Evaluating Outcomes of Food Service Guidelines

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We seek to identify and understand health needs through research and programs and work to create an environment where every person has access to their best health.
Food Service Guidelines

• FSG Evaluation/Research Funders:
  • CDC, NIH, USDA

• Places:
  • Schools
  • ECEs
  • Food Banks & Food Pantries
  • Faith-based Organizations
  • Community Meal Programs (e.g., soup kitchens)
  • State Parks
  • Worksites/Vending
FSG Outcomes We Track

FSGs

Changes in Food Offered

Nutrition of Menus & Ingredients

Changes in Food Sold and Served

Nutrition of Foods Purchased/Selected

Changes in Food Eaten

Nutrition of Food Actually Eaten or Diet Quality of Person

Changes in Health

Risks or Disease or Other Health Outcomes
**Place:** School district

**Guideline:** Sodium content of entrées offered in school district should be ≤480 mg of sodium per entrée, based on USDA’s Smart Snacks in Schools.

**Indicator:** Mean sodium content of entrées offered on the menu

**Finding:**
- Baseline: 673.9 mg per entrée offered (24.3% entrées ≤480 mg)
- Year One Follow-up: 625.5 mg per entrée offered (32.8% entrées ≤480 mg)
Changes in Food Offered

- **Other Example:**
  - Vending audit nutrient analysis (state parks)
  - Menu nutrient analysis (community meals; state parks)
  - Shelf audit (food pantries)
  - Procurement records (food banks)
Changes in Food Purchased/Served

- **Place:** School district

- **Guideline:** Comprehensive approach to reducing sodium in each meal component, based on USDA’s Smart Snacks in Schools

- **Indicator:** Sodium served per nutrient analysis of ten days of school lunch served across 30 schools

- **Finding…**
Changes in Food Purchased/Served

• At baseline, in lunches at 30 schools over 10 days:
  • 1,793,499 mg of sodium served
    • Equivalent to the weight of average male American Fuzzy Lop rabbit
  • Highest sodium entrée served: 2336 mg
  • Highest sodium side dish served: 1127 mg

IMAGE: https://domesticanimalbreeds.com/american-fuzzy-lop-rabbit-everything-you-need-to-know/
Changes in Food Purchased/Served

- At follow-up, in lunches at 30 schools over 10 days:
  - 1,500,759 mg of sodium served
    - Reduced by
      - 1/6 of a American Fuzzy Lop rabbit
      - 123 mg per diner
    - Highest sodium entrée served: 1634 mg
      - (decrease of 702 mg)
    - Highest sodium side dish served: 964 mg
      - (decrease of 163 mg)
Other Examples:

• Bag audits (food pantries)


Changes in Food Eaten

• **Place:** Food pantries

• **Guideline:** Increase percentage of fresh fruits and vegetables and other Foods to Encourage distributed by food pantries in region

• **Indicator:** Food pantry clients’ self-reported fruit and vegetable consumption

• **Finding:**
  • Baseline: Consumed 1.7 servings fruits & vegetables per client day per in past 30 days
  • Year One Follow-up: No change in consumption.
    • Distribution of fresh fruits/vegetables increased by 10x!
Changes in Food Eaten

• **Other Examples:**
  • Plate waste analysis (ECEs)
  • “VeggieMeter” measure of skin carotenoids (ECEs, schools, food pantries)
  • 24-hour diet recalls (food pantries)
  • Willingness to try (ECEs)
Changes in Health

• **Place:** Faith-based organization

• **Guideline:** At all church events, no sugar-sweetened beverages, limit fried foods, encourage fruits and vegetables, etc.

• **Indicator:** Church members’ BMI, HbA1c, blood pressure via health screenings

• **Finding:**
  • Year-over-year analysis pending
Changes in Food Eaten

**Other Examples:**
- School district level BMI (schools)
Thank you

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