

# Science Base Chapter:

## *Food Environment and Settings*

Subcommittee 4

# Subcommittee 4 Membership

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*SC 4 Chair*

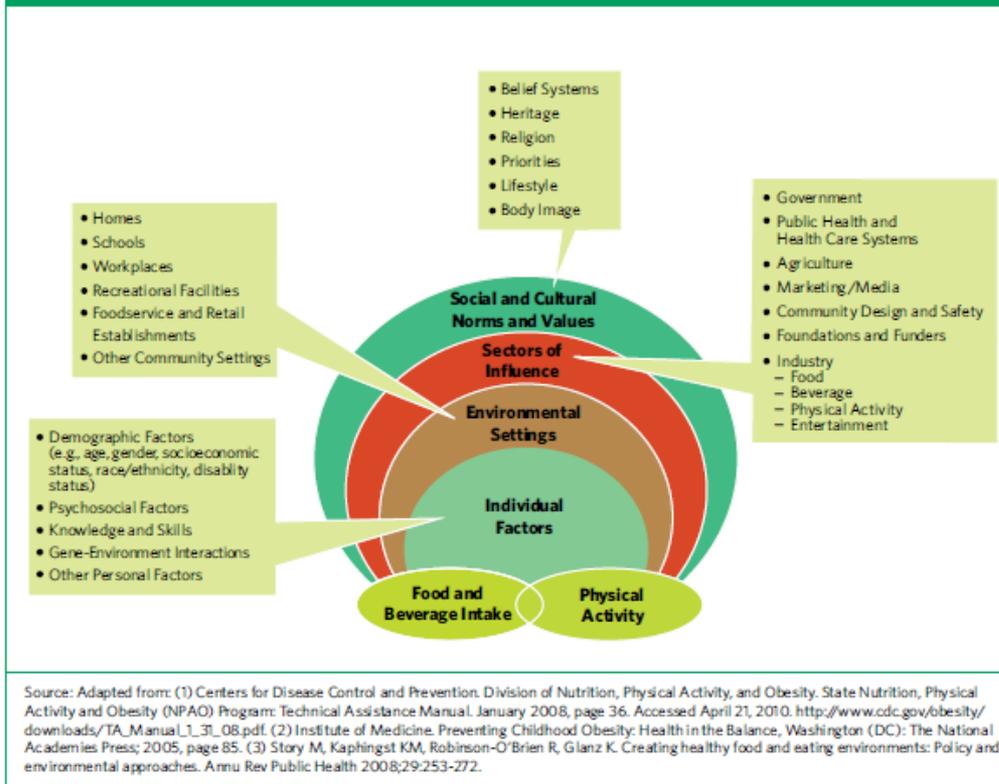
Barbara Millen  
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# Introduction

## 2010 Dietary Guidelines for Americans

**FIGURE 6 1: A Social Ecological Framework for Nutrition and Physical Activity Decisions**



Recognized the role of the food environment in promoting or hindering healthy eating

# 2015 Dietary Guidelines Advisory Committee

## Food Environments

### *Physical environment*

- Key settings – neighborhood and community food access, early care and education, schools, worksites
- Understand and assess the role of food environment in promoting or hindering healthy eating in various settings.
- Identify the most effective evidence-based diet-related programs, practices, environmental and policy approaches (“what works”) to improve health and reduce disparities.

# Food Access

## Questions and Methodology

What is the relationship between neighborhood and community access to food retail settings and:

1. Individuals' dietary intake and quality?
2. Weight status?

### **Approach:**

NEL (Nutrition Evidence Library) systematic review

# Early Care and Education Question and Methodology

What is the impact of obesity prevention approaches in early care and education (ECE) programs on the weight status of children ages two to five years?

## **Approach:**

- Existing systematic review *plus*
- NEL systematic review to update the literature

# Schools

## Questions and Methodology

What is the impact of school-based approaches on:

1. The dietary intake, quality, behaviors and/or preferences of school-aged children?
2. Weight status of school-aged children?

What is the impact of school-based policies on:

3. The dietary intake, quality, behaviors and/or preferences of school-aged children?
4. The weight status of school-aged children?

**Approach:** Existing Systematic Reviews

# Worksite Questions and Methodology

What is the impact of worksite-based approaches on:

1. The dietary intake, quality, behavior of employees?
2. Weight status of employees?

What is the impact of worksite-based policies on:

1. The dietary intake, quality and behavior of employees?
2. Weight status of employees?

**Approach:** Existing Systematic Reviews

# Major Conclusions and Recommendations

## The DGAC found:

- Strong to moderate evidence that school and worksite policies are associated with improved dietary intake;
- Moderate evidence that multi-component school-based and worksite approaches increase vegetable and fruit consumption; and
- Moderate and promising evidence that multi-component obesity prevention approaches implemented in child care settings, schools and worksite improve weight-related outcomes.

# Major Conclusions and Recommendations

- For the community food access questions addressing the relationship between food retail settings and dietary intake and weight status the evidence was too limited or insufficient to assign grades.
- To reduce the disparity gaps that currently exist in low resource and underserved communities, more solutions-oriented initiatives and policies are needed on ways to increase access and procurement of healthy foods, and also reduce access to nutrient-poor foods.

# Chapter Summary

- Environmental and policy approaches are needed to complement individual-based efforts to improve diet quality and reduce obesity
- Approaches have the potential for broad and sustained impact at the population level
- One striking aspect of the Committee's findings was the effectiveness of multi-component interventions over single component interventions

# Chapter Summary

Examples of strategies identified in key settings – early care and education, schools, and worksites

- For obesity prevention, effective multi-component interventions incorporated both nutrition and physical activity using a variety of strategies, including:
  - Environmental policies to improve the availability and provision of healthy foods;
  - Increasing opportunities for physical activity;
  - Increased parent engagement; and
  - Educational approaches (e.g., school curriculum).
- For multi-component dietary interventions effective strategies include:
  - Nutrition education;
  - Parent engagement; and
  - Environmental policies (e.g., nutrition standards, food service changes, point-of-purchase information)

# Chapter Summary

- Evidence can be used to inform and guide new multi-component individual and environmental and policy approaches in settings where people eat and procure their food to successfully target improvements in dietary intake and weight status.
- Collaborative partnerships and strategic efforts are needed to translate evidence into action.
- Further work on restructuring the food environment to facilitate healthy eating and physical activity, especially in high risk populations, is needed to advance evidence-based solutions that can be scaled up.

# Special Thanks

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***Discussion***