Research, Inc.

# Services Allow Seniors to Remain in Their Homes

| Home–delivered | Congregate |
|:---:|:---:|
| 91% | 59% |

Issue Brief, July 2010, Mathematica Policy Research, Inc.

# US OAA 2009 Participant Survey

| Question | Home Delivered Meals<br>% of Respondents | Congregate Meals<br>% of Respondents |
|---|---|---|
| Single Meal Provided ½ or more of total food for day | 63 | 58 |
| Don't always have enough $ or Food Stamps to buy food | 24 | 13 |
| Choose between food & medication | 17 | NA |
| Choose between food & rent or utility | 15 | NA |
| Receive food stamps | 15 | 7 |

2009 AoA Survey of OAA Participants, January 2010

# US OAA 2009 Participant Survey

| Question | Home Delivered Meals % of Respondents | Congregate Meals % of Respondents |
|---|---|---|
| Fair or Poor Health | 56 | 29 |
| Stayed overnight in hospital in past year | 40 | 20 |
| Stayed overnight in nursing home in past year | 12 | 4 |
| Alzheimer's Disease | 12 | 5 |
| Diabetes | 35 (16% nationally) | 26 (16% nationally) |
| Hypertension | 73 (48% nationally) | 68 (48% nationally) |
| Heart Disease | 48 (32% nationally) | 32 (32% nationally) |

2009 AoA Survey of OAA Participants, January 2010

# Requirements of the Older Americans Act

- **Section 339 Nutrition Program**
  - "A State that establishes and operates a nutrition project under this chapter shall…"
  - State must solicit advice of a dietitian or individual of comparable expertise in planning nutritional services and ensuring….

# Requirements of the Older Americans Act

▸ **Meals**
  ◦ 1/3 DRI; Dietary Guidelines for Americans, 2005;
  ◦ Design meals to meet special dietary needs (cultural/ethnic preferences, health, religious needs)
  ◦ Design "appealing" meals, i.e. food/menu choice, include participant input
  ◦ Input from dietitian, participants, individuals knowledgeable in the needs of older adults.

# What are the Dietary Reference Intakes (DRIs)?

- Introduced in 1997
- Reference values of nutrients, primarily used by nutrition & health professionals
- Basis for
  - assessing & planning diets
  - federal nutrition & food programs
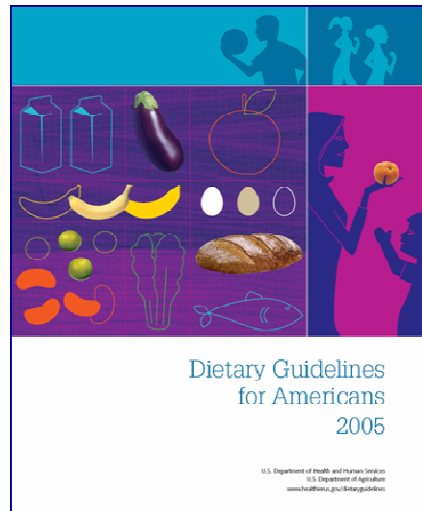
# What is the purpose of the DRIs?

- Maintain nutritional adequacy
- Promote health
- Reduce risk of disease
- Provide a measure of excess
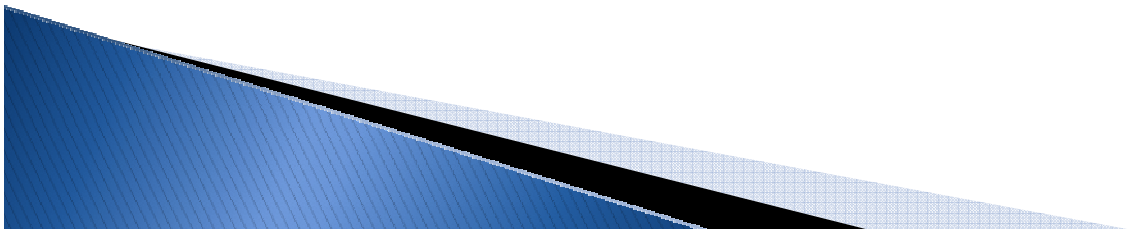
# What are the Dietary Guidelines for Americans?

▸ Brief science-based statements & text published by federal government

▸ Promotes health & prevent disease

▸ Updated every 5 years. Due Fall 2010

Dietary Guidelines for Americans 2005

U.S. Department of Health and Human Services
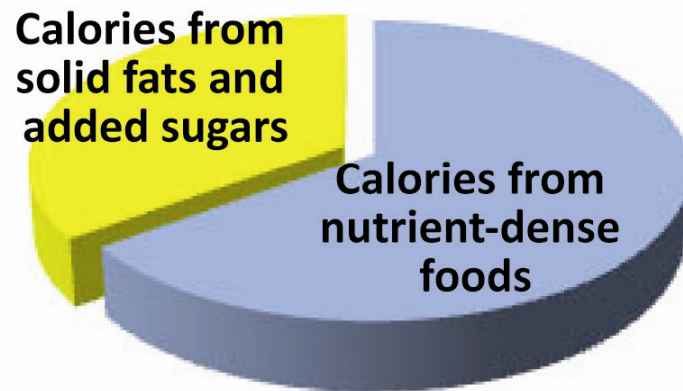U.S. Department of Agriculture
www.healthierus.gov/dietaryguidelines

# Highlights of the Dietary Guidelines for Americans 2010

- Addresses majority of Americans are overweight or obese
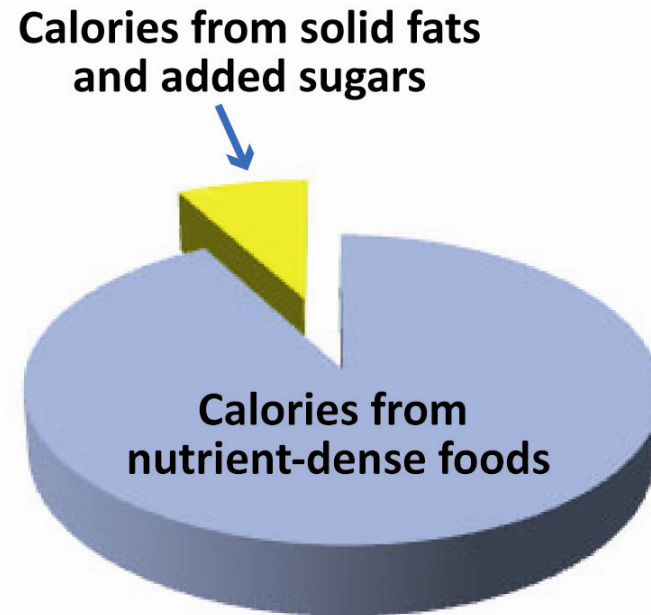- Research supported
- Total diet= Energy balanced + nutrient dense

# Dietary Guidelines for Americans 2010

## What We Eat
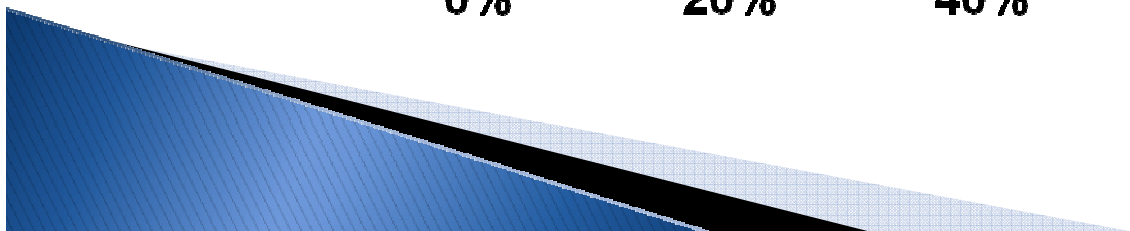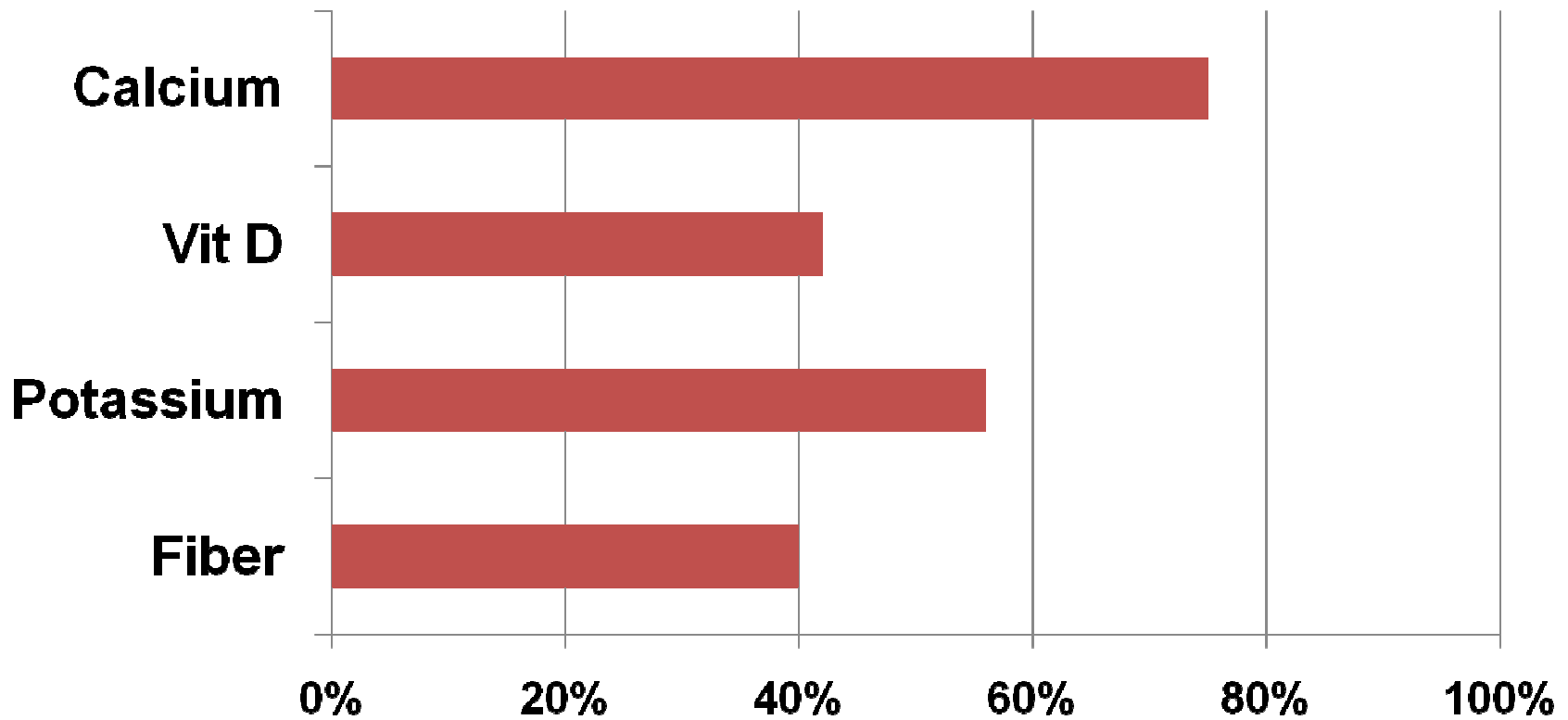
## Recommended Limits



Calories from solid fats and added sugars

Calories from nutrient-dense foods

Calories from solid fats and added sugars

Calories from nutrient-dense foods

# Dietary Intakes Compared to Recommended Levels

## Eat More

# Dietary Intakes Compared to Recommended Levels

## Eat Less

| Category | Percentage |
|---|---|
| Saturated Fat | ~160% |
| Sodium | ~225% |
| Refined Grains | ~200% |
| Solid Fats | ~280% |
| Added Sugars | ~240% |
| SoFAS | ~280% |

0%   50%   100%   150%   200%   250%   300%
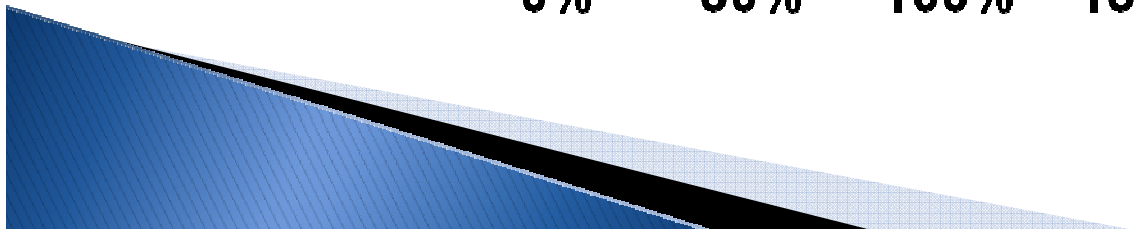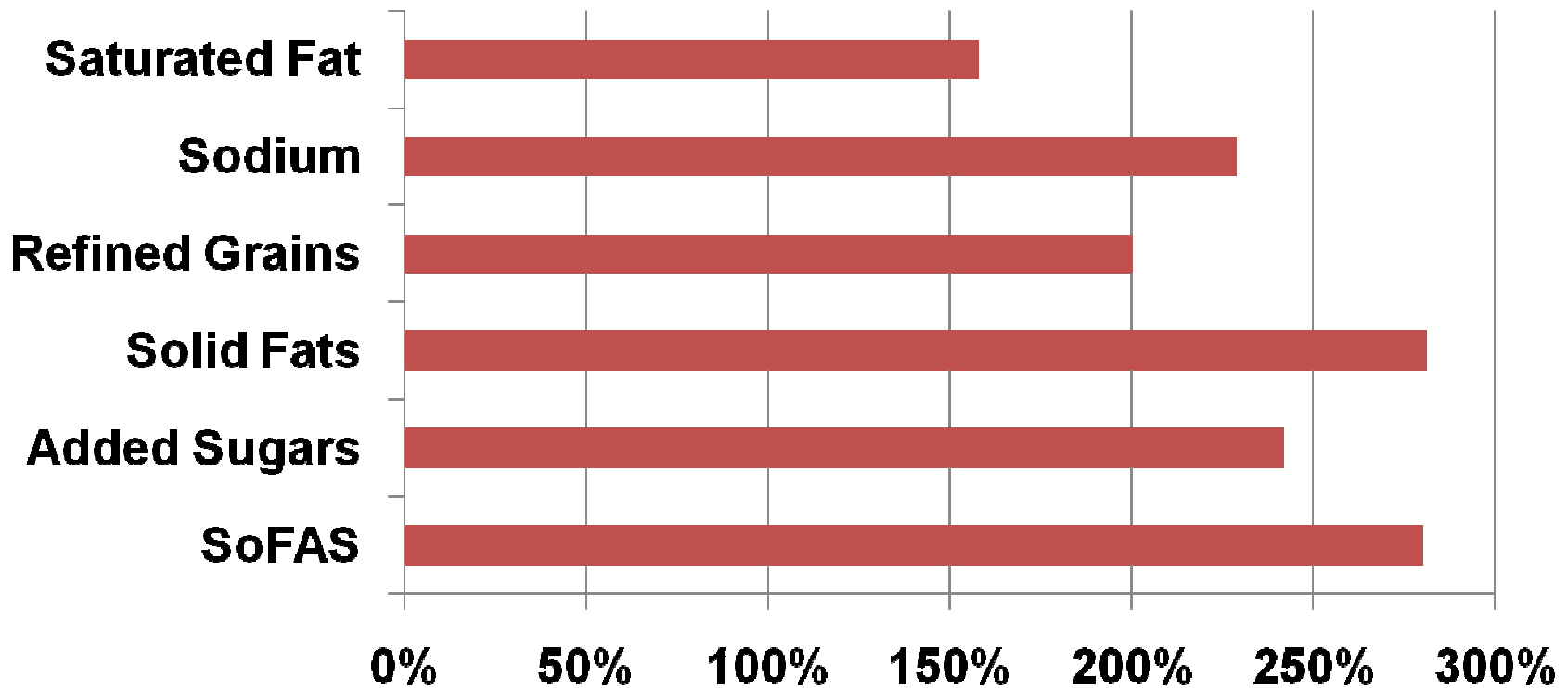
# Dietary Guidelines for Americans Meal Patterns
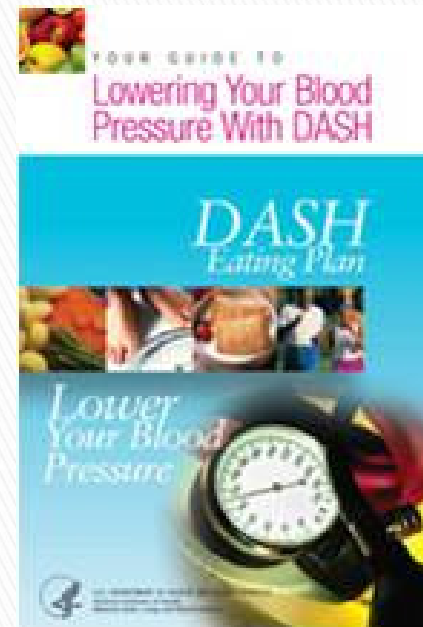


USDA Food Guide

DASH Eating Plan

# Key Recommendations for Older Adults:

- Calories
  - 1800 – 2050 calories/day (Age/Activity)
- Fat
  - 20–35% of Total Calories
- Protein
  - 46–56 gm (10–35% of Calories)

# Key Recommendations for Older Adults:

- Sodium – Limit to 1,500 mg/day
- Sources:  Naturally occurring in foods; Table salt; processed, brine, smoked, or salty foods

# Key Recommendations for Older Adults:

- Potassium – Meet 4,700 mg/day with food
- Sources: Found in meat, milk, fruits and vegetables;

# Key Recommendations
## for Older Adults:

## Keep Sodium and Potassium in Balance
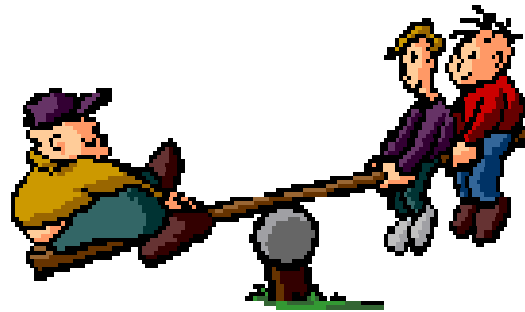
# Key Recommendations for Older Adults:

- Calcium–1200 mg/day
  - Sources:  Milk, Dairy products, cheese, ice cream, etc.

# Key Recommendations for Older Adults:

▸ Fiber– 21 to 30 gm/day
▸ Source:  Whole grains, Legumes, Nuts, Vegetables, Fruits

# Key Recommendations
# for Older Adults:

▸ Vitamin A- 700 to 900 microgram/day

▸ Sources:  Plant sources preferred-Dark green and orange vegetables

# Key Recommendations for Older Adults:

▸ Vitamin $B_6$–1.5 to 1.7 mg/day
▸ Sources: Fortified cereals, beans, meat, poultry, fish, and some fruits and vegetables

# Key Recommendations for Older Adults:

- Vitamin $B_{12}$– 2.4 micrograms/day
- Sources: Eggs, meat, poultry, shellfish, milk, and milk products

# Key Recommendations for Older Adults:

▸ **Vitamin C** – 75 to 90 mg per day

▸ **Sources:** Citrus fruits, broccoli, strawberries, lemons, mustard and turnip greens, Brussels sprouts, cabbage, spinach

# Key Recommendations for Older Adults:

▸ Vitamin D–600–800 IU/day
▸ Sources:  Sun, Fortified foods

# Key Recommendations for Older Adults:

- Vitamin E-15 mg/day

- Sources: Vegetable oils (such as wheat germ, sunflower, and safflower oils), nuts (such as almonds), seeds (such as sunflower seeds), and green vegetables (such as spinach and broccoli).

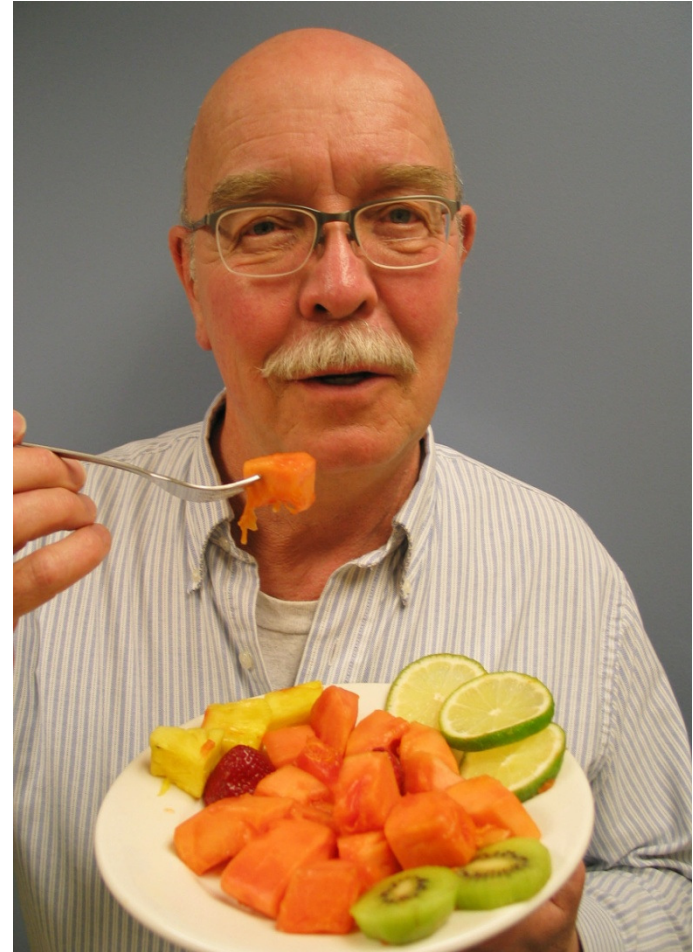# Menu Planning

- Menu Planning Goals
- Customer Input
- Food Trends
- Nutritional Guidelines

# Goals of Menu Planning

Meals are:
- ▶ Appealing to the client
- ▶ Nutritious
- ▶ High Quality
- ▶ Safe to Eat

# Menu Planning

- Enhance taste
- Strive for balance
- Emphasize variety
- Add contrast: texture & temperature
- Think about color
- Consider eye appeal
- Regional, traditional
- Time of year

# Customer Input

- Menu committees
- Product sampling
- Food preference surveys
- Satisfaction focus groups
- "Secret" diner
- Comment cards
- Satisfaction surveys

# Customer Surveys

- Menu Quality
  - Appetizing
- Service Delivery
  - Trays are sealed
- Foods Offered
  - Variety
  - Texture
  - Types of Foods
- Future Program Development
- Customer Outcomes

# Menu Planning
## Older Adult Top Food Trends

- Scratch cooking
- Home-made
- Restaurant quality
- Comfort foods
- International flavors, ethnic
- Tasty, eye appeal

- Customer driven
- Choice
- Smaller portions
- Lighter fare
- Nutrient dense
- Healthy
- Variety

Institute of Food Technologists, 2005

# Documentation of Nutritional Adequacy

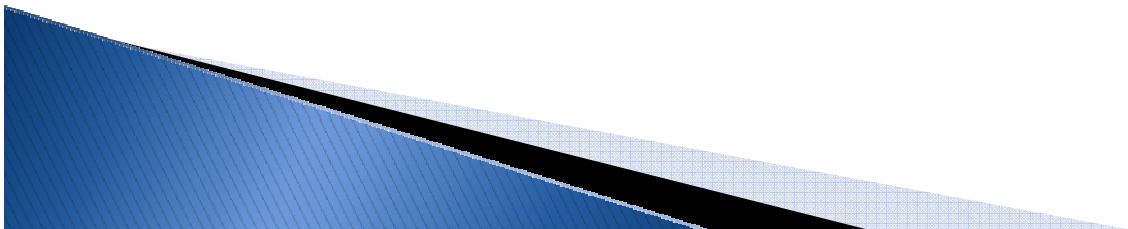▸ Computer Nutrient Analysis with Target Nutrients

Or

▸ Meal Pattern
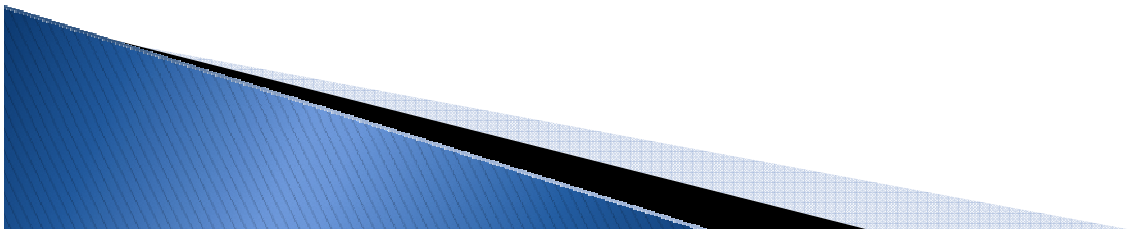
# Polling Question:

What method do you use to document nutritional adequacy for your menus?

A. Nutrient Analysis

B. Meal Pattern

C. Both

D. Other

# Nutrient Analysis Software

▶ **Variety of Nutrient Analysis Software Available**
  ◦ Analysis of foods, recipes, and menus
  ◦ Food production, inventory, and costing capabilities.

▶ **Nutrient Analysis Software Used**
  ◦ *FoodWorks- Price, low cost updates, good technical support, accurate database
  ◦ Food Processor
  ◦ Nutritionist V, Nutritionist Pro (First Databank)
  ◦ Computrition

# Nutrient Analysis Software

- Components:
  - Current nutrient data base
    - USDA National Nutrient Database for Standard Reference
  - Standardized recipes
  - Accurate nutrient data from vendors and manufacturers
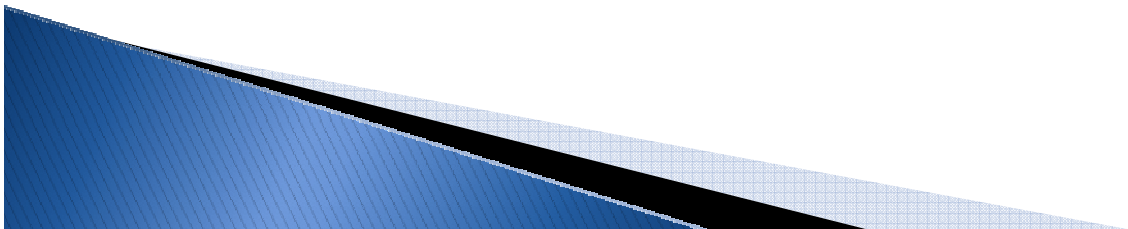
# Dietary Guidelines for Americans Meal Patterns

- Lean Meats & Beans
- Grains
- Fruits
- Vegetables
  - Dk Green, Orange
  - Legumes, starchy, other
- Milk
- Oils
- Sweets discretionary calorie allowance

- Meat, poultry, fish
- Nuts, seed, legumes
- Grains
- Fruits
- Vegetables
- Low-fat or fat free dairy foods
- Fats and oils
- Sweets and added sugars

| USDA Food Guide | DASH Eating Plan |

# Meal Pattern

- Meat or meat alternative
- Vegetable/fruit
- Starch
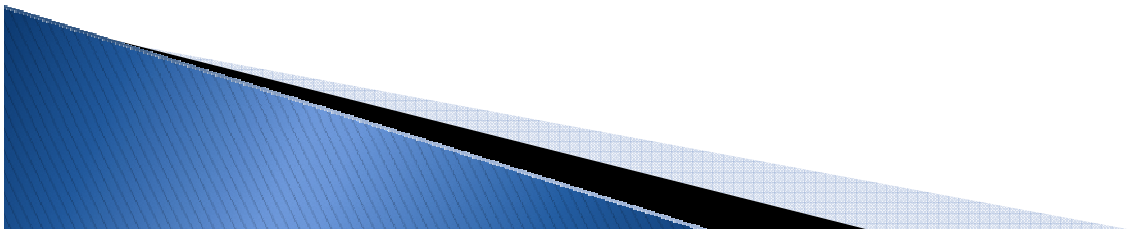
# Menu Options

- Frozen
- Shelf Stable
- Special Dietary Needs
- Choice

# Frozen

▸ Indications
  ◦ Daily delivery is limited
  ◦ Provide more menu choice
  ◦ Offer weekend/holiday meal
  ◦ Expand service–second meal

# Shelf-Stable

- Provided on a temporary basis when regular meal is not an option
- Used during bad weather, or other emergency meal replacements
- Does not require refrigeration and can be consumed at room temperature if needed
- May not comply with DRI requirements (sodium, potassium)

# Special Dietary Needs

- **Culturally or ethnic appropriate meals**
  - Examples:  Asian, Halal, Kosher, Vegetarian

- **Modified Meals**
  - Examples:  Pureed, Low sodium

- **Therapeutic**
  - Examples:  Renal, Gluten-free

# Choices

▸ **Accommodating Consumer Choice**
  ◦ Time
  ◦ Service location or place
  ◦ Restaurant voucher programs
  ◦ Café style service
  ◦ Menu
  ◦ Food
  ◦ More than 1 meal/day
  ◦ Fee for service/private pay options
  ◦ Customer service emphasis

## Menu Planning Principles

- Food Service
- Food Safety
- Cost Control
- Evaluation

# Food Service Factors to Consider

- Type of Food Service Operation
  - Self operated
  - Catered
- Food Service System
  - On-site food production
  - Central kitchen with satellite service
  - Ready prepared/Cook-chill/Cook-freeze
  - Convenience
  - Restaurant/Restaurant Voucher

# Food Service Factors to Consider

- Size of operation
  - Number of meals/day
- Type and frequency of meal service
  - 5day/7day
  - One meal/day, two meals/day, three meals/day
- Types of Delivery System
  - Hot, frozen, chilled
- Menu Options

# Food Service Factors to Consider

- Labor considerations
  - Number of employees
  - Skill of Staff
- Equipment
  - Production
  - Delivery
- Packaging/Meal service delivery

# Food Service Factors to Consider

- ‣ Cycle Menus
  - ◦ Different every day & repeats after number of weeks
- ‣ Cycle menus:
  - ◦ 4 – 6 week cycle
  - ◦ 3 – 4 cycles per year
- ‣ Cycle menus should consider:
  - ◦ Available storage
  - ◦ Purchasing & delivery schedule
  - ◦ Production limitations
  - ◦ Seasonal, regional, traditional foods

# Food Service Factors to Consider

▶ **Standardized Recipes**
  ◦ Consistent quality
  ◦ Predictable yield
  ◦ Customer satisfaction
  ◦ Consistent nutrient content
  ◦ Food cost control
  ◦ Efficient purchasing
  ◦ Labor control

# Standardized Recipes

Sources

▸ Food for Fifty (12th Edition)

▸ Quantity recipes published by USDA

◦ Recipes for school and child care

◦ National Food Service Management Institute

▸ Food manufacturers

▸ Recipe standardization of client favorites

# Food Safety In Menu Planning

➢Retains temperature
➢Retains quality, despite holding times
➢Selection of safe foods
➢Ease of safe food handling
➢Compliance with state and local food code



FIGHT BAC!
Keep Food Safe From Bacteria

CLEAN
Wash hands and surfaces often.

SEPARATE
Don't cross-contaminate.

CHILL
Refrigerate promptly.

COOK
Cook to proper temperatures.

# Cost Control in Menu Planning

▶ Cost Considerations

◦ Raw Foods vs. Convenience Foods
◦ Food availability
◦ Purchasing procedures
◦ Labor
◦ Packaging/Food containers

# Possible Causes of ⬆ Meal Costs

▸ Poor menu planning

▸ Careless purchasing and receiving practices

▸ Failure to use standardized recipes

▸ Inaccurate forecasting

▸ Careless food storage

▸ Waste in food preparation

▸ Portion control not followed

# Menu Evaluation

▸ Analysis of cost/meal
  ◦ Raw food cost per meal
  ◦ Total cost per meal
▸ Compliance with program requirements
  ◦ Computer assisted menu analysis
  ◦ State and local health food code
▸ Customer satisfaction
▸ Plate waste (Congregate setting)
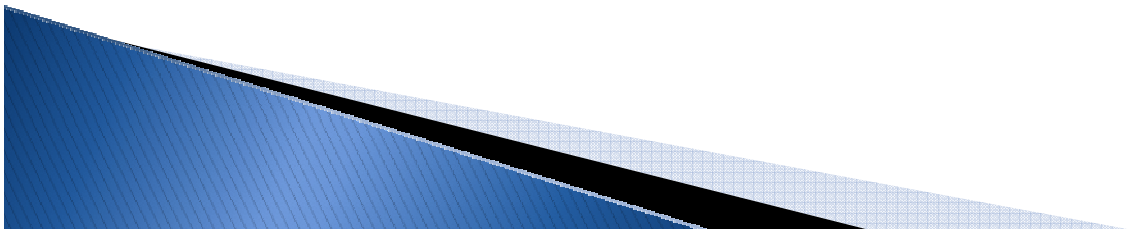
# Menu Planning for Catered Food Service

▸ Include specifications in the scope of work

▸ Provide input into menu development

▸ Monitor food quality and costs

▸ Monitor service and delivery
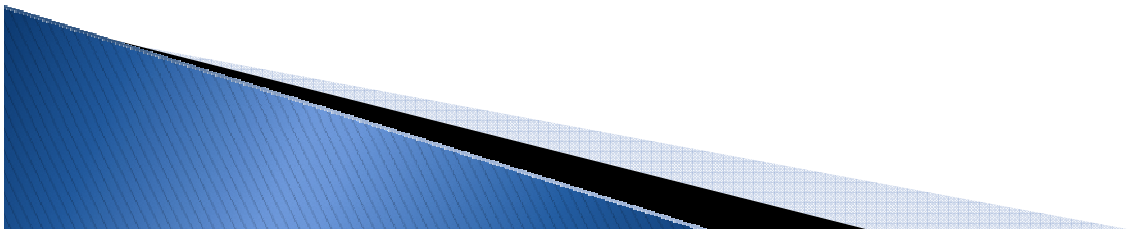
# Questions?

# Resources

- **Administration on Aging http://www.aoa.gov/**
- **AGing Integrated Database http://www.agidnet.org/**
- **Behavioral Risk Factor Surveillance Survey http://apps.nccd.cdc.gov/brfss/page.asp?yr=2008&state=US&cat=CV#CV**
- **Dietary Reference Intakes http://fnic.nal.usda.gov/nal_display/index.php?info_center=4&tax_level=1**

# Resources

- **Dietary Guidelines for Americans http://www.health.gov/dietaryguidelines/dga2005/toolkit/default.htm**
- http://www.cnpp.usda.gov/DietaryGuidelines.htm
- **Older Americans Act Nutrition Service Providers Guide**
  - **http://www.health.gov/dietaryguidelines/dga2005/toolkit/default.htm#older_adults**
- **National Institutes of Health**
  - **National Heart Lung Blood Institute Recipes: http://www.nhlbi.nih.gov/health/**

# Resources

▶ **Food and Drug Administration- Food Safety**

  ◦ **http://www.cfsan.fda.gov/list.html**

▶ **American Heart Association**

  ◦ **http://www.americanheart.org/**

  ◦ **Including cookbooks, recipes**

▶ **American Diabetes Association**

  ◦ **http://www.diabetes.org/**

  ◦ **Including cookbooks, recipes**

# Resources

- **International Food Information Council**
  - **http://www.ific.org/**
- **National Resource Center on Nutrition, Physical Activity and Aging**
  - **http://nutritionandaging.fiu.edu**
- **National Food Service Management Institute**
  - **http://www.nfsmi.org/**
  - **Adult Day Care Manual, incl. Information on meal service**