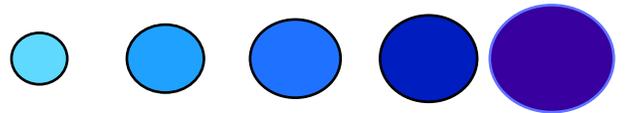


# Nutrition and Physical Activity: A Policy Resource Guide

February 2005



Washington State Department of

*Health*

Patty Hayes, Assistant Secretary  
Community and Family Health

**PUBLIC HEALTH**  
ALWAYS WORKING FOR A SAFER AND  
HEALTHIER WASHINGTON



# NUTRITION AND PHYSICAL ACTIVITY: A POLICY RESOURCE GUIDE

**February, 2005**

For more information or to obtain copies of this report, contact:

Office of Community Wellness and Prevention  
Chronic Disease Prevention and Risk Reduction  
NewMarket Industrial Campus  
7211 Cleanwater Lane, Bldg. 13  
P.O. Box 47842  
Olympia, WA 98504-7842

(360) 236-3612

<http://www.doh.wa.gov/cfh/steps/default.htm>





# ACKNOWLEDGEMENTS

## **This Policy Resource Guide was prepared by:**

Erica Lamson, Policy Intern, Division of Community and Family Health,  
Office of the Assistant Secretary  
Victor Colman , JD Senior Policy Advisor – Division of Community and  
Family Health, Office of the Assistant Secretary

## **Special Acknowledgments:**

This document could not have been created without the tremendous effort of the following individuals. These individuals deserve the highest acknowledgement and gratitude for their assistance with the planning, creation, and revision of this document. During the planning process, they provided vision and guidance for shaping its structure. During the creation and revision of the document, their professional expertise ensured practical applicability and accuracy. It is with a great amount of gratitude that your efforts are recognized. Thank you all for your extensive contributions.

### *The Washington State Department of Health*

Ruth Abad

Sofia Aragon

Charlotte Claybrooke (now with the  
State Department of Transportation)

Julia Dilley

Monica Dixon

Mary Frost

Lauren Jenks

Jan Norman

Robbi Kay Norman

Rebecca Ross

Marilyn Sitaker

Kyle Unland

### *The federal Centers for Disease Control:*

Angela McGowan

Peter Briss

Karen Lee

Tracey Teuber

Judy Kruger

Harold Kohl

Nancy Williams

Casey Hannan

### *Other Reviewers:*

Peter Browning

Liz McNett-Crowl



# CONTENTS

Introduction.....	1
A Healthy Community Environment: Looking Forward.....	3
Social-Ecological Model .....	6
Policy Development: Effecting Lasting Behavioral Change .....	8
Evaluating Policy Changes .....	12
Policy Guide .....	18
Nutrition	
Communities .....	24
Schools.....	32
Worksites.....	37
Healthcare .....	41
Physical Activity	
Communities .....	44
Schools.....	52
Worksites.....	58
Healthcare .....	61
Appendix.....	63
Resources .....	65
References.....	77

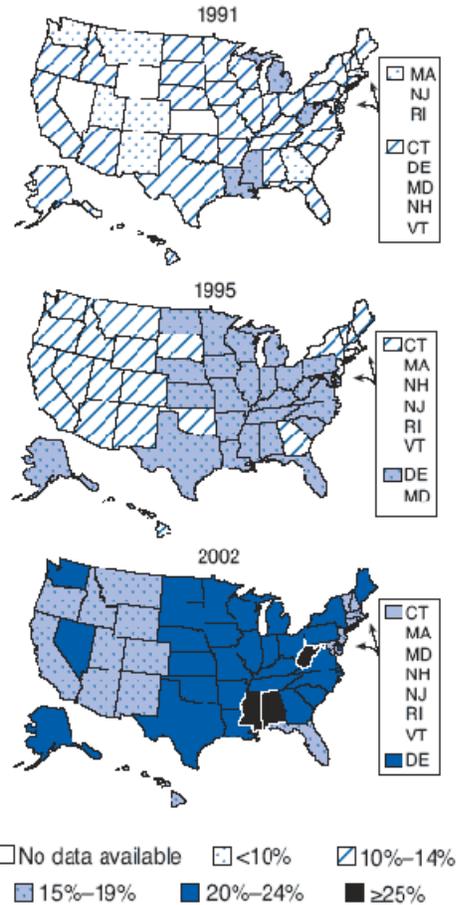


# INTRODUCTION

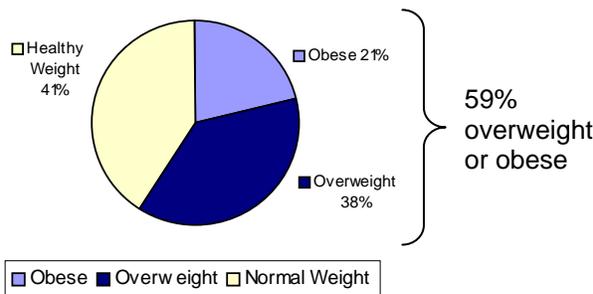
It is no longer news that obesity has reached epidemic proportions in the United States. With two-thirds of all U.S. adults either overweight (Body Mass Index “BMI” 25-29.9) or obese (BMI ≥ 30) and 15% of all children and adolescents overweight (≥ 95 percentile weight for height), the problem cannot be ignored.<sup>1</sup>

Further, people of color and people with low incomes experience an unequal burden of death and disability from nutrition-related chronic disease. For example, compared to Caucasians of similar age, African Americans are 2.0 times as likely, Latino Americans are 1.9 times as likely, and Native Americans are 2.6 times as likely to have diabetes.<sup>2</sup> And with medical expenses attributable to obesity estimated at \$75 billion dollars in 2003, it is clear that the consequences of inaction are great.<sup>3</sup> Determining which actions are most effective is more difficult, however.

Traditionally, interventions focus upon behavioral and educational methods to treat obesity. Recently, however, the focus has broadened to include the social and physical environment where everyday decisions about health are made.



**Overweight and obesity prevalence in Washington State in 2002**



Body weight is influenced by a host of factors, many of which are still being elucidated. However, it is clear that nutrition and physical activity play a dominant role. Not only do these impact weight status, each has an independent effect on health, although the

relationship is complex. For instance, good nutrition can help protect against heart disease, stroke, certain cancers, diabetes, and osteoporosis.<sup>4</sup> Likewise, adequate physical activity can help protect against cardiovascular disease, colon cancer, diabetes, high blood pressure, and possibly stroke. Physical activity is also very important for healthy aging, as it helps to strengthen bones, muscles, and joints, relieve arthritis symptoms, reduce falls, and reduce anxiety. Concurrently, the chronic diseases associated with obesity are many and well documented. Some of these include hypertension, dyslipidemia, type 2 diabetes, coronary heart disease, stroke, certain cancers, osteoarthritis, and psychological disorders, among others.<sup>5</sup>

Because good nutrition and physical activity not only affect body weight, but also protect against chronic disease on their own, it is clear that targeting prevention efforts to improve nutrition and increase physical activity will dramatically decrease the morbidity and mortality associated with chronic diseases that result from poor nutrition, physical inactivity, overweight, and obesity.

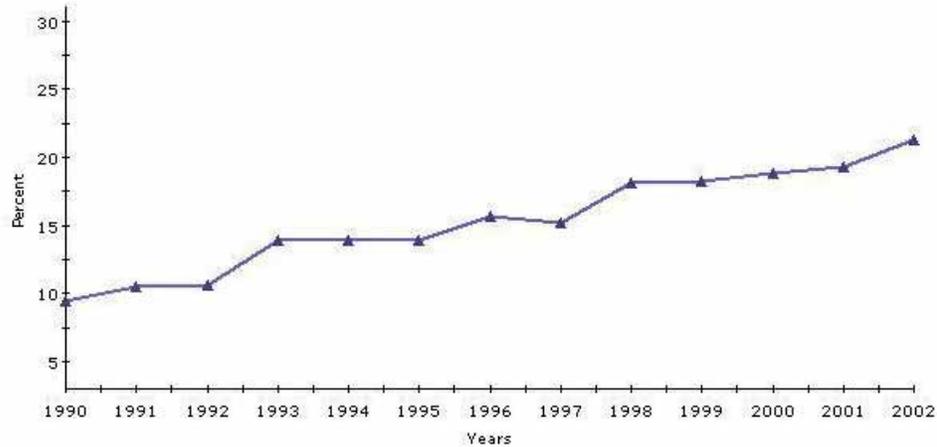
### Some Washington State Facts<sup>1</sup>

- In 2002, almost **60%** of Washington State residents were either **overweight or obese**.
- Concurrently, **77%** of Washingtonians ate **fewer than 5 or more** servings of **fruits and vegetables** per day in 2003.
- While 54% of Washingtonians met the recommended levels of moderate physical activity, only **31%** met recommendations for **vigorous physical activity** in 2003.

Attempts at improving nutrition and physical activity have conventionally focused on individual behavior change through one-on-one counseling, education, and support groups. These types of interventions have been moderately effective at improving nutrition and physical activity behaviors.<sup>6</sup> Because it is difficult to begin and sustain a lifestyle change without a supportive environment, there is growing interest in how the broader social environment impacts food choice and physical activity patterns. With a ready supply of energy dense, palatable food and decreasing opportunities to be physically active, our modern environment has been described as “obesogenic” or obesity promoting. This environment challenges even the strongest dedication to eating healthfully and being physically active.

The past few decades have brought many changes in our social and physical environment that negatively impact eating and physical activity behaviors. Consider the many technological advances of modern life that diminish daily physical activity: cars, dishwashers, computers, elevators, and television. Consider the ease with which food can be obtained quickly from almost anywhere and the

large portion sizes to which most have become accustomed. All of these factors have varying levels of impact on the nutrition and physical activity patterns of individuals.



Obesity prevalence by body mass index, Washington  
1990 to 2002<sup>1</sup>

## A Healthy Community Environment: Looking Forward

Being immersed in the current environment, it is sometimes difficult to take a step back to look at the many ways our social settings impact nutrition and physical activity. To facilitate this view, it is useful to imagine a community in which eating well and being physically active were easy choices for all citizens. What would this community look like? How would one of its citizens spend a typical day? These questions are useful to not only better understand the impact of the environment on nutrition and physical activity choices, but also to create a vision for how Washington communities can promote the health of Washington State residents.

Consider a typical mid-sized Washington community. Call this community Middleton. Sarah is a bank-teller in Middleton. Sarah and her husband, David, who is a paramedic at the local hospital, are raising two young children. The oldest child has just entered first grade, and the youngest child will celebrate his first birthday in one month. The family has lived in Middleton for eight years. What does a typical day look like for Sarah and her family?

Like most modern families, the day begins quickly as there is someplace that everyone must go, whether that is a job, school, or daycare. Because David has to be at work early this morning, Sarah takes the kids to school and daycare. Commuting has taken on a new meaning for many in Middleton since a new path system was built. Like most of his co-

workers, David used to drive to work. Since the new paved trail was built, he finds it more convenient to bike to work. As he tells his co-workers, the advantages are many: he spends less on gas, puts fewer miles on his car, gets more exercise, and generally feels better and more alert while at work. While David had tried to bike to work a few times before the trail was built, he didn't feel safe on the busy, narrow streets without a bike lane. Although he still has to ride part of the way on city streets, Middleton now has designated bike lanes on 80% of its streets and has instigated traffic calming measures on many streets, so he feels safer when riding. Because of the design and location of the trail, he is able to actually decrease his commute time by riding his bike. Since the installation of sidewalks, crosswalks, and greater enforcement of the school zone speed limit, David also feels more comfortable allowing his child to walk to her elementary school. David is not alone; since making these changes, the percentage of children who walk or bicycle to school everyday greatly increased.

Since David sometimes works 24-hour shifts at the hospital as a paramedic, he often eats in the hospital cafeteria. During the eight years that he has worked there, David has noticed considerable change in the cafeteria food. He remembers reading something about a nutrition policy in the employee newsletter, but hasn't thought much about it. He just knows that the variety of food offered there seems to have increased dramatically in the last few years. There is now a well-stocked salad bar every day in the cafeteria and David has noticed signs that identify the day's healthy choices. He likes the diversity of choices now available to him at the cafeteria and often selects the "healthy choice" option.

Sarah is usually the one to take the children to school and daycare in the morning. She puts the baby in the stroller and walks with her older child to the elementary school that is four blocks away. Before her daughter began elementary school, Sarah was concerned about the soda and sugary snacks that would be available to her daughter from the vending machines and from the a la carte lunch line when she went to school. However, since the school board passed the comprehensive nutrition policy, she no longer worries about how her daughter will eat while at school because all food sold there has to meet nutritional standards. The cafeteria's salad bar, which contains many fresh, locally grown fruits and vegetables, also helps the students make nutritious choices at lunchtime. At the school open house this year, Sarah talked with the school principal who said that teachers in the school are disallowed from offering food as a reward to children and school organizations are disallowed from selling food as a fund-raiser.

The school was built in 1912 but remodeled three years ago and now serves as an important nexus for the community. Since there was need for a new middle school in the community, and the elementary school had more land than it was able to use, a new middle school was built adjacent to the elementary school. The two schools now share sports facilities, and both schools regularly open their gyms, playground, and sports facilities to the community. It is not unusual to see people walking or running the track and playing pick-up games of basketball.

Before moving to Middleton, Sarah drove her car to work and on many of her daily errands. When they moved to Middleton, she and David decided to purchase a home near Middleton's downtown shopping district. This was an easy choice for the couple, as the city in partnership with the local bank, provides multiple financial incentives to encourage home-buyers to purchase a home near the city's business district. Since the area they live

in is designated as mixed-use, Sarah and David don't have to travel far to find the necessities of daily life. In fact, since the bank that Sarah works for is only six blocks from their home, Sarah finds it easiest to walk to work everyday.

After dropping her oldest child at school, Sarah walks with the baby to work. Childcare is very convenient for Sarah since her employer established a childcare center in cooperation with several other nearby business owners. This not only allows Sarah to drop the baby off on her way to work, but the center is also close enough that Sarah is able to walk over on her lunch hour to breastfeed her infant. During other parts of the day, Sarah is allowed break time to pump breast milk in a lactation room at her work. The room isn't luxurious and only contains a rocking chair and a small refrigerator, but it allows Sarah and two other mothers at the bank to continue breastfeeding since their return to work. Sarah reflects on how difficult it was to continue breastfeeding with her first child when her employers didn't allow break time to pump, and she had to use the bathroom stall to obtain privacy while pumping. In retrospect, she's not surprised that she stopped breastfeeding her first child three weeks after returning to work. With her second baby, she has been able to continue breastfeeding through the first 11 months.

Sarah has recently become more conscious of the foods she and her family eat. She has been seeing a dietitian who is helping her manage her weight and cholesterol. While her doctor had referred her to a dietitian two years ago, she didn't make the appointment until her insurance company began covering preventative visits. The insurance company also started offering discounts on health club memberships. David and Sarah joined a health club in the spring; previously it had been too expensive.

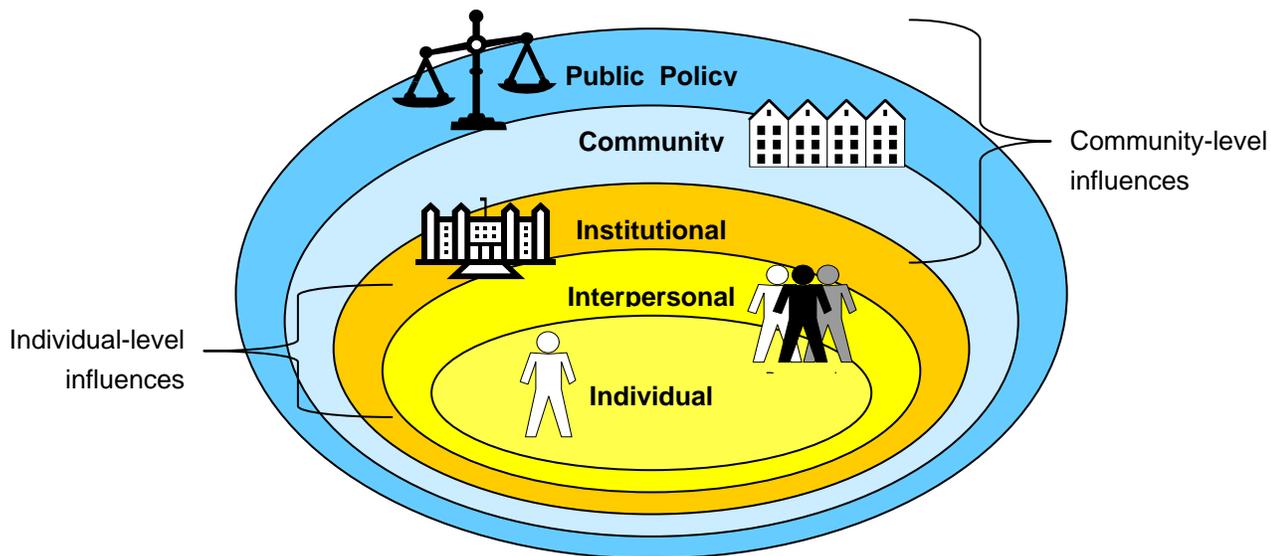
After work, Sarah picks the baby up from daycare and walks to meet her oldest child at school. On the walk home, Sarah's daughter tells her about what she learned in school. Sarah was surprised that the highlight of her daughter's day seems to have been a new activity in PE class. The PE teacher has built a small climbing wall inside the school gym, and the students have spent several of their one-hour class lessons learning to climb the wall. Sarah's daughter is very excited by this new activity and asks Sarah if they can attend open gym night at the school on Thursdays to play on the climbing wall. Sarah thinks this sounds fun, and makes a mental note to tell David about the planned evening.

This idealized picture can illustrate the many different ways the nutrition and physical activity environment can either support or hinder healthy choices. As the picture broadens to incorporate more than individual choices and education, there are numerous elements of modern life that impact healthy eating and physical activity. While equipping individuals with the knowledge to make the appropriate choice is an important step in the process, the remainder of the picture cannot be overlooked. Take the example above. Sarah intended to breastfeed her first child until she was one year old because her doctor had informed her that this was the healthiest choice for her and her baby. Because she had to return to work shortly after the baby was born, she had to begin pumping her breast milk. While she tried to continue to breastfeed, the lack of a supportive environment at her workplace (i.e., lactation room, regular break time, etc.) made it very difficult for

her to continue. Therefore, even with the appropriate education and motivation, Sarah’s physical environment made it difficult for her to make the healthy choice. While individuals need to be empowered by education and self-efficacy to make healthy choices, that choice needs to be the easy one. This means reshaping the current nutrition and physical activity environment into one that is supportive of healthy behavior. The social-ecological model, explained in the next section, provides a framework for understanding the multiple influences on health behavior.

## Social-Ecological Model

Health behavior is complex and influenced by a variety of different factors. The social-ecological model provides a framework for understanding the many influences on nutrition and physical activity behaviors.<sup>7</sup> Each sphere of the model represents a set of influencing factors. These are many and diverse and can either serve to promote or hinder healthy behaviors. This is an interrelated and dynamic model so that each sphere influences and is influenced by the other spheres.

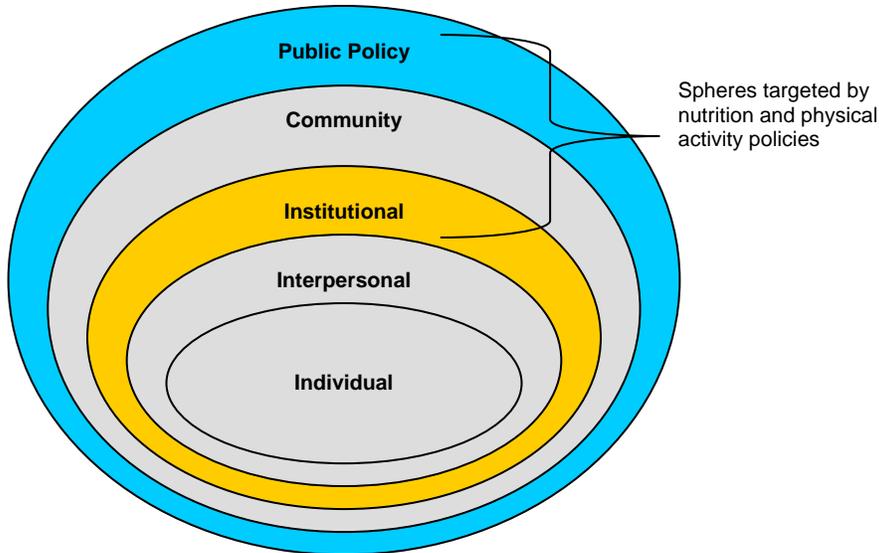


The next page contains a short description of each of the spheres and a brief example of how these factors may influence an individual’s nutrition and physical activity choices.<sup>8</sup>

SPHERE	DEFINITION	EXAMPLE
<b>Individual</b>	Individual characteristics, such as awareness, knowledge, attitudes, beliefs, values, and preferences	A man visits a dietitian and learns strategies for lowering his cholesterol.  A woman enjoys playing basketball.
<b>Interpersonal</b>	Social support and social identity from friends, family, and peers	An individual has started a walking regime and asks her friend to join her.  A child watches and mimics his father as he chooses a piece of fruit as a snack.
<b>Institutional</b>	Rules, regulations, policies, and informal structures	An employee goes to the office vending machine searching for a mid-afternoon snack. Only chips, cookies, and candy bars are available. He would prefer a healthy snack, but settles for a candy bar to tide him over until dinner.  The local school district provides physical education for K-12 students five days per week and requires students to be enrolled in a PE class.
<b>Community</b>	Formal and informal social networks and norms	A teenage girl wants to play on the football team, but is discouraged from doing so because football is a “boys sport.”  An employee is encouraged to take a walking break mid-day, as all other employees of the office do.
<b>Public Policy</b>	Local, state, and federal policies and laws	A person wishing to eat healthy goes to a restaurant for lunch. Numerous salad choices are available, but no nutritional information is found on the menu or menu board. The server cannot provide any information as well. The person then orders what she believes is the healthiest choice.  An employee would like to commute to work on his bicycle, but because the locality has not established a bike lane, cars often speed. He decides it’s too dangerous to ride and drives his car instead.

Nutrition and physical activity health promotion can target health behavior at any of these spheres and is often the most effective when several spheres are targeted at once. Traditionally, nutrition and physical activity interventions have focused on the two individual levels of the social-ecological model, individual and interpersonal. Examples of these approaches include education, counseling, health fairs, and support groups. While these activities can be effective at changing individual health behavior, it is difficult for individuals to start and maintain these

changes when the community-level influences are not supportive of healthy behaviors. Take the example above of the employee who goes to the vending machine in search of a mid-afternoon snack. He may *know* that he should choose a healthy food and *want* to do so, but the option simply isn't available to him. Making changes to the outer spheres of the social-ecological model equips individuals with a supportive environment that makes it easy for them to choose healthy foods and be more physically active.



Although all of these spheres exert important influences on health, this document will focus on policy options that seek to make the nutrition and physical activity environment conducive to healthy behaviors. Policies are most applicable at the public policy and institutional spheres of the model.

## Policy Development: Effecting Lasting Behavioral Change

As discussed previously, successfully changing individual behavior requires more than individual change strategies. Institutional and public policy changes are critical to achieving sustained behavioral change. In the public health world, moving toward healthier behaviors is also stated as “norms change” – where the shift in individual behavior is so strong that a new or emerging community norm is forged.

## The Interplay of Norms and Policies

What are norms exactly? They can be defined as:

- Standards or models;
- A set of standards for a group;
- A voluntary or expected way of behaving.

What are policies? Typical dictionary definitions include:

- The general principles by which an entity is guided;
- An articulated set of principles guiding human actions;
- The bridge between custom and law.

There is an interesting and dynamic relationship between norms and policies. A more traditional version has norms change preceding any policy change. Here, individual and community norms must first be recognized before codifying these new norms in policy. Classic prevention programs use this approach in working with large and heterogeneous populations, typically attempting first to change attitudes and beliefs about the risk behavior. If long-term change was identified as important then institutional and public policies could be then be modified to fit the new normative behavior.

A more proactive policy-based approach takes a different tack. Modifying policy becomes the first step, which then helps to change attitudes, beliefs and ultimately behavior. In addition, simply engaging in policy discussions, regardless of enactment, can contribute to norms change effort. Normative change and policy development lie at the heart of any community-based effort that endeavors to bring about systemic, community-wide change leading to reductions in the specific risk behavior in question. No one approach is best and both remain relevant today.

## Policy Development: Beyond the Legislative Branch

At times, discussions about policy refer implicitly about “public” policy -- federal, state, county or city. Typically, policy enactment is seen to occur in only one branch – legislative. However, other key parts of government also engage in policymaking beyond ordinances and laws.

- EXECUTIVE BRANCH (ELECTED OFFICIALS)  
The executive branch (i.e., mayor, county executive, governor) is one of those branches where advocacy efforts are underutilized. However, it must be

emphasized that these offices are political offices with direct accountability to the voters. Thus, direct communication to these offices is certainly appropriate.

- **EXECUTIVE BRANCH AGENCIES (REGULATORY)**  
This is a semi-hidden branch of the government, with little accountability to the voters. However, critical policy decisions are left to the interpretations of this branch, particularly in the case of vague legislation. Policy advocates need to learn about rules and regulations and how to impact proposed and current rules and regulations.
- **JUDICIAL**  
This branch speaks a different language, a language that can only be deciphered by lawyers or very motivated and educated citizens. However, with a little prodding and help from those who do “speak (and write) the language”, community groups can directly channel their advocacy efforts here, most notably with writ petitions and amicus (or “friend of the court”) briefs.

## **The Power of Local Policy Development**

It is critical to point out the virtues of achieving successful policy change at the local level. Barring specific legal limitations (e.g., only the state or the federal government have jurisdiction over a particular topic area), advocates can sometimes achieve greater success at the local level because:

- compliance/enforcement efforts can be more accountable to the public
- locals can more easily reflect community-specific standards and norms
- vested industry interests generally less effective at the local level

Because there is less constraint, local policy development also provides great opportunity to create and enact innovative policy ideas.

## **Moving Policy Agendas**

Having a good idea and knowing what level of the system needs changing are only part of the policy development equation. The art of “moving” of policy agendas has become just as important as the idea itself. While there are occasions where individuals can precipitate change, the use of organizations and groups of organizations (coalitions) is generally the most effective way to move policy agendas. Many concepts and ideas are in play here -- community organizing, social justice, leadership development, media advocacy, and role of public sector and its employees. Building and maintaining coalitions is a skill to be learned, and many resources now exist just in this niche area.<sup>9</sup>

## **Policy Development and Analysis**

There are many ways, methods, and approaches to deciding which policy options are most relevant to that community, a level of government, or a private institution. A full discussion of this analytical process is beyond the scope of this paper, but many policy-makers consider at least some of the following variables when choosing among various policy options:

### **Assessing extent of the problem**

- burden of disease
- level of urgency
- perceived need

### **Choosing a policy option**

- all non-policy alternatives been tried (policy change necessary)
- efficacy (informed by what the research world tells us)
- feasibility of implementation
  - program (do-able in the real world)
  - budget (costs and benefits)
- social justice (addresses needs of all affected populations)
- understanding potential unintended consequences
- ability to measure success (evaluation)
- understanding stakeholder views (values, interests)
- political feasibility (likelihood of enactment)

So, applying a scientific lens to the policy making process, as this document attempts to do, is useful for understanding and prioritizing policy ideas based on what should be most effective. However, it is important to realize that science is not the only filter that must be applied to policy development. Policy development occurs within the broader social context and should be understood within that context. Policymaking is inherently a political process, so that not only issues of logistical feasibility must be considered, but also all the variables noted above, including political feasibility, need clear-eyed analysis.

## Policy Implementation and Enforcement

Policy implementation and enforcement are the last concepts to understand when discussing the power of policy change. Just changing words in codes, rules and statutes may not be enough to shift community norms. Advocates may need to engage in close monitoring of implementation efforts, and support and promote for the need for bona fide enforcement and importance of prioritizing the policy change for the relevant enforcement entity.

## Evaluating Policy Changes

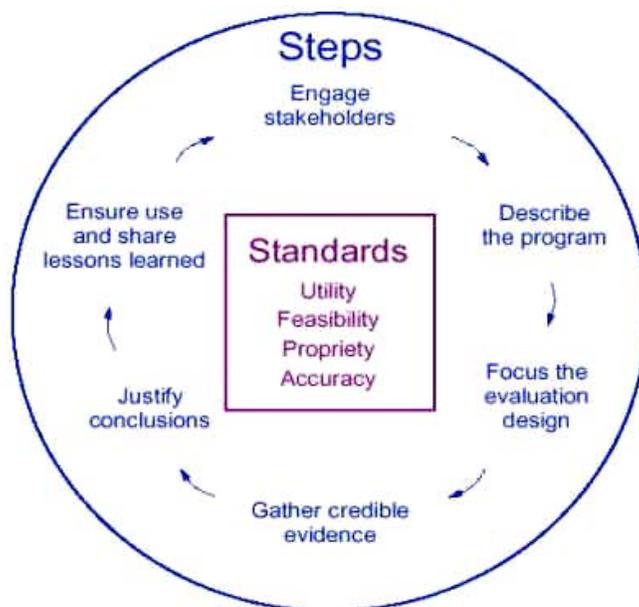
As illustrated by the social-ecological model, public and institutional policy impacts personal behavior, as well as societal norms. To that end, when individuals work to change policy in their state, community, or organization, their goal is not the change itself, but the expected result of the change. To better define the relationship between the policy and its expected impact, scientific evidence, expert opinion, or personal testimony is often used to justify why the change is necessary. These projections anticipate the impact of the policy and help policy makers better understand what the probable effect of the policy will be.

For nutrition and physical activity policies, the expected outcome is better nutrition and increased physical activity which, in the longer term, can result in decreased rates of chronic disease. However, establishing the best policy based on the predicted outcome is only part of the process. It is also vital to know whether the policy is having the expected effect. Implementation of policy could achieve either the expected outcome, no outcome, or an unexpected outcome that could be either desirable or undesirable. Even with forethought and good scientific data, it is impossible to tell exactly what the outcome will be in any given community. This is why evaluation is necessary. If the policy has the desired effect, then evaluation results will be important to justifying the existence of the policy to stakeholders. If the policy produces no effect or has an unexpected effect, evaluation can provide explanations for this outcome and help stakeholders to determine what changes need to be made to the policy, its implementation, or its enforcement so that it does create the desired effect. For these reasons, policy change does not end with the enactment of the policy. Like program development, policy change requires a commitment to continuous improvement to ensure the policy is having the intended effect.

Evaluation of a policy change can occur on two main levels. First, evaluation can tell whether the actions specified in a policy were actually carried out. For instance, evaluation of a school district policy to eliminate the sale of soda could determine whether schools within the district are adhering to the policy. This is

called process evaluation. Second, evaluation can tell whether the ultimate goal or intermediary goals of the policy were met. For instance, for the same policy mentioned above, an evaluation could determine whether students drank fewer sodas after the school stopped selling soda. This is called outcome evaluation. Both process and outcome evaluation are important to fully understand the impact of the policy and ensuring that the policy does what it is intended to do.

The Centers for Disease Control and Prevention (CDC) has developed a framework for evaluation.<sup>10</sup> This framework consists of six iterative and continuative steps that fully integrate the evaluation result into the ongoing refinement of the program or policy development process. Because it is impossible to change methods midway through evaluation, it is very important that these steps be carefully considered and planned before the policy is enacted. Planning the evaluation of the policy in tandem with the development of the policy itself allows the evaluation to be focused and applicable so that useful results will be generated. The objective of the evaluation is always to provide relevant information that can be applied to improving the functionality of the policy, not only to understanding its effects. Evaluation should be functional, not solely academic.



The following table provides a more detailed description of the evaluation process,<sup>10</sup> as well as an example of the evaluation framework as it could be applied to a policy change.

<p><b>STEPS IN EVALUATION PROCESS*</b></p>	<p><b>EVALUATION OF EXAMPLE POLICY</b>  <i>All employees of Example Corporation will receive a 30-minute break time, in addition to their regularly scheduled break time, to participate in physical activity.</i></p>
<p><b>Step 1</b>  <b>Engage Stakeholders</b>                      Include people or organizations involved with or affected by the policy and the primary users of the evaluation.</p>	<p>Company management, employees, and employee healthcare plan provider.</p>
<p><b>Step 2</b>  <b>Describe the Policy or Program</b>                      Thoroughly define the policy, including its purpose and plan for implementation and enforcement. Include how the policy fits into the broader context and what it is trying to accomplish.</p>	<p>The purpose of this new company policy is to encourage physical activity among employees. Beginning January 1, 2005, all employees are required to receive at least 30 minutes, but not more than one hour, of paid break time to participate in physical activity. This time is allotted for the purposes of participating in physical activity only. Employees who do not wish to participate in physical activity have the right to decline the extra break time. Management shall inform employees of the new policy and encourage their participation.</p> <p>In support of the policy, a new exercise room containing resistance and cardiovascular exercise equipment, including at least one full set of free weights, 2 treadmills, and 1 stationary bicycle, will be installed in the Example Corporation building. \$1000 is allotted for this purpose.</p>
<p><b>Step 3</b>  <b>Focus the Evaluation Design</b>                      Articulate the <i>purpose</i> of the evaluation, define the <i>users</i> and <i>uses</i> of the evaluation, develop the <i>questions</i> that the evaluation will answer, design a <i>method</i> of data collection that will accurately answer the evaluation questions, and create an <i>agreement</i> that outlines roles and responsibilities of those who</p>	<p>The purpose of the evaluation is to determine if the new break time policy is being implemented, if employees are using the extra break time to exercise, and if the policy is increasing employees' daily physical activity.</p> <p>The management will use the evaluation results to determine if the policy was adequately implemented and if the policy is having the desired effect on employee physical activity.</p> <p>The evaluation will ask the following.</p> <ul style="list-style-type: none"> <li>➤ Was the exercise room established?</li> <li>➤ Were employees provided with the stated 30-minute, paid exercise break?</li> <li>➤ Did employees take the extra break time?</li> </ul>

<p><b>STEPS IN EVALUATION PROCESS*</b></p>	<p><b>EVALUATION OF EXAMPLE POLICY</b>  <i>All employees of Example Corporation will receive a 30-minute break time, in addition to their regularly scheduled break time, to participate in physical activity.</i></p>
<p>will carry out the evaluation.</p>	<ul style="list-style-type: none"> <li>➤ Did employees increase their physical activity following implementation of the policy?</li> </ul> <p>To answer these questions, the following information will be gathered.</p> <ul style="list-style-type: none"> <li>➤ Visual assessment and inventory of exercise room and equipment.</li> <li>➤ Documentation by management that employees were informed of the additional breaks and allowed to take them</li> <li>➤ Simple count of how many employees took break time at least three times per week using one week of employee time sheets.</li> <li>➤ Survey of all employee exercise patterns before and after the policy is implemented. Compare time spent in physical activity before policy with time spent after policy. Follow-up questionnaire will ask additional questions about awareness of policy and managerial encouragement to take exercise breaks.</li> </ul> <p>The company wellness coordinator will be in charge of project evaluation. Following data collection and analysis, a detailed report will be compiled and provided to management so that the results can be assessed. The report's executive summary will be distributed to employees and to the healthcare plan providers.</p>
<p style="text-align: center;"><b>Step 4</b>  <b>Gather Credible Evidence</b></p> <p>Compile information in such a way that evaluation results are seen as relevant and credible to stakeholders. Credibility is determined by the way in which questions were asked, sources of information used, conditions of data collection, reliability of measurement, validity of interpretation, and the procedures used for quality control.</p>	<p>Information collected to answer the evaluation question is credible in the following ways.</p> <ol style="list-style-type: none"> <li>1. Visual assessment is efficient and adequate to determine creation of exercise room and its contents.</li> <li>2. Management documentation will include informational posters hung in break rooms and meeting agendas that contain allotted time to discuss new policy. Follow-up survey of employees will include question about knowledge of policy and degree of encouragement from management to take breaks.</li> <li>3. Time sheets, which are required from all staff, provide an objective measure of how employee time is spent.</li> <li>4. The wellness coordinator, who is trained in physical activity, will develop survey questions. Management will review questions for appropriateness before survey administration.</li> </ol>

<p><b>STEPS IN EVALUATION PROCESS*</b></p>	<p><b>EVALUATION OF EXAMPLE POLICY</b>  <i>All employees of Example Corporation will receive a 30-minute break time, in addition to their regularly scheduled break time, to participate in physical activity.</i></p>
<p><b>Step 5</b>  <b>Justify Conclusions</b></p> <p>Stakeholders have confidence that the conclusions made by the evaluation are based on the evidence gathered. Justifying these conclusions is based on standards held by the stakeholders, proper analysis and synthesis of the data, interpretation of the evidence, and judgments and recommendations made about the policy.</p>	<p>Stakeholders agree that the policy will be considered successful if a fully equipped exercise room is established within six months of policy implementation, if employees are informed of and allowed to take the additional break time, if at least 60% of all employees utilize the break time at least three times per week, and if at least 20% of employees improve their daily physical activity by 30 minutes per week. Stakeholders agree that the degree to which the policy was implemented by management and utilized by employees will largely determine its success.</p>
<p><b>Step 6</b>  <b>Ensure Use and Share Lessons Learned</b></p> <p>Ensure that the evaluation process and findings are used and disseminated appropriately.</p> <p>The evaluation design, preparation for use of the evaluation, feedback obtained from all involved parties, dissemination of the evaluation results and lessons learned, and the development of additional uses for the evaluation all contribute to whether the evaluation is used.</p>	<p>Evaluation results are compiled and outlined in a report to management, as well as to all employees. Management uses results to determine if policy should be amended, continued, or expanded. Healthcare plan providers receive copy of evaluation. If management determines that the policy is successful, healthcare plan providers are asked to renegotiate employer contribution to plan due to policy implementation and success.</p>

\*Adapted from Framework for program evaluation in public health. *MMWR*. 1999;48(No. RR-11). For a more detailed explanation of the CDC framework for evaluation, visit <http://www.cdc.gov/eval/framework.htm#summary>.

Sometimes it is difficult for organizations or individuals to justify time and resources spent on evaluation when they feel intuitively that their actions or the actions of the agency are having the desired effect. The same applies to policies.

Once a policy is enacted, it may feel like the work is done. However, one cannot assume that the policy will get adequately implemented, enforced, and the outcome received will be the outcome expected. Evaluation allows for critical analysis of the policy process, as well as determination of the success of the policy in bringing about the desired change. This information can and should feedback into the policy development process by helping to refine implementation and enforcement, and by further justifying the existence of the policy to stakeholders and policymakers.



## POLICY GUIDE

The purpose of the following table is to create a comprehensive policy guide for the prioritization and development of nutrition and physical activity policies at state, local, and private jurisdictions. Where applicable, evidence of policy effectiveness is provided.

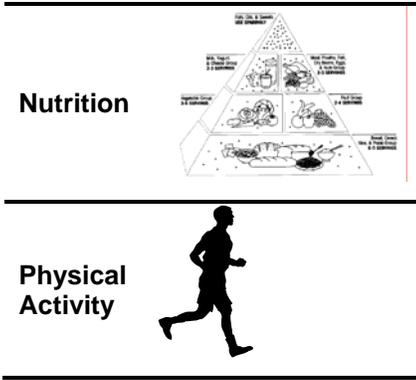
It is acknowledged that the policy options available for nutrition and physical activity are many and diverse. This guide cannot provide information about every policy option available. Instead, it is meant as a starting point for the development of policies to address the issues described in the introduction. Each situation and each community require a unique policy assessment and development approach. Each of the policy options presented below can, and should be adapted to fit the particular needs of the community or organization.

Similarly, it is not the purpose of this guide to be a comprehensive manual for policy development. In addition to providing a menu of policy options, a comprehensive manual would address issues of community assessment, feasibility of implementation, and enforcement. All of these are important for creating a successful policy. Community assessment involves determining the current state of the nutrition and physical activity environment, surveying the policies that affect nutrition and physical activity, and prioritizing policy options based on importance and practicality. Determining the feasibility of a policy option involves taking into account the political environment and the practicality of and potential barriers to policy implementation. Additionally, enforcement is necessary to imbue the policy with the power to create change. Issues of community assessment, implementation feasibility, and enforcement, in addition to a science-based menu of policy options, are all important elements to consider when developing nutrition and physical activity policies.

It is hoped that this guide will prove useful when considering the myriad of policy choices available. For resources beyond the scope of this publication, please see the annotated bibliography found at the end of this guide.

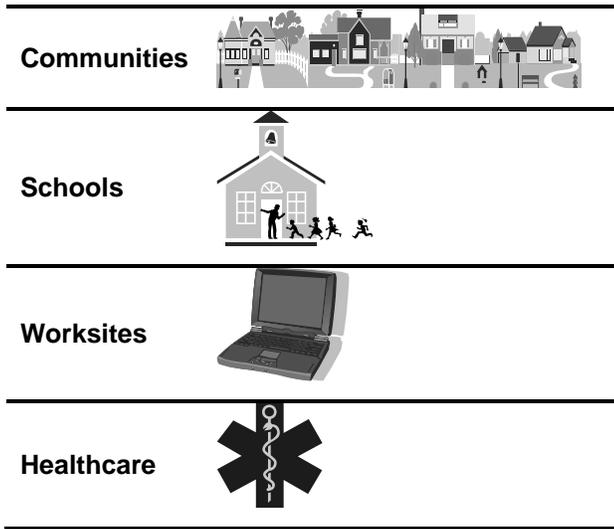
### Table Organization and Methods

The following table presents a menu of nutrition and physical activity policy options. These options were generated through academic literature and internet searches. As the research process progressed, each new non-replicated policy option was recorded until no new options were found.



The table is divided into two main sections: nutrition and physical activity.

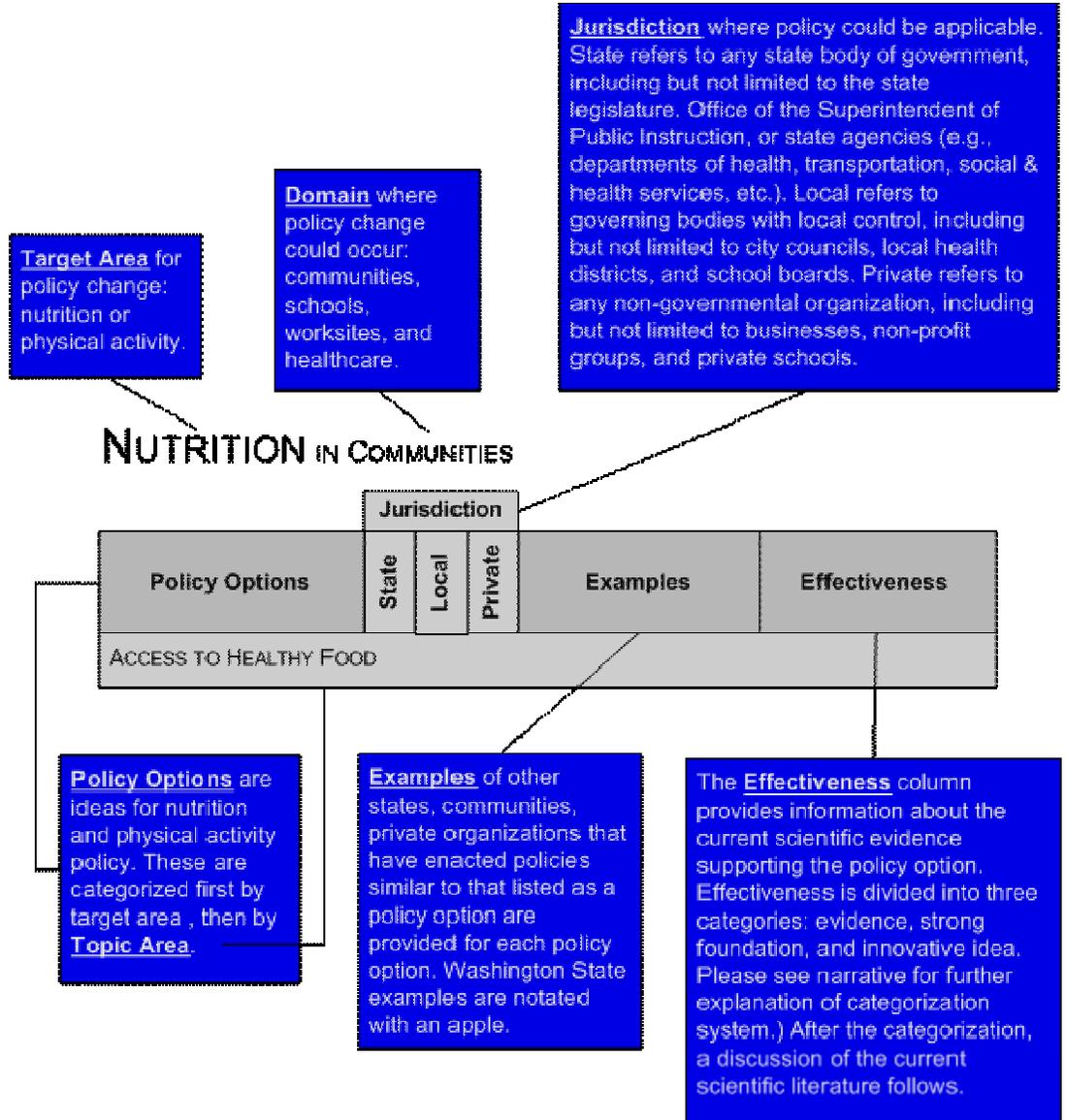
These sections are further divided into the domains of communities, schools, worksites, and healthcare. Policy options for each domain are sorted into categories by subject area. Each new section is demarcated by the following symbols.



In addition to the explanation that follows, the following diagram describes the organization of the policy table. Beginning at the left and moving to the right, the first column is *policy options*, which contains a list of policy ideas meant to address various aspects of nutrition and physical activity. Next is *jurisdiction*, which is subdivided into three categories. These categories are *state, local, and private*. In this context, the term *state* refers to all policies applicable at a

statewide level of control. These could be policies for which the state legislature has control, as well as policies that state-level departments control, such as the Department of Health, the Department of Transportation, or the Office of the Superintendent of Public Instruction. The term *local* refers to all policies that are applicable at city, county, or other regional levels of jurisdiction. These could be school boards, city councils, county councils, or local health districts, among other local governing bodies. Lastly, the term *private* refers to any non-governmental entity that follows a set of written policies. Examples include businesses, non-profit organizations, churches, private schools, neighborhood associations or families.

To the right of the *jurisdiction* column is *examples*. For each policy option, examples of states, communities, and organizations that have implemented similar policies are provided. Washington examples are notated with an apple symbol (🍏). For some policy options, relevant examples could not be located. Most examples are referenced and some include internet links and/or contact information for follow-up.



Following the *examples* column is *effectiveness*, which contains a brief discussion of the relevant scientific literature supporting each policy option. In an effort to summarize the copious and complex scientific literature within each topic area,

three categories of effectiveness were developed. These are *effective policy idea*, *promising policy idea*, and *untested policy idea*. Because this guide does not include a systematic review of the literature, these categorizations are used only as a convenient method of simplifying complex bodies of literature.

Methods for classifying literature into the categories specified above are as follows<sup>i</sup>.

<b>EFFECTIVE POLICY IDEA</b>	The policy idea or the environmental change the policy is meant to bring about were tested in one or more well-designed, controlled, prospective studies and found to affect nutrition and/or physical activity behavior.
<b>PROMISING POLICY IDEA</b>	The rationale supporting the policy idea or the specific policy approach (i.e., taxation) was tested in one or more well-designed prospective or cross-sectional studies.
<b>UNTESTED POLICY IDEA<sup>ii</sup></b>	Neither policy idea nor rationale supporting policy idea has been tested in prospective or cross-sectional studies. Studies that were inconclusive or conflicting were also included in this category.

- Non-comparison studies, such as focus groups, case series, or case studies were **not** used to determine effectiveness.

When a body of literature as expansive, diverse, and dynamic as nutrition and physical activity is to be reviewed and distilled for the purpose of guiding policy decisions, several considerations must be noted. At present, there is currently very little scientific evidence regarding the effectiveness of nutrition and physical activity policies. While the literature abounds with studies about other aspects of nutrition and physical activity, the dearth of literature directly testing the impact of policies is reflective of how recently the policy approach has been applied to these issues. Further, the political nature of policymaking and the complexity of accounting for confounding factors that cloud the association between the policy and its effects make studying policy impacts particularly challenging. Consequently, very few studies that were reviewed for this guide directly tested a specific nutrition and/or physical activity policy. Most policy ideas were categorized as “promising.” In cases where no studies that had directly investigated the effect of a policy were available, secondary literature that addressed issues relevant to the rationale supporting the policy was reviewed. Typically, these were studies that investigated the “basic premise” of the policy. For instance, at the time of this writing, there are no studies that investigate the effect of a school policy to eliminate soda from school vending machines. However, there is supporting evidence that soda consumption leads to consuming excess calories and weight gain and displaces more nutrient-rich beverages, such as milk.<sup>11-14</sup> This evidence supports the rationale behind a policy to eliminate soda,

but it cannot determine whether the policy would have a beneficial effect on student nutrition. In this case, the evidence supports the rationale for the policy change, but it cannot determine its ultimate effectiveness.

The remaining policy ideas were classified as “untested.” Inconclusive or conflicting studies of ideas could have been a fourth category, but were included here to reduce unnecessary complexity.

Literature searches were completed by searching academic databases by keyword according to the policy option topic. Internet search engines were also used to find “grey literature” not represented in standard academic databases. “Grey literature” can be a valuable resource to uncovering pertinent unpublished reports and study results.

---

<sup>i</sup> To assign these classifications, studies were examined independently by the authors to determine study design and quality, and then studies relevant to each policy option were examined collectively to determine the overall strength of the evidence. Studies that supported the *effective policy idea* classification were designed to study either the policy option or the environmental change the policy was intended to cause. Further, these studies had to measure prospectively both the exposure (policy or change policy is meant to cause) and the outcome and compare those results among two groups: those receiving the policy or environmental change and those who did not. Evidence deemed strong or sufficient by the *Guide to Community Preventive Services* automatically classified a policy as an *effective policy idea* without further review of the literature because of the systematic review process employed by that guide.

Studies that supported the rationale behind the policy option but that did not actually test the policy option or the change the policy was intended to create were classified as *promising policy ideas*. Cross-sectional as well as prospective studies were included in this category. Non-comparative studies, while sometimes discussed in the explanation of effectiveness, were not used to determine effectiveness classifications.

When neither of these two levels of evidence was available, the classification of *untested policy idea* was assigned. In this case, very few to no prospective or cross-sectional studies could be found to support the policy itself, the change the policy was intended to cause, or the rationale behind the policy. This classification was also made when studies were either inconclusive or conflicting. While policy options in this category may seem reasonable for addressing nutrition and physical activity, their effectiveness is currently unknown.

<sup>ii</sup> Please note that this classification does not mean that these are ineffective policy options. In most cases, these policies have not been studied, so it is simply not possible to determine their level of effectiveness.



## NUTRITION IN COMMUNITIES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
ACCESS TO HEALTHY FOOD					
<ul style="list-style-type: none"> <li>● Provide funding to expand the WIC Farmers' Market Nutrition Program to additional counties and communities.</li> </ul>	x	x			<b>Effective policy idea</b> since farmers' market coupons increase fruit and vegetable consumption <sup>15, 16</sup>
<ul style="list-style-type: none"> <li>● Provide funding to expand the Senior Farmers' Market Nutrition Program to additional counties and communities.</li> </ul>	x	x			<b>Effective policy idea</b> since basket delivery to homebound seniors increases fruit and vegetable consumption <sup>17, 18</sup> and provision of farmers' market coupons increases fruit and vegetable consumption. <sup>19</sup>
<ul style="list-style-type: none"> <li>● Provide funding for equipment purchase that would allow the use of electronic benefits transfer (EBT) card at all state farmers' markets.</li> </ul>	x	x	x	🍏 Seattle farmers' markets in Columbia City, Lake City, Magnolia, University District, and West Seattle accept EBT cards. <sup>20</sup> The Olympia farmers' market also accepts EBT cards. <sup>21</sup>	<b>Promising policy idea</b> since food stamp sales fell at farmers' markets after the EBT card was implemented and that food stamp sales increase after a market accepts EBT cards. <sup>22</sup>

# NUTRITION IN COMMUNITIES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>● <b>Provide financial incentives for grocery stores or farmers markets to locate in underserved communities.</b></li> </ul>	x	x	x	<p>Pennsylvania plans devoted \$100 million of the Governor's Economic Stimulus Package to develop supermarkets in urban and rural underserved communities.<sup>23</sup></p> <p>The City of Rochester, New York provided monetary incentives to a major grocery store chain to build four new stores and expand an existing structure as well as develop a comprehensive plan to improve the areas around the stores.<sup>24</sup></p>	<p><b>Promising policy idea</b> since there are fewer grocery stores and fewer opportunities to purchase healthy food, in many low-income communities,<sup>25-27</sup> that fewer grocery stores are associated with decreased dietary quality,<sup>28, 29</sup> and that locating a new grocery store in an underserved community can increase fruit and vegetable intake.<sup>30</sup></p>
<ul style="list-style-type: none"> <li>● <b>Fund or provide direct bus service or low- or no-cost transportation to farmers markets and large grocery stores.</b></li> </ul>		x	x	<p>Ralphs, Numero Uno, and Jax grocery stores offer free shuttle service to Los Angeles area customers. At Ralphs, customers present a receipt with total sales greater than \$25 to receive a free ride home.<sup>31</sup></p>	<p><b>Promising policy idea</b> since low-income individuals have less access to private automobiles<sup>26</sup> and there are fewer grocery stores in low-income communities.<sup>1 26</sup></p>

<sup>1</sup> A feasibility study was performed and found that if 10% of households without a car used a grocery store shuttle service, the program would break even. A greater percentage of use would generate a profit.<sup>32</sup> Cassady D, Mohan V. Doing well by doing good? A supermarket shuttle feasibility study. *J Nutr Educ Behav.* 2004;36:67-70.

 Indicates policy option has been implemented in Washington State.

# NUTRITION IN COMMUNITIES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>Require the development and implementation of nutritional standards for preschools and daycares so that all foods and beverages available are consistent with the <i>Dietary Guidelines for Americans</i> or other nutrient standards.<sup>33</sup></li> </ul>	x	x	x		<p><b>Promising policy idea</b> since older students who have access to a la carte, snack bar, and/or vending machine food at school, which do not have to meet the <i>Dietary Guidelines</i>, consume fewer fruits and vegetables than those who do not have access to these.<sup>34-36</sup></p>
<ul style="list-style-type: none"> <li>Create tax incentives, zoning rules, and other incentives to encourage small storeowners in underserved areas to provide healthier food items, such as fresh fruits and vegetables.</li> </ul>	x	x			<p><b>Untested policy idea</b> that providing incentives to small food stores, which may have less produce and other healthy options,<sup>37</sup> will encourage stores to provide healthier food options, in order to make it easier for individuals to purchase healthy food.</p>

# NUTRITION IN COMMUNITIES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>● <b>Within the land use element of the comprehensive plan, provide incentives for the development of community gardens on public and private land.</b></li> </ul>		x		<p> The city of Seattle operates the P-Patch program, in partnership with the organization Friends of P-Patch, that helps neighborhoods obtain and manage community gardens.<sup>38</sup></p> <p> The land use element of the comprehensive plan for the city of Seattle calls for the establishment of community garden for every 2,500 households within the city's urban villages.<sup>39, 40</sup></p> <p>Escondido, CA Adopt-A-Lot allows groups to use vacant lots for community gardens, recreation facilities, and beautification.<sup>41</sup></p> <p>The State of New York allows use of vacant state land for community gardens and compiles an inventory of available lots.<sup>42</sup></p> <p>The city of Portland, Oregon enters agreements both public and private property owners to obtain community gardening space.<sup>42</sup></p>	<p><b>Untested policy idea</b> that making it easier for groups to begin community gardens will encourage their creation. Gardening is a moderate physical activity, but its effect on fruit and vegetable intake hasn't been fully studied.</p>

# NUTRITION IN COMMUNITIES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>● Provide free water, trash pick-up, and other municipal resources to community gardens.</li> </ul>		X		Escondido, California City Council adopted a policy that provides free water to community gardens when drip irrigation is used and all community gardeners be trained in water conservation. <sup>41</sup>	<b>Untested policy idea</b> to treat community gardens like other recreational facilities. Offering incentives for creating community gardens may encourage garden development. Gardening is a moderate physical activity, but its effect on fruit and vegetable intake hasn't been fully studied.
<ul style="list-style-type: none"> <li>● Provide garden space for resident use at apartment housing complexes, including low-income housing facilities.</li> </ul>	X	X	X		<b>Untested policy idea</b> to provide space to encourage gardening among housing residents.
NUTRITION LABELING					
<ul style="list-style-type: none"> <li>● Require that nutrition labels appear on all fresh meat and poultry products.</li> </ul>	X		X		<b>Promising policy idea</b> since <i>Nutrition Facts</i> labels are used by some consumers to make food-purchasing decisions <sup>43, 44</sup> and use of <i>Nutrition Facts</i> labels is positively associated with increased dietary quality. <sup>45-47</sup>
<ul style="list-style-type: none"> <li>● Require restaurants to provide nutrition information (i.e., on menus, menu boards, wrappers).</li> </ul>	X		X		<b>Promising policy idea</b> since providing nutrition information affects food choice. <sup>48-53</sup>

## NUTRITION IN COMMUNITIES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>● <b>Provide incentives for restaurants and/or grocery stores to adopt a nutrition labeling system to identify food items that meet certain nutrition standards, such as the <i>Dietary Guidelines for Americans</i>.</b></li> </ul>	X		X	Several North Carolina organizations have come together to develop a voluntary labeling system called <i>Winner's Circle</i> , which allows consumers to identify healthy foods. The program is available for use in other states. <sup>54</sup>	<b>Promising policy idea</b> since consumers use labels with health claims to make food choices. <sup>48, 53, 55-57</sup>
BREASTFEEDING					
<ul style="list-style-type: none"> <li>● <b>Require employers to provide daily, unpaid break time for a mother to express breast milk. Require that employers also make a reasonable effort to provide a private location (other than a toilet stall) in close proximity to the work place for this activity.</b></li> </ul>	X			The states of Connecticut, Illinois, Tennessee, and Minnesota require that employers provide daily, unpaid breaks and that they provide adequate location for mothers to express breast milk. <sup>58</sup>	<b>Promising policy idea</b> since women whose employers provide a breastfeeding supportive work environment utilize available facilities and equipment to express breast milk and will breastfeed at rates equivalent to women not working outside the home. <sup>59, 60</sup> Complementary evidence that workplaces save money by decreasing absenteeism, decreasing medical claims, increasing productivity, and facilitating an earlier return to work among new mothers, <sup>61-63</sup>

# NUTRITION IN COMMUNITIES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>Require or provide incentives for the establishment of breastfeeding policies at childcare facilities that provide for safe storage and procedures for using expressed breast milk, following parent's instructions to feed only breast milk, and provide a place onsite for mothers to breastfeed.</li> </ul>	X	X	X		<p><b>Untested policy idea</b> that childcare facilities can support a mother's choice to breastfeed by providing safe storage and procedures for use of expressed breast milk and by providing private facilities where mothers can comfortably breastfeed.</p>
<ul style="list-style-type: none"> <li>Exempt breastfeeding mothers from jury duty.</li> </ul>	X			<p>The states of California, Idaho, Iowa, Minnesota, and Oregon exempt breastfeeding women from jury duty.<sup>64</sup></p>	<p><b>Untested policy idea</b> that seeks to minimize the disruption of breastfeeding by eliminating separation of mother and baby for jury duty.</p>
<ul style="list-style-type: none"> <li>Exempt materials that are manufactured for the purpose of initiating, supporting, or sustaining breastfeeding from the state sales tax.</li> </ul>	X			<p>The state of Maryland exempts for the state sales and use tax the sale of tangible personal property that is manufactured for the purpose of initiating, supporting or sustaining breastfeeding.<sup>58</sup></p>	<p><b>Untested policy idea</b> that decreasing cost of breastfeeding supplies by eliminating taxes will encourage more mothers to breastfeed.</p>

# NUTRITION IN COMMUNITIES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
MISCELLANEOUS OPTIONS					
<ul style="list-style-type: none"> <li>● <b>Implement sales tax for foods of minimal nutritional value, and direct accumulated funds toward health promotion.</b></li> </ul>	X	X		<p>The state of Minnesota applies a 6.5% sales tax to candy, carbonated beverages, fruit drinks (not juice), chewing gum, and single-serve ice cream.</p> <p>The District of Columbia applies a sales tax of 5.75% to snack foods and soft drinks.<sup>65</sup></p>	<p><b>Promising policy idea</b> since a small tax can raise substantial revenue.<sup>65</sup> Analogous support from tobacco prevention and alcohol control that product price influences consumption.<sup>66-68</sup></p>
<ul style="list-style-type: none"> <li>● <b>Require that the Basic Food application process be simplified.</b></li> </ul>	X			<p>The state of Florida increased elderly participation by 26% by simplifying the food stamp program application for this group.<sup>20</sup></p>	<p><b>Untested policy idea</b> that simplifying the application process will facilitate use of Basic Food program for those 36% who are eligible but don't participate.<sup>69</sup></p>
<ul style="list-style-type: none"> <li>● <b>All food purchased with government funds must meet certain nutritional standards, such as the <i>Dietary Guidelines for Americans</i>.</b></li> </ul>	X	X		<p>Contra Costa County, CA adopted a policy that requires that "all county-sponsored functions at which meals or snacks are served must offer a healthful choice of refreshments consistent with the U.S. Dietary Guidelines."<sup>70</sup></p>	<p><b>Untested policy idea</b> that governmental bodies can support healthy eating.</p>



## NUTRITION IN SCHOOLS

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
ACCESS TO HEALTHY FOOD					
<ul style="list-style-type: none"> <li>Require the creation and implementation of food-pricing strategies that encourage purchase of nutritious foods by students, faculty, and staff. (E.g., decrease price of healthy food and/or raise price of unhealthy food.)</li> </ul>	x	x	x	Recent pilot study in one high school found that raising price of high-fat, energy dense food by 10% and lowering price of healthier food kept revenues within 5% of estimated revenues for usual pricing conditions. <sup>71</sup>	<b>Effective policy idea</b> since lowering the price of healthy foods results in increased purchase of those foods. <sup>55, 71-74</sup> Supporting evidence from tobacco and alcohol control that product price influences product consumption. <sup>66-68</sup>
<ul style="list-style-type: none"> <li>Disallow sale of foods that compete with the National School Lunch and Breakfast Programs.</li> </ul>	x	x	x	<p>School Nutrition and Food Service Policy in Maine disallows foods or beverages to be sold in competition with the National School Lunch and Breakfast Programs. All food service sales support non-profit school food service.<sup>75</sup></p> <p>California SB 677: The California Obesity Prevention Act prohibits carbonated beverages to be sold in elementary, middle, and high schools.<sup>76</sup></p>	<b>Promising policy idea</b> since students who participate in the National School Lunch and Breakfast Programs, which are required to meet the <i>Dietary Guidelines</i> , consume more key nutrients than children who do not, <sup>77-79</sup> and that students who have access to a la carte, snack bar, and/or vending machine foods consume fewer fruits and vegetables than those who do not. <sup>34-36</sup>

# NUTRITION IN SCHOOLS

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>Require the development and implementation of nutritional standards so that all foods and beverages available on school campuses and at school events are consistent with the <i>Dietary Guidelines for Americans</i> or other nutrient standards.<sup>33</sup></li> </ul>	x	x	x	<p> Washington SB 5436 mandates that an advisory committee develop a model policy regarding access to nutritious foods and opportunities for developmentally appropriate exercise by January 1, 2005.<sup>80</sup></p> <p> The Seattle School Board recently passed a comprehensive nutrition policy that sets nutritional standards, portion size limits, and pricing guidelines for all foods sold in competition with the National School Breakfast and Lunch programs.<sup>81</sup></p> <p>West Virginia Board of Education developed Standard for School Nutrition that limit sale or serving of foods of minimal nutritional value, including vending machines, classroom parties, and fundraising events.<sup>82</sup></p> <p>North Carolina developed “recommended standards for all foods available in school” that local schools and districts are encouraged to adopt.<sup>83</sup></p>	<p><b>Promising policy idea</b> since students who have access to healthy foods that are promoted, choose those foods from the school cafeteria.<sup>84, 85</sup> participate in the National School Lunch and Breakfast Programs, which are required to meet the <i>Dietary Guidelines</i>, consume more key nutrients than children who do not,<sup>77-79</sup> and that students who have access to a la carte, snack bar, and/or vending machine foods consume fewer fruits and vegetables than those who do not.<sup>34-36</sup></p>

## NUTRITION IN SCHOOLS

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>● Provide free breakfast and/or free lunch to all students, regardless of their eligibility for free or reduced price meals.</li> </ul>	X	X	X	<ul style="list-style-type: none"> <li>🍏 Seattle Public Schools require all schools with 80% or more students eligible for free and reduced price meals to provide free breakfast to all students.<sup>86</sup></li> <li>🍏 Tacoma Public Schools provide breakfast for every student.</li> <li>🍏 Soap Lake School District provides free breakfast and lunch to all students.</li> </ul>	<p><b>Promising policy idea</b> since students who participate in the National School Lunch and Breakfast Programs consume more key nutrients than children who do not.<sup>77-79</sup> Supporting evidence that students who are certified to receive free or reduced price meals are more likely to participate in the programs.<sup>87</sup></p>
<ul style="list-style-type: none"> <li>● Develop a district or school policy that requires the establishment of salad bars in all K-12 schools.</li> </ul>		X	X	<ul style="list-style-type: none"> <li>🍏 Olympia School District began salad bar that featured locally grown fruits and vegetables. Saw increases in nutrition program participation and fruit and vegetable consumption.<sup>88</sup></li> </ul>	<p><b>Promising policy idea</b> since offering a salad bar increases fruit and vegetable consumption among students.<sup>88, 89</sup> Schools that have a salad bar offer a wider variety of fruits and vegetables and have higher lunch program participation rates than schools that do not.<sup>90</sup></p>
<ul style="list-style-type: none"> <li>● Provide additional funding to expand the Summer Food Service Program for Children.</li> </ul>	X				<p><b>Untested policy idea</b> that providing additional state funding to support the Summer Food Service Program for Children will increase food security for low-income children.</p>
<ul style="list-style-type: none"> <li>● Prohibit or set restrictions on exclusive marketing contracts between school districts and soft drink companies.</li> </ul>	X	X	X	<ul style="list-style-type: none"> <li>San Francisco School District passed the <i>Commercial-Free Schools Act</i> that prohibits the district from entering an exclusive contract with a soft drink company.<sup>91</sup></li> </ul>	<p><b>Untested policy idea</b> that prohibiting or limiting exclusive contracts will discourage availability of soda in schools. Complementary evidence that soda consumption leads to excess calories,<sup>78</sup> and weight gain,<sup>11, 12</sup> and displace more nutrient-rich beverages such as milk.<sup>13, 14</sup></p>

# NUTRITION IN SCHOOLS

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>Develop a policy that establishes criteria for and encourages purchasing from local farmers.</li> </ul>	x	x	x	<p> Olympia School District began salad bar that featured locally grown fruits and vegetables. Saw increases in nutrition program participation and fruit and vegetable consumption.<sup>88</sup></p> <p> Seattle Public Schools nutrition policy encourages providing food and beverages that are locally grown and produced.<sup>86</sup></p> <p>Santa Monica-Malibu School District featured locally grown fruits and vegetables on the salad bars at several schools. Saw increases in use of salad bar after local food was offered.<sup>92</sup></p> <p>The Berkeley School Board Food Policy states that the district will purchase food from school gardens and local farms as a first priority.<sup>93</sup></p>	<p><b>Untested policy idea</b> that purchasing from local farmers will increase student interest in and satisfaction with fresh fruits and vegetables, thereby encouraging consumption of these items. Some evidence that student participation in lunch salad bar option increased when local fruits and vegetables were featured.<sup>92</sup></p>
<ul style="list-style-type: none"> <li>Disallow marketing of food and beverages on school grounds and at school-sponsored events.</li> </ul>	x	x	x		<p><b>Untested policy idea</b> that eliminating marketing will discourage consumption of foods of minimal nutritional value. Complementary evidence that children exposed to food advertisements will choose advertised food products more often than children who were not exposed and most food advertising directed at children is for high-sugar cereals, fast food restaurants, and candy.<sup>94-96</sup></p>

# NUTRITION IN SCHOOLS

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>Develop a policy that requires schools to provide students with a reasonable minimum time to eat lunch.</li> </ul>	X	X	X	The state of Connecticut recently passed HB 5344 which states that each local and regional board of education shall require each school under its jurisdiction offer students a “daily lunch period of not less than 20 minutes.” <sup>97</sup>	<b>Untested policy idea</b> that providing students with sufficient time to eat will encourage them to choose full meals rather than snack items and will allow them to respond to feelings of hunger.
<ul style="list-style-type: none"> <li>Develop a policy that requires recess to be scheduled before lunch, not after lunch.</li> </ul>	X	X	X	 Seattle Public Schools encourages schools to schedule recess time immediately prior to serving lunch. <sup>86</sup> Several elementary schools in Montana implemented a recess below lunch policy. Teachers reported decreased discipline problems and students were more ready to learn after returning to the classroom. <sup>98</sup>	<b>Untested policy idea</b> that providing students time for recess before offering lunch will encourage students to eat the full meal and decrease cafeteria waste due to students leaving their meal to play at recess. <sup>99, 100</sup>
NUTRITION LABELING					
<ul style="list-style-type: none"> <li>Require that nutrition information be either posted or appear on the food labels of all food sold on school grounds or at school-sponsored events.</li> </ul>	X	X	X		<b>Promising policy idea</b> since providing nutrition information affects food choice. <sup>48-53</sup>
<ul style="list-style-type: none"> <li>Require or provide incentives for the creation and implementation of a nutrition labeling system to identify food items that meet certain nutrition standards, such as the <i>Dietary Guidelines for Americans</i>.</li> </ul>	X	X	X	Several North Carolina organizations have come together to develop a voluntary labeling system called <i>Winner’s Circle</i> , which allows consumers to identify healthy foods. The program is available for use in other states. <sup>54</sup>	<b>Promising policy idea</b> since consumers use labels with health claims to make food choices. <sup>48, 53, 55-57</sup>



## NUTRITION IN WORKSITES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
ACCESS TO HEALTHY FOOD					
<ul style="list-style-type: none"> <li>● Provide price incentives for the purchase of healthy food at worksite cafeterias, snack bars, and vending machines (e.g., decrease price of healthy foods and/or increase price of foods of limited nutritional value).</li> </ul>	x	x	x		<b>Effective policy idea</b> since lowering the price of healthy foods results in increased purchase of those foods. <sup>55, 71-74</sup>

## NUTRITION IN WORKSITES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>Require that a certain percentage of all meals offered in the worksite cafeterias, vending machines, and other food outlets will meet certain nutritional standards, such as the <i>Dietary Guidelines for Americans</i>.</li> </ul>	x	x	x	<p><i>Better Choices</i> is a National Institutes of Health program that features vending machine snacks that are low in fat, salt, and calories. NIH also offers the <i>DeLITEful Entrée</i> program where the cafeteria features at least one entrée per day that is low in fat, saturated fat, sodium, and cholesterol.<sup>101, 102</sup></p> <p>The North Carolina Craven County Health Department created a healthy snack bar for employees. The snack bar is self-sustaining and raises a modest profit, which is used to further employee wellness activities.<sup>103</sup></p> <p>Waters Corporation in Milford, Massachusetts contracts with Sodexo Marriott to provide an in-house cafeteria where at least one non- or low-fat or no-cholesterol entrée is offered every meal.<sup>2</sup> 104</p>	<p><b>Promising policy idea</b> since a barrier to healthy eating at work is lack of availability of healthy foods.<sup>105, 106</sup> and that offering a variety of healthy food in a cafeteria setting in addition to providing education, health promotion, and/or price incentives will positively effect customer food choices.<sup>72, 84, 107-110</sup></p>
<ul style="list-style-type: none"> <li>Establish a policy that only foods meeting certain nutritional standards, such as the <i>Dietary Guidelines for Americans</i>, will be served at meetings, seminars, and workshops.</li> </ul>	x	x	x		<p><b>Untested policy idea</b> that providing only healthy food at meetings will encourage people to eat healthfully.</p>

<sup>2</sup> Water Corporation reports that offering the healthy options has helped increase patronage of the cafeteria by 5% and sales by 3%.

## NUTRITION IN WORKSITES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>● <b>Work with an existing farmers market to establish a farmers' market or community supported agriculture drop-off onsite or near the worksite.</b></li> </ul>	x	x	x	 The Pike Place Market community supported agriculture (CSA) program has developed relationships with many Seattle area worksites so that market baskets are dropped off for participating members once per week during the growing season. <sup>111</sup>	<b>Untested policy idea</b> that establishing farmers' market or community supported agriculture program close to work will increase fruit and vegetable consumption among employees. People who frequent farmers markets think their fruit and vegetable consumption increases due to their purchases at the market. <sup>112</sup>
NUTRITION LABELING					
<ul style="list-style-type: none"> <li>● <b>Post nutrition information for all menus, menu boards, and food sold in worksite cafeterias or other areas.</b></li> </ul>	x	x	x		<b>Promising policy idea</b> since providing nutrition information affects food choice. <sup>48-53</sup>
<ul style="list-style-type: none"> <li>● <b>Adopt a nutrition labeling system to identify food items that meet certain nutrition standards, such as the <i>Dietary Guidelines for Americans</i>.</b></li> </ul>	x	x	x	Several North Carolina organizations have come together to develop a voluntary labeling system called <i>Winner's Circle</i> , which allows consumers to identify healthy foods. The program is available for use in other states. <sup>54</sup>	<b>Promising policy idea</b> since consumers use labels with health claims to make food choices. <sup>48, 53, 55-57</sup>
BREASTFEEDING					
<ul style="list-style-type: none"> <li>● <b>Develop incentive programs that encourage employers to provide breastfeeding-friendly worksites.</b></li> </ul>	x	x	x	Texas law gives the Texas Department of Health the responsibility to designate Texas businesses as "mother-friendly" if businesses create worksite policies intended to support lactating mothers. <sup>113</sup>	<b>Promising policy idea</b> since women whose employers provide a supportive breastfeeding work environment utilize available facilities and equipment to express breast milk and will breastfeed at rates equivalent to women not working outside the home. <sup>59, 60</sup> Complementary evidence that workplaces save money by decreasing absenteeism, decreasing medical claims, increasing productivity, and facilitating an earlier return to work among new mothers, <sup>61-63</sup>

## NUTRITION IN WORKSITES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>Establish a supportive breastfeeding worksite policy for worksites that provides flexible work schedules; creates a lactation room equipped with breast pumps, refrigerators, and chairs; and gives mothers access to a contracted lactation consultant.</li> </ul>	x	x	x	<p> Weyerhaeuser Company created “New Moms” rooms that are equipped with top-of-the-line electric breast pumps, refrigerators, cots, and chairs.<sup>114</sup></p> <p>The Home Depot provides breastfeeding classes to pregnant employees and their spouses, access to consultations by a lactation consultant, access to hospital-grade breast pumps onsite, and subsidizes the purchase of portable electric breast pumps for all participating employees. The company estimates that it has saved \$42,000 during the five years the program has operated.<sup>62</sup></p>	<p><b>Promising policy idea</b> since women whose employers provide a breastfeeding supportive work environment utilize available facilities and equipment to express breast milk and will breastfeed at rates equivalent to women not working outside the home.<sup>59, 60</sup> Complementary evidence that workplaces save money by decreasing absenteeism, decreasing medical claims, increasing productivity, and facilitating an earlier return to work among new mothers,<sup>61-63</sup></p>
<ul style="list-style-type: none"> <li>Establish a childcare facility on-site or close to the worksite so that mothers can continue to breastfeed while their infant is in daycare.</li> </ul>	x	x	x	<p> Pay Plus Benefits is a small Kennewick, Washington company with 16 employees. They provide a subsidized child care facility on-site for their employees. The company says this allows employed mothers to breastfeed longer.<sup>114</sup></p>	<p><b>Untested policy idea</b> that providing conveniently accessible childcare facilities will facilitate a working mother’s choice to breastfeed by allowing her to breastfeed her infant during working hours.</p>
WELLNESS PROGRAMS					
<ul style="list-style-type: none"> <li>Provide incentives to encourage employers to provide wellness programs that have significant healthy eating components.</li> </ul>	x				<p><b>Promising policy idea</b> since comprehensive worksite wellness programs are clinically effective, lower absenteeism, and reduce health care costs for employers.<sup>115-117</sup></p>



## NUTRITION IN HEALTHCARE

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
ACCESS TO HEALTHY FOOD					
<ul style="list-style-type: none"> <li>● <b>Create a hospital/clinic policy that a certain percentage of meals offered in the cafeterias, vending machines, and other food outlets will meet certain nutritional standards, such as the <i>Dietary Guidelines for Americans</i>.</b></li> </ul>	X	X	X		<p><b>Promising policy idea</b> since offering a variety of healthy food in a cafeteria setting in addition to providing education, health promotion, and/or price incentives positively affects customer food choices.<sup>72, 84, 107-110</sup></p>
NUTRITION LABELING					
<ul style="list-style-type: none"> <li>● <b>Adopt a nutrition labeling system to identify food items that meet certain nutrition standards, such as the <i>Dietary Guidelines for Americans</i>.</b></li> </ul>	X	X	X	Several North Carolina organizations have come together to develop a voluntary labeling system called <i>Winner's Circle</i> , which allows consumers to identify healthy foods. The program is available for use in other states. <sup>54</sup>	<p><b>Promising policy idea</b> since consumers use labels with health claims to make food choices.<sup>48, 53, 55-57</sup></p>
<ul style="list-style-type: none"> <li>● <b>Post nutrition information for all food sold in worksite cafeterias or other areas.</b></li> </ul>	X	X	X		<p><b>Promising policy idea</b> since providing nutrition information affects food choice.<sup>48-53</sup></p>

# NUTRITION IN HEALTHCARE

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
BREASTFEEDING					
<ul style="list-style-type: none"> <li>● <b>Create a hospital breastfeeding policy that is consistent with the UNICEF/WHO baby friendly hospital guidelines.</b><sup>118</sup></li> </ul>	X	X	X	 Evergreen Hospital Medical Center in Kirkland, WA, St. Mary Medical Center in Walla Walla, WA, Okanogan-Douglas District Hospital in Brewster, WA, and Tacoma General Hospital in Tacoma, WA have been awarded the “baby-friendly” hospital designation by implementing the UNICEF/WHO 10 Steps to Successful Breastfeeding. <sup>119</sup>	<b>Effective policy idea</b> since implementing the 10 steps outlined in the UNICEF/WHO baby friendly hospital initiative increases breastfeeding initiation rates. <sup>64, 120-123</sup>
<ul style="list-style-type: none"> <li>● <b>Require or provide incentives for insurance companies and health management organizations to provide coverage for telephone or in-person lactation consultation post-delivery.</b></li> </ul>	X	X	X		<b>Promising policy idea</b> since providing in-person or telephone support increases breastfeeding duration. <sup>124</sup>
<ul style="list-style-type: none"> <li>● <b>Require all healthcare professionals who provide maternal and childcare services to undergo training in lactation support.</b></li> </ul>	X	X	X	 Evergreen Hospital Medical Center in Kirkland, WA provides a series of courses for health professionals in breastfeeding mother and infant care and in designing lactation support programs <sup>125</sup>	<b>Untested policy idea</b> that providing lactation training to healthcare providers will increase breastfeeding rates. Training may influence breastfeeding rates if part of a comprehensive intervention package, but implemented alone, training does not influence breastfeeding rates. <sup>126-128</sup>
<ul style="list-style-type: none"> <li>● <b>Provide funding to WIC clinics to purchase breast pumps for loan to program participants.</b></li> </ul>	X				<b>Untested policy idea</b> that providing breast pumps to breastfeeding mothers participating in the WIC program will encourage continuation of breastfeeding after returning to work or school. Some evidence that a loan program at WIC clinics can increase initiation rates. <sup>129</sup>

# NUTRITION IN HEALTHCARE

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>Require that all schools providing training to healthcare professionals integrate breastfeeding training into current curriculum.</li> </ul>	X	X	X		<p><b>Untested policy idea</b> that requiring schools providing healthcare training to integrate breastfeeding training into the curriculum would result in higher breastfeeding rates. Some evidence that breastfeeding rates can increase when healthcare staff is educated about breastfeeding.<sup>130</sup></p>
WELLNESS PROGRAMS					
<ul style="list-style-type: none"> <li>Require or provide incentives for health insurance companies and health management organizations to include preventive services related to nutrition as part of their benefit packages.</li> </ul>	X				<p><b>Promising policy idea</b> since behavioral counseling provided by a trained healthcare provider in the primary care setting is effective at changing dietary behavior<sup>131</sup> and combined nutrition and physical activity counseling may produce weight loss in obese patients.<sup>6</sup></p>
<ul style="list-style-type: none"> <li>Offer discounts on health insurance premiums on a sliding scale for employers based on the employers' health and wellness initiatives.</li> </ul>			X	<p>The state of New Hampshire established a method by which insurance companies can discount the premium rate for health benefit plans which include financial incentives for those insured to participate.<sup>132</sup></p>	<p><b>Promising policy idea</b> since comprehensive worksite wellness programs are clinically effective, lower absenteeism, and reduce health care costs for employers.<sup>115-117</sup></p>



## PHYSICAL ACTIVITY IN COMMUNITIES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
ACCESS TO RECREATIONAL OPPORTUNITIES					
<ul style="list-style-type: none"> <li>● <b>Incorporate and fund plans for the creation of additional walking and biking trails, parks, and community recreation facilities in the recreation section of the comprehensive plan.</b></li> </ul>		X		<ul style="list-style-type: none"> <li>🍏 The city of Wenatchee, WA has outlined the development of multiuse trails and corridor access systems in its 2002 comprehensive plan.<sup>133</sup></li> <li>🍏 The city of Olympia, WA has established the creation of an “overall system of walking and bicycling routes” in its comprehensive plan.<sup>134</sup></li> </ul>	<p><b>Effective policy idea</b> since creating or improving access to places for physical activity combined with informational outreach activities can increase physical activity.<sup>135</sup> Access to nearby recreational walking/biking trails, parks, and other recreation facilities is positively correlated with physical activity<sup>136-139</sup> and negatively correlated with overweight.<sup>140</sup></p>
<ul style="list-style-type: none"> <li>● <b>Provide funding for transportation and sliding scale fee options to increase access to existing physical activity programs for underserved populations.</b></li> </ul>	X	X	X	<ul style="list-style-type: none"> <li>🍏 The state of Alabama allocated \$12,000 from the state’s general funds to a Birmingham YMCA to provide low-income youth access to a swimming program.<sup>141</sup></li> </ul>	<p><b>Effective policy idea</b> since improving access to places for physical activity combined with informational outreach can increase physical activity.<sup>135</sup></p>
<ul style="list-style-type: none"> <li>● <b>Provide walking/biking maps for trails and paths, including connections between paths.</b></li> </ul>	X	X	X	<ul style="list-style-type: none"> <li>🍏 King County provides walking and biking maps for local recreational trails and neighborhoods.<sup>142, 143</sup></li> <li>🍏 The city of Moses Lake Parks and Recreations Department publishes a guide to the city’s activity paths and trail etiquette.<sup>144</sup></li> <li>🍏 Thurston County provides an online interactive bicycling map.<sup>145</sup></li> </ul>	<p><b>Promising policy idea</b> since providing informational outreach is an important component to the success of programs that create or increase access to places for physical activity.<sup>135, 146</sup></p>

# PHYSICAL ACTIVITY IN COMMUNITIES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>Establish tax incentives/exceptions for private donation of easements for expanding walking and biking paths.</li> </ul>	X	X			<p><b>Promising policy idea</b> since a better walking and cycling infrastructure (sidewalks and bike paths) is associated with more individual walking and bicycling trips.<sup>136, 138-140, 146-148</sup></p>
<ul style="list-style-type: none"> <li>Include in the comprehensive plan that existing public facilities will be improved to facilitate physical activity before building additional facilities.</li> </ul>		X		<p> The comprehensive plan for the City of Moses Lake has as a goal to “provide public facilities and services in a manner that protects investment in existing facilities and maximizes the use of existing facilities”<sup>149</sup></p> <p> The Spokane Parks and Recreation Department used over a mile of previous rail corridor to create the Trolley Trail, which connects the city with two rural trails<sup>150</sup></p>	<p><b>Untested policy idea</b> that reinvesting resources in existing facilities to encourage physical activity is an efficient use of available funds and helps maintain and encourage use of older neighborhoods that may be inherently more walkable than outlying neighborhoods.</p>

# PHYSICAL ACTIVITY IN COMMUNITIES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
URBAN PLANNING AND TRANSPORTATION					
<ul style="list-style-type: none"> <li>● <b>Within the transportation section of the comprehensive plan, provide for the creation and funding of an integrated network of paved pedestrian and bicycle paths that serve as an alternative to roadways and facilitate non-motorized travel to and through neighborhoods, shopping, parks, and schools.</b></li> </ul>		X		<p>🍏 A policy in the land use element of the comprehensive plan for the city of Tacoma, WA states that city will “encourage pedestrian linkages and corridors to tie neighborhoods together.”<sup>151</sup></p> <p>🍏 The Neighborhood Connections project, a collaboration between Climate Solutions and the City of Olympia, WA, identified, designed, and planned a network of paths that promote non-motorized transportation. Olympia’s comprehensive plan encourages the creation of a network of paths for non-motorized transportation.<sup>152, 153</sup></p> <p>🍏 The city of Pullman, WA has outlined in the Pedestrian/Bicycle Circulation Plan how it will provide for the establishment and maintenance of “cross routes” that link major activity centers in the community, as well as circuitous “loop routes” for recreational purposes.<sup>154</sup></p>	<p><b>Effective policy idea</b> since creating or improving access to places for physical activity combined with informational outreach activities can increase physical activity.<sup>135</sup> Better walking and cycling infrastructure (sidewalks and bike paths) is associated with more individual walking and bicycling trips.<sup>136, 138-140, 147, 148</sup></p>
<ul style="list-style-type: none"> <li>● <b>Mandate that a greater percentage of federal transportation dollars are spend on pedestrian and bicycle projects, inclusive of, but not limited to, the creation of paths and trails.</b></li> </ul>	X			<p>🍏 The Paths and Trails Law<sup>155</sup> requires the WA State Department of Transportation to spend 0.3% of the state and federal construction budget for non-motorized trails and paths, and it requires cities and counties to spend a minimum of 0.5% of their gas tax funding on non-motorized paths and trails.<sup>153, 156</sup></p>	<p><b>Promising policy idea</b> since better walking and cycling infrastructure (sidewalks and bike paths) is associated with more individual walking and bicycling trips.<sup>136, 138-140, 146-148</sup></p>

## PHYSICAL ACTIVITY IN COMMUNITIES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>Require that new developments install sidewalks and internal connections to form a pedestrian and bicycle network.</li> </ul>	x	x	x	<p> The City of Port Townsend, WA requires new subdivisions to provide pedestrian and bicycle paths that connect roads and neighborhoods. City real estate taxes pay for some connections. City street funds will develop volunteer efforts to build and maintain connecting trails.</p> <p>The city of Greensboro, North Carolina requires sidewalks to be built along both sides of major and minor thoroughfares and collector streets. If a development is built between a pedestrian traffic destination, pedestrian mid-block walkways (connections) have to be created.<sup>157</sup></p> <p>The city of Davidson, North Carolina offers a 30% reduction in transportation fees charged to a developer in return for pedestrian-friendly design features and an additional 30% reduction for transit-friendly features.<sup>158</sup></p>	<p><b>Promising policy idea</b> since better walking and cycling infrastructure (sidewalks and bike paths) is associated with more individual walking and bicycling trips.<sup>136, 138-140, 146-148</sup></p>
<ul style="list-style-type: none"> <li>Disallow or create disincentives for the creation of cul-de-sacs and dead-end roads in new development projects.</li> </ul>	x	x	x	<p> The comprehensive plan for the city of Olympia, WA discourages the construction of cul-de-sacs so that cul-de-sacs will only be allowed as “the result of topographic constraints, wetlands, water bodies, or unusual property shapes.” The plan also gives a 300 feet maximum length for cul-de-sacs and states that they should be designed with signed and designated pedestrian/bicycle connections to adjoining streets.<sup>153</sup></p>	<p><b>Promising policy idea</b> since street connectivity is a factor in the “walkability” of a neighborhood and that “walkability” is positively associated with frequency of walking and biking trips.<sup>139, 147, 159</sup></p>

## PHYSICAL ACTIVITY IN COMMUNITIES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>● <b>Create safer pedestrian and bicyclist areas by instituting traffic calming measures.</b></li> </ul>		X		<p>🍏 The City of Kirkland, WA has established the Neighborhood Traffic Control Program which has implemented a variety of traffic calming measures<sup>160</sup></p>	<p><b>Promising policy idea</b> since traffic engineering measures, like single-lane roundabouts, sidewalks, exclusive pedestrian signal phasing, pedestrian refuge islands, and increased intensity of roadway lighting, can decrease pedestrian-vehicle crashes.<sup>161</sup></p>
<ul style="list-style-type: none"> <li>● <b>Encourage the creation of mixed-use neighborhoods through zoning rules, incentives, and disincentives in the comprehensive plan.</b></li> </ul>	X	X		<p>🍏 In the comprehensive plan, the city of Bellevue, WA encourages development of housing in mixed residential/commercial settings and provides incentives for residential development in commercial zones.<sup>162</sup></p> <p>🍏 One section in the land use element of the comprehensive plan for the city of Tacoma, WA is devoted to policies that encourage the creation of mixed-use development.<sup>151</sup></p>	<p><b>Promising policy idea</b> since mixed use neighborhoods that provide close proximity of shopping, work, and other non-residential land use to housing are associated with greater walking and/or cycling among residents<sup>139, 147, 148, 163, 164</sup> and decreased pedestrian fatality rates.<sup>165</sup> Corresponding evidence that residents of counties with high urban sprawl walk fewer minutes, have greater prevalence of obesity, have higher BMIs, and have higher prevalence of hypertension than counties with lower urban sprawl.<sup>166-168</sup></p>
<ul style="list-style-type: none"> <li>● <b>Locate business in areas designated as mixed use.</b></li> </ul>			X		<p><b>Promising policy idea</b> since mixed use neighborhoods that provide close proximity of shopping, work, and other non-residential land use to housing are associated with greater walking and/or cycling among residents<sup>139, 147, 148, 163, 164</sup> and decreased pedestrian fatality rates.<sup>165</sup> Corresponding evidence that residents of counties with high urban sprawl walk fewer minutes, have greater prevalence of obesity, have higher BMIs, and have higher prevalence of hypertension than counties with lower urban sprawl.<sup>166-168</sup></p>

# PHYSICAL ACTIVITY IN COMMUNITIES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>● Provide incentives to encourage builders of new multilevel buildings to make stairways accessible and attractive.</li> </ul>	X	X	X	<p>🍏 At the Seattle Starbucks headquarters, stairwells are centrally located and attractively designed while the elevators are inconspicuous.<sup>169</sup></p>	<p><b>Promising policy idea</b> since making stairways accessible and attractive, as well as posting signs prompting their use and playing music increases stair use.<sup>135, 170, 171</sup></p>
<ul style="list-style-type: none"> <li>● In the housing element of the comprehensive plan, outline a method for encouraging housing development near public transit hubs.</li> </ul>		X		<p>🍏 The city of Seattle’s comprehensive plan promotes housing development and preservation in coordination with transit plans and in proximity to light rail stations and other transit hubs.<sup>40</sup></p> <p>🍏 Seattle was the first city in the nation to offer location efficient mortgages (LEMs). LEMs consider the attributes of the neighborhood where the home that is for sale is located (e.g., proximity to public transit hub) in the determination of the amount of mortgage for which a borrower can qualify.<sup>172, 173</sup></p>	<p><b>Promising policy idea</b> since mixed use neighborhoods that provide close proximity of shopping, work, and other non-residential land use to housing are associated with greater walking and/or cycling among residents<sup>139, 147, 148, 163, 164</sup> and decreased pedestrian fatality rates.<sup>165</sup> Corresponding evidence that counties with high urban sprawl walk fewer minutes, have greater prevalence of obesity, have higher BMIs, and have higher prevalence of hypertension than counties with lower urban sprawl.<sup>166-168</sup></p>
<ul style="list-style-type: none"> <li>● Install bike racks and bike lockers near worksites, shopping centers, transit hubs, and other places that would encourage the use of a bicycle for transportation.</li> </ul>	X	X	X	<p>🍏 Metro transit in Seattle provides bike racks and lockers at several park &amp; rides and transit centers in and around Seattle.<sup>174</sup></p> <p>🍏 As a policy of the transportation element of its comprehensive plan, the city of Des Moines, WA says that it will incorporate bicycle racks in its downtown area to encourage non-motorized transportation.<sup>175</sup></p> <p>The city of Chicago recently built a bicycle transit station that includes free indoor parking for 300 bikes, showers, lockers, bicycle rental and repair, and a café.<sup>176</sup></p>	<p><b>Untested policy idea</b> that providing facilities for safely securing bicycles will encourage bicycling.</p>

# PHYSICAL ACTIVITY IN COMMUNITIES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>● <b>Make physical activity a priority within the comprehensive plan by requiring that all new building and transportation projects consider the impact of and make allowances for the effect of the project on physical activity.</b></li> </ul>		X		<p>🍏 The comprehensive plan for the City of Kirkland, WA states that land use within the downtown core will be oriented to pedestrians and physical activity will be considered in development plans.<sup>177</sup></p> <p>🍏 In its comprehensive plan, the city of Woodinville, WA encourages pedestrian amenities as part of all new public and private development and requires that all major public and private developments plan for and obtain approval of pedestrian access in addition to vehicle and circulation schemes.<sup>178</sup></p>	<p><b>Untested policy idea</b> that requiring consideration of the impact of building and transportation projects on physical activity will cause projects to take affirmative steps to encourage physical activity.</p>
<ul style="list-style-type: none"> <li>● <b>Locate parking lots out of the way of pedestrian and bicycle paths.</b></li> </ul>	X	X	X	<p>🍏 In the transportation element of the comprehensive plan, the city of Woodinville, WA “encourages parking facilities to be designed to facilitate transit use and pedestrian access.” The plan also states that public and private development will be encouraged to locate building entrances and transit facilities near each other.<sup>178</sup></p>	<p><b>Untested policy idea</b> that decreasing impediments to walking and biking by building parking lots out of the way of non-motorized transportation will encourage walking and biking. Corresponding evidence that supportive walking and biking infrastructure is associated with more walking and bicycling trips.<sup>136, 138-140, 147, 148</sup></p>

## PHYSICAL ACTIVITY IN COMMUNITIES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>● <b>Create a pedestrian and/or bicycling master plan that details steps the city or town will take to make the community more supportive of physical activity. Incorporate the master plan into the comprehensive plan.</b></li> </ul>		X		<p> The “Regional Bicycle and Pedestrian Implementation Strategy for the Central Puget Sound Region” was developed as an adjunct to the area’s regional transportation plan and outlines 15 objectives that would make the area more bikable and walkable.<sup>179</sup></p> <p>The City of Portland has had a pedestrian master plan since 1998 that has provided guidance and prioritization for municipal actions.<sup>180</sup></p>	<p><b>Untested policy idea</b> that creating a master plan will provide guidance for the development of community infrastructure that is conducive to physical activity.</p>
<b>MISCELLANEOUS OPTIONS</b>					
<ul style="list-style-type: none"> <li>● <b>Eliminate sales tax for the purchase of exercise equipment by individuals.</b></li> </ul>	X	X			<p><b>Promising policy idea</b> since owning or having access to home exercise equipment is positively associated with physical activity.<sup>136, 138, 146, 181, 182</sup></p>
<ul style="list-style-type: none"> <li>● <b>Establish collaborative policies among state and local agencies so that all state and local recreation areas promote physical activity.</b></li> </ul>	X	X		<p>The U.S. Department of Health and Human Services, Department of Agriculture, Department of the Interior, and Department of the Army released a memorandum of understanding to establish a framework for collaboration among the agencies to promote physical activity on public land and water resources.<sup>183</sup></p>	<p><b>Promising policy idea</b> since access to recreational walking/biking trails, parks, and other recreation facilities is positively correlated with physical activity<sup>136-138</sup> and negatively correlated with overweight.<sup>140</sup></p>



# PHYSICAL ACTIVITY IN SCHOOLS

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
ACCESS TO RECREATIONAL OPPORTUNITIES					
<ul style="list-style-type: none"> <li>● <b>Provide after hours access to recreational facilities to students, faculty, staff, and community members.</b></li> </ul>	X	X	X	<p>🍏 Moses Lake School District has a policy to encourage use of school facilities by opening facilities to outside groups/activities for a fee. The high school is open for walkers from 3:30 p.m. to 9:00 p.m. every day the school is in session<sup>184</sup></p> <p>🍏 Skagit County Parks and Recreation uses Juvenile Justice grant funds to open five school gymnasiums on weekends to youth aged 12 to 18 years<sup>150</sup></p> <p>The state of Massachusetts gives “incentive percentage points” to schools when it considers applications for state funds if schools have demonstrated innovative community uses of school facilities.<sup>185</sup></p>	<p><b>Effective policy idea</b> since creating or improving access to places for physical activity combined with informational outreach activities can increase physical activity.<sup>135</sup> Access to nearby recreational walking/biking trails, parks, and other recreation facilities is positively correlated with physical activity<sup>136-139</sup> and negatively correlated with overweight.<sup>140</sup></p>
<ul style="list-style-type: none"> <li>● <b>Provide funding to enhance physical activity facilities at schools. (Add bike racks or lockers; install lights in outdoor fields; build walking trails on school grounds; and maintain well-equipped playing fields and physical activity centers.)</b></li> </ul>	X	X	X		<p><b>Promising policy idea</b> since increasing access to facilities to be physically active combined with informational outreach can increase physical activity.<sup>139, 186</sup> Supporting evidence that making children’s play environment more visually appealing increases physical activity.<sup>187</sup></p>

# PHYSICAL ACTIVITY IN SCHOOLS

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
URBAN PLANNING AND TRANSPORTATION					
<ul style="list-style-type: none"> <li>● <b>Provide funding to expand Safe Routes to School programs.</b></li> </ul>	X	X		<p> The WA State Department of Transportation awarded grants to local communities to create infrastructure to support local Safe Routes to School.<sup>188</sup></p> <p>California passed Safe Routes to School legislation that provides between \$25 and \$45 million per year over three years in federal transportation safety funding to improve the safety and design of streets and sidewalks along routes to schools. Funding requires 10% match of local funds.<sup>189</sup></p> <p>Arlington County, Virginia uses county funds to provide walking route maps to parents and students, perform capital improvements to roadways and sidewalks around schools, provide police monitoring of traffic around schools, and conduct walking/biking education in schools.<sup>189</sup></p>	<p><b>Promising policy idea</b> since active transportation to and from school can contribute to children’s daily physical activity<sup>190</sup> and that Safe Routes to School programs can increase the number of students walking and biking to school.<sup>191-193</sup></p>

# PHYSICAL ACTIVITY IN SCHOOLS

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>● <b>Make it a priority of the transportation element of the comprehensive plan to make improvements to the transportation infrastructure (e.g., crosswalks, sidewalks, etc.) around schools and on school routes.</b></li> </ul>		X		<p>🍏 The comprehensive plan of the city of Federal Way, WA states that capital budget decisions will be made to support a system of safe walking routes to school.</p> <p>🍏 Projects under the WA State Department of Transportation Safe Routes to School grant program include the creation of sidewalks, safe crossing points, neighborhood connection and other walking and biking paths, pedestrian overpasses, improving police enforcement, installing traffic calming features, and installing path lighting.<sup>188</sup></p> <p>The New York City Department of Transportation completed a survey of area schools to determine which routes near schools are most in need of safety modifications. Long-term improvement projects involving capital construction to improve safety will be completed at 32 schools.<sup>194</sup></p>	<p><b>Promising policy idea</b> since a barrier to walking or biking to school is traffic danger,<sup>195</sup> and that traffic engineering measures, like single-lane roundabouts, sidewalks, exclusive pedestrian signal phasing, pedestrian refuge islands, and increased intensity of roadway lighting, can decrease pedestrian-vehicle crashes.<sup>161</sup> Complementary evidence that better walking and cycling infrastructure (sidewalks and bike paths) is associated with more individual walking and bicycling trips.<sup>136, 138-140, 146-148</sup></p>
<ul style="list-style-type: none"> <li>● <b>Require or provide incentives to encourage remodeling of existing school buildings rather than construction of new buildings.</b></li> </ul>	X	X		<p>The state of Vermont's State Board of Education encourages local school boards to give preference to the renovation of existing buildings and facilities over the creation of new facilities.<sup>185</sup></p>	<p><b>Untested policy idea</b> that providing incentives for school districts to renovate existing schools rather than build new schools will lead to the renovation and development of more densely populated neighborhoods. Higher density, mixed-use neighborhoods are associated with increased physical activity.<sup>139, 147</sup></p>

## PHYSICAL ACTIVITY IN SCHOOLS

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>Adapt state and local school board recommendations to minimize the amount of land required for new school buildings.</li> </ul>	X	X		 The Seattle School District's guidelines for new facilities provide for fewer acres of land for new elementary schools than are recommended by the state of Washington.	<b>Untested policy idea</b> that decreasing the amount of land required for construction of a new school may encourage schools to be built in more densely populated neighborhoods. Higher density, mixed-use neighborhoods are associated with increased physical activity. <sup>139, 147</sup>
<ul style="list-style-type: none"> <li>Require and provide funding for the creation of walking/biking map that details safe routes students can take to school.</li> </ul>	X	X		<p>The city of Phoenix's School Safety Program created a "Safest Route to School" walking plan that helps students and parents know which routes are the safest for walking or biking to school.<sup>196</sup></p> <p>The City of Springfield, Missouri created safe route maps for all Springfield elementary schools. Maps are available online in PDF file format.<sup>197</sup></p>	<b>Untested policy idea</b> that providing information to parents and students about safe routes to for active commuting will increase the number of students walking or biking to school. Complementary evidence that route maps are effective at increasing active transportation to and from school when part of a comprehensive Safe Routes to School program. <sup>191-193</sup>
<ul style="list-style-type: none"> <li>Develop incentives or disincentives that encourage faculty, staff, and students to commute via non-motorized means.</li> </ul>	X	X		 Mercer Island High School has a policy that restricts parking privileges to seniors so that only 40% of students who are of driving age are permitted to drive to school <sup>150</sup>	<b>Untested policy idea</b> that providing incentives or disincentives for active commuting will encourage physical activity.
<ul style="list-style-type: none"> <li>Require, encourage, or provide incentives in the School Facilities Manual so that schools undergoing renovation or building new facilities design parking lots to minimize interference with pedestrian or bicycle traffic.</li> </ul>	X	X			<b>Untested policy idea</b> that emphasizing non-motorized transportation over motorized transportation in the design of school facilities and parking lots will encourage physical activity.

# PHYSICAL ACTIVITY IN SCHOOLS

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
CURRICULUM					
<ul style="list-style-type: none"> <li>Require the development and implementation of a physical activity curriculum that provides sufficient moderate to intense physical activity.</li> </ul>	X	X			<b>Effective policy idea</b> since increasing the amount of time students spend in moderate or vigorous activity while in PE classes can increase physical activity and fitness. <sup>135, 198, 199</sup>
<ul style="list-style-type: none"> <li>Require that every K-12 student be enrolled in a physical education class during each term of the school year and that classes are held every day of the week.</li> </ul>	X	X		<p>The state of Louisiana passes SB 871, which mandates that each public elementary school provide at least 30 minutes of moderate to vigorous physical activity each day.<sup>200</sup></p> <p>The Texas State Board of Education adopted a rule that requires K-6 grade students to participate in physical activity for a minimum of 30 minutes daily or 135 minutes weekly.<sup>201</sup></p>	<b>Effective policy idea</b> since increasing the amount of time students spend in physical education classes increases student physical activity <sup>135, 198</sup> and may impact rates of overweight. <sup>202</sup>
<ul style="list-style-type: none"> <li>Require that elementary schools provide at least 30 minutes of recess during the school day so that students can be physically active.</li> </ul>	X	X			<b>Promising policy idea</b> since elementary age children spend at least some of their recess time (amount varies between studies) engaged in moderate to vigorous physical activity. <sup>187, 203, 204</sup>
<ul style="list-style-type: none"> <li>Provide regular in-service training to physical education teachers to enhance skills for increasing physical activity during PE classes.</li> </ul>		X			<b>Promising policy idea</b> since enhancing physical education teachers' skills for increasing the amount of time students are moderately to vigorously physically active is effective when part of a comprehensive curriculum. <sup>135, 199, 205</sup> Providing only training to teachers without a supporting curriculum has not been tested.

# PHYSICAL ACTIVITY IN SCHOOLS

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>Require the development and implementation of school PE curricula that emphasizes lifelong fitness activities over traditional sports activities.</li> </ul>	X	X		<p> Seattle Public Schools have offered a program called “Success-oriented PE,” which uses unusual sports, such as circus arts, table tennis, mountain bikes, fencing, orienteering, roller-skating, crew, yoga, rock climbing, dance, and global sports, to teach lifelong physical activity<sup>206</sup></p> <p> Spokane Public Schools created a K-10 PE curriculum called “Fit for the Future” that emphasizes lifestyle physical activities and fitness over sports. The curriculum is based on the Essential Academic Learning Requirements (ELARs) to be implemented in 2006<sup>150, 207</sup></p>	<p><b>Untested policy idea</b> that emphasizing lifelong fitness activities over team sports will teach students skills and activities they can use throughout their lives, thereby encouraging them to be more physically active.<sup>208</sup></p>



## PHYSICAL ACTIVITY IN WORKSITES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
FACILITIES DESIGN					
<ul style="list-style-type: none"> <li>● <b>Make stairs accessible and inviting in worksites to encourage stair use by employees.</b></li> </ul>	X	X	X	<p>🍏 At the Starbucks headquarters in Seattle, stairwells are centrally located and attractively designed while elevators are inconspicuous to encourage stair use.<sup>169</sup></p> <p>The Centers for Disease Control and Prevention (CDC) made stairs more inviting by installing new carpet, painting and adding framed artwork to the walls, hanging motivational signs, and playing music. Stair use increased by 8.9%<sup>170, 209</sup></p>	<p><b>Promising policy idea</b> since making stairways accessible and attractive, as well as posting signs prompting their use and playing music increases stair use.<sup>135, 170, 171</sup></p>
<ul style="list-style-type: none"> <li>● <b>Provide fiscal incentives for the installation of design features in new office buildings that encourage physical activity, such as onsite fitness facilities, walking paths, and inviting stairways; Implement design options that encourage physical activity when planning new office facilities.</b></li> </ul>	X	X	X	<p>The Sprint International Headquarters in Overland Park, Kansas was designed to encourage physical activity. Its 21 buildings are connected with covered walkways. Parking garages are around the perimeter of the campus, There is a three-story fitness center, a gymnasium, four courtyards with fountains and waterfalls, two jogging trails, an 8-acre lake, and recreation fields.<sup>169</sup></p>	<p><b>Promising policy idea</b> since improving access to places for physical activity combined with informational outreach can increase physical activity<sup>135</sup></p>

## PHYSICAL ACTIVITY IN WORKSITES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>● Provide workers with shower facilities and flex time to encourage physical activity before or during the workday.</li> </ul>	X	X	X	 Public Health—Seattle & King County has included showers for employee use in new clinic sites <sup>150</sup>	<b>Untested policy idea</b> that providing employees with shower facilities and/or flex time will encourage them to be physically active before or after the work day. Some evidence that having flexible work time for exercise is associated with meeting physical activity guidelines. <sup>146</sup>
WELLNESS PROGRAMS					
<ul style="list-style-type: none"> <li>● Provide incentives to encourage employers to provide wellness programs that have significant physical activity components, including subsidized health club memberships.</li> </ul>	X			 Microsoft, Nintendo, and Honeywell provide their employees with a membership at PRO Sports Club in Bellevue, WA <sup>150</sup>	<b>Promising policy idea</b> since comprehensive worksite wellness programs are clinically effective, lower absenteeism, and reduce health care costs. <sup>115-117</sup> Some evidence that offering financial incentives may improve participation in worksite wellness programs. <sup>210, 211</sup>
<ul style="list-style-type: none"> <li>● Make is part of the employee benefit package to provide a worksite wellness program with a significant physical activity component.</li> </ul>	X	X	X		<b>Promising policy idea</b> since comprehensive worksite wellness programs are clinically effective, lower absenteeism, and reduce health care costs. <sup>115-117</sup>

# PHYSICAL ACTIVITY IN WORKSITES

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>● Offer lower insurance premiums, cash rebates, vacation days, or other incentives for employees who can document participation in regular physical activity.</li> </ul>	X	X	X	<p>🍏 The City of Redmond Police Department offers their officers an annual pay incentive (2.5% of their monthly salary when they rank in the highest category and 1.5% in the second highest category) when they successfully complete a physical fitness evaluation<sup>212</sup></p> <p>IBM pays workers one a one-time bonus of \$150 if they exercise.<sup>213</sup></p> <p>Phifer Wire Company employees accrue up to two vacation days per year by working out at the company's on-site fitness center.<sup>213</sup></p>	<p><b>Untested policy idea</b> to offer discounted insurance premiums or cash rebates for employees who can document participation in physical activity. Some evidence that offering financial incentives may improve participation in worksite wellness programs.<sup>210, 211</sup></p>



## PHYSICAL ACTIVITY in Healthcare

Policy Options	Jurisdiction			Examples	Effectiveness
	State	Local	Private		
<ul style="list-style-type: none"> <li>Require or provide incentives for healthcare plans to include preventive services related to physical activity as part of their benefit packages.</li> </ul>	X		X		<b>Promising policy idea</b> since individually-adapted health behavior change programs are effective at increasing physical activity, <sup>135</sup> and combined nutrition and physical activity counseling may produce weight loss in obese patients. <sup>6</sup>
<ul style="list-style-type: none"> <li>Provide financial incentive for individual purchase of exercise equipment or health club memberships.</li> </ul>			X	HealthPartners, Minnesota's third largest HMO, provides a discount at a participating retailer for purchase of home exercise equipment and for membership and attendance at participating health clubs. <sup>214, 215</sup>	<b>Promising policy idea</b> since owning or having access to home exercise equipment is positively associated with physical activity. <sup>136, 138, 146, 181, 182</sup> Supportive evidence that improving access to places for physical activity combined with informational outreach can increase physical activity. <sup>135</sup>
<ul style="list-style-type: none"> <li>Offer discounts on premiums on a sliding scale for employers based on the employer's health and wellness initiatives.</li> </ul>			X		<b>Promising policy idea</b> since comprehensive worksite wellness programs are clinically effective, lower absenteeism, and reduce health care costs. <sup>115-117</sup>
<ul style="list-style-type: none"> <li>Adopt standards of practice that include routine screening of patients regarding physical activity behaviors and provisions of physical activity recommendations or prescriptions.</li> </ul>	X	X	X		<b>Untested policy idea</b> that routine screening of patients for physical activity behavior will encourage physical activity. Inconclusive evidence regarding the benefit of brief behavioral counseling in the primary care setting. <sup>216</sup>



# APPENDIX

## NUTRITION AND PHYSICAL ACTIVITY STATE PLAN OBJECTIVES

In early June 2003, the Washington State Nutrition and Physical Activity State Plan was released to guide policy and environmental changes around the state to make it easier for Washingtonians to eat healthfully and be more physically active. The plan represents the cumulative effort of a year of planning by a 35-person Nutrition and Physical Activity Advisory Group, which consisted of a diverse group of officials from state and local agencies and representatives from advocacy organizations across the state. Professionals from education, transportation, planning, nutrition, physical activity, agriculture, parks and recreation, economic development, and healthcare worked together to create this set of recommendations. (The plan can be found at <http://depts.washington.edu/uwcphn/NPAStatePlan.pdf>.)

The overall goal of the plan is “to increase the proportion of Washington State residents whose diets reflect the Dietary Guidelines for Americans and who get at least 30 minutes of moderate activity on five or more days per week.” To meet this goal, the plan is organized into three objective and priority recommendations for each objective for both nutrition and physical activity. The objectives and priority recommendations are as follows.

### NUTRITION OBJECTIVES AND PRIORITY RECOMMENDATIONS

#### **Access to Health Promoting Foods**

- Increase the consumption of fruits and vegetables
- Ensure that worksites provide healthful foods and beverages
- Ensure that K-12 schools provide healthful foods and beverages

#### **Reduce Hunger and Food Insecurity**

- Provide adequate support for nutrition and food programs
- Improve access to nutrition programs

#### **Increase the Proportion of Mothers Who Breastfeed Their Infants and Toddlers**

- Ensure that healthcare settings, childcare facilities, and worksite environments are breastfeeding friendly

### PHYSICAL ACTIVITY OBJECTIVES AND PRIORITY RECOMMENDATIONS

#### **Increase the Number of Physical Activity Opportunities Available to Children**

- Adopt school-based curricula and policies that provide quality, daily physical education for all students
- Encourage policies that provide kindergarten through 12<sup>th</sup> grade (K-12) students with opportunities for physical activity outside of formal physical education classes

- Provide opportunities to replace sedentary behaviors, such as watching television, with physical activity

**Increase the Number of People Who Have Access to Free or Low-Cost Recreational Opportunities for Physical Activity**

- Provide adequate funding for state and local recreation sites and facilities
- Develop model policies to increase access to public facilities for physical activity
- Increase the number of worksites that have policies that enhance activity opportunities

**Increase the Number of Active Community Environments**

- Utilize urban planning approaches – zoning and land use – that promote physical activity
- Incorporate transportation policy and infrastructure changes to promote non-motorized transit
- Enhance safety and perceived safety to improve community walkability and bikability

It is intended that the *Nutrition and Physical Activity Policy Resource Guide* be a complementary adjunct to the *Washington State Nutrition and Physical Activity State Plan*. Many of the policy options outlined in the *Policy Resource Guide* are consistent with the *State Plan* objectives and priority recommendations. However, the purpose of the *Policy Resource Guide* is to provide its users with a menu of specific policy options applicable to state, local, and private levels of jurisdiction, whereas the *State Plan* provides broader objectives and recommendations to guide policy and environmental changes throughout Washington State. By offering relevant examples and descriptions of effectiveness for each policy option, it is hoped that this document can work in tandem with the *State Plan* to be useful tools for developing nutrition and physical activity policies in communities, schools, worksites, and healthcare organizations around the state.

# RESOURCES

## WEBSITES

### **Action for Healthy Kids**

<http://www.actionforhealthykids.org>

This national organization is comprised of state teams from 50 states and the District of Columbia who work toward improving the health and educational performance of children through better nutrition and physical activity in schools. Resources for changing the school environment include fact sheets, state-by-state school profiles, PowerPoint presentations, a “What’s Working” database that contains profiles of what other states and communities are doing to address these issues, a resource database, results of surveys and polls conducted by the AFHK team, reports published by AFHK, and an opportunity to join one of the state AFHK teams. All profiles in the “What’s Working” database are evaluated and scored using AFHK developed criteria that are explained in the report *Criteria for Evaluating School-based Approaches to Increasing Good Nutrition and Physical Activity*.

### **Baby-friendly Hospital Initiative USA**

<http://www.babyfriendlyusa.org>

This website provides information for multiple audiences, including hospitals and birth centers, professionals, parents, and breastfeeding advocates. The information provided for hospitals and birthing centers include a self-appraisal tool, directions for becoming a baby-friendly hospital, links to U.S. baby-friendly hospitals, and links to additional resources.

### **The Business Case for Active Living at Work**

<http://www.hc-sc.gc.ca/hppb/fitness/work/index.html>

This website, provided by the Canadian Council for Health and Active Living at Work, provides information to worksites seeking to promote physical activity. It includes information about the benefits of being active at work, summarizes current research, explains how to get started, and provides a template for developing a business case for active living at work.

### **The Center for Food and Justice**

Urban & Environmental Policy Institute, Occidental College

<http://departments.oxy.edu/uepi/cfj/index.htm>

The Center for Food and Justice develops and evaluates untested programs, participates in grassroots organizing and community capacity building, and completes research, education, and policy analysis to achieve a sustainable and just food system. Their website provides links to publications and other resources, such as *Transportation and Food: the Importance of Access* and *Healthy School Food Policies: Checklist*. The site also provides information about the center's various programs.

### **The Center for Health and Healthcare in Schools**

<http://www.healthinschools.org> and

<http://www.healthinschools.org/sh/obesity.asp#gr2>

The Center for Health and Healthcare in Schools' topic page "Keeping Kids Healthy: Obesity, Nutrition & Physical Exercise" provides several links to reports and organizations, as well as a useful fact sheet called "Childhood Obesity: What the Research Tells Us." The site also contains a resource center specifically aimed at parents.

### **Center for Health Improvement**

<http://www.cchi.org>

The Center for Health Improvement works toward health improvement in health policy development and implementation. The organization provides services in the areas of research, policy development and analysis, and technical assistance. The most notable tool on their website is the *Health Policy Guide* (formerly the *Health Policy Coach*) at <http://www.healthpolicyguide.org/default.asp>. This guide contains policy profiles on several subject areas related to nutrition and physical activity. Each profile contains background information, policy ideas, examples of effectiveness and references, and contact information for additional resources.

### **Center for Public Health Nutrition**

<http://depts.washington.edu/uwcpnh/>

The Center for Public Health Nutrition is affiliated with the University of Washington and works to advance public health approaches to improve nutrition and physical activity through environmental and policy changes. The CPHN website contains many resources, including links to literature reviews, reports and recommendations, data, programs and initiatives, and a list of upcoming

conferences and events. Similar resources are available for Washington-specific information.

### **Center for Science in the Public Interest**

<http://www.cspinet.org> and <http://www.cspinet.org/nutritionpolicy/index.html>

The Center for Science in the Public Interest is a nutrition advocacy organization that publishes the well-known *Nutrition Action Health Letter*. Their nutrition policy page provides an easy-to-understand explanation of the policy approach to nutrition, as well as an extensive list of policy options to address poor nutrition and obesity.

### **Centers for Disease Control, Nutrition & Physical Activity Program**

National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

<http://www.cdc.gov/nccdphp/dnpa/>

This CDC site provides extensive publications, data, nutrition and physical activity consumer-directed information, program descriptions, recommendations, and training and tools. Browse this site for many useful resources.

### **Community Food Security Coalition**

<http://www.foodsecurity.org/>

This organization works toward building sustainable, local and regional food systems that ensure access to affordable, healthy, and culturally appropriate food for everyone. Information is available about farm-to-school programs, urban agriculture and gardening, the annual CFSC conference, funding opportunities, and a list of resources.

### **Eat Smart, Move More North Carolina**

<http://www.eatsmartmovemorenc.com>

*Eat Smart, Move More North Carolina* is a statewide initiative by the North Carolina Department of Health and Human Resources and the North Carolina Division of Public Health. The purpose of the initiative is to promote increased opportunities for physical activity and healthy eating through policy and environmental changes. The website is divided into two main sections: professional tools and personal tools. Professional tools include descriptions of their programs, a compilation of success stories from communities in North Carolina that have made

environmental and policy changes, and a list of available publication for download. Publications include *North Carolina Blueprint for Changing Policies and Environments in Support of Healthy Eating* and *North Carolina Blueprint for Changing Policies and Environments in Support of Increased Physical Activity*. Both are practical guides to accomplishing policy and environmental changes. *Winning with ACEs: How You Can Work Toward Active Community Environments* is another useful publication. *Eat Smart: North Carolina's Recommended Standards for All Food Available in School* is a thorough guide for bettering the nutrition environment in K-12 schools.

One program to note is Winner's Circle, which uses labeling of food items and food establishments (restaurants, schools, cafeterias, etc.) to identify foods that are healthy alternatives and establishments that offer healthy choices. Program information can be found at

<http://www.eatsmartmovemorenc.com/programs/winnerscircle/index.php>.

The personal tools on this website include educational tools like the "Resolv-O-Matic" that generates family and individual health tips, a resource library with various nutrition and physical activity facts sheets, and an interactive nutrition label.

### **Guide to Community Preventive Services**

<http://www.thecommunityguide.org>

This guide is currently being developed by the Task Force on Community Preventive Services. For each topic area, the task force systematically reviews the relevant literature and makes recommendations based on the demonstrated effectiveness of an intervention. Nutrition and physical activity are two topic areas, among other community prevention areas. Physical activity recommendations were released in 2001. Nutrition is due for release in 2004.

### **Inventory of Qualitative Research**

[http://www.cdc.gov/nccdphp/dnpa/qualitative\\_research/](http://www.cdc.gov/nccdphp/dnpa/qualitative_research/)

This is a catalog of qualitative research pertaining to nutrition and physical activity maintained by the CDC. Studies date back from 1997 and can be searched by research topic, target audience, and specific text words. The CDC encourages organizations and individuals to share additional qualitative research studies for inclusion in the catalog.

### **Municipal Research & Services Center of Washington**

<http://www.mrsc.org/Subjects/HumanServices/healthymain.aspx> and  
<http://www.mrsc.org/subjects/planning/compplan.aspx?r=1>

These are two very useful links from the Municipal Research and Service Center of Washington.

The first link contains multiple resources under the title “Healthy Communities.” These pages include general information about healthy communities, as well as multiple links related to nutrition and physical activity under the categories of building, design, and land use; nutrition and food security; recreation; and transportation planning.

The second link contains detailed information about the comprehensive planning process of Washington cities and counties. Included are links to the Growth Management Act and related legislation, frequently asked questions about the planning process, and links to comprehensive plans for Washington cities and counties.

### **National Association of State Boards of Education**

<http://www.nasbe.org/HealthySchools/index.html>

NASBE works to give voice to the State’s Boards of Education. Part of the NASBE website is devoted to healthy schools (direct link above). Although broader in scope than solely nutrition and physical activity, this site provides extensive information in the form of policy briefs, reports, articles, a database of state-level school health policies, sample policies to encourage physical activity and healthy eating, as well as the publication *Fit, Healthy, and Ready to Learn: A School Health Policy Guide* available from the NASBE website. Some links are inaccessible to non-members.

### **National Business Group on Health**

<http://www.wbgh.org>

This organization represents the perspective of large employers and provides resources for helping its members’ health care problems. Business members are primarily Fortune 500 companies. Resources are primarily aimed at employers and include toolkits, issue briefs, fact sheets, web-based seminars, and examples of what other employers are doing to tackle obesity and rising healthcare costs. While most resources are available to members only, some resources are available to non-members.

## **National Conference of State Legislatures**

<http://www.ncsl.org>

The National Conference of State Legislatures is a bipartisan organization that provides research, technical assistance, and opportunities for policymakers to exchange ideas. NCSL also acts as an advocate for state and local governments before Congress and federal agencies. NCSL has a topic page on physical activity, nutrition, and obesity at

<http://www.ncsl.org/programs/health/phyactobesity.htm?CFID=360211&CFTOKEN=69399798>

Included on this page are publications and resources, including legislative and issue briefs; a list of upcoming conferences; a web page devoted to healthy community design funded by the Robert Wood Johnson Foundation; and a state legislation and statute database that is searchable by issue area, record type, year, bill status, and jurisdiction.

## **National Center for Bicycling and Walking**

<http://www.bikewalk.org>

The focus of this website is to provide information and tools to help communities to encourage physical activity through transportation design; land use planning and development; recreation, parks and trails; and safety, security, and crime prevention. The website contains an extensive list of resources, including a community assessment tool for walking and bicycling, the *Bicycling Facility Guide*, the *Pedestrian Facility Design Guide*, and a free electronic newsletter that includes details on new resources as they become available. Further, the organization sponsors the annual Pro Walk/Pro Bike Conference (International Symposium on Walking and Bicycling), Walkable Community Workshops that help communities initiate change by training “champions,” and the Active Living Institute that provides an intensive 4-day training course for professionals about creating active community environments. This center also provides direct assistance via telephone, postal mail, email, and online forums.

## **Partnership for Prevention**

<http://www.prevent.org>

The purpose of this organization is to increase the priority of injury and illness prevention within the health care system and health-related policy. Organization projects and priority areas are diverse but include nutrition and physical activity. For instance, one recent project seeks to encourage health plans to do more to promote physical activity. Publications include *Promoting Physical Activity in*

*Communities: Forward-Looking Options from an Executive Roundtable, Healthy Workforce 2010: An Essential Health Promotion Sourcebook for Employers Large and Small, and Creating Communities for Healthy Aging.* Most publications are available online without a membership. Additional resources are available for those organizations and individuals who are members.

### **Partnership for a Walkable America**

<http://www.walkableamerica.org> and <http://www.walktoschool-usa.org>

Partnership for a Walkable America is a national coalition that works to improve conditions for walking in the U.S. and to increase the number of Americans who walk regularly. Its members are those national governmental and non-profit organizations that are concerned about health, safety, and the environment. Many resources are available. These include a downloadable walkability checklist, an annual pedestrian project award, and a separate website devoted to the International Walk to School week the first week of October. This website can be found at <http://www.walktoschool-usa.org> and contains many resources for promoting International Walk to School week, as well as an opportunity to register local Walk to School Week events. Information is also provided about the Safe Routes to School Program, including a starter toolkit.

### **Prevention Institute**

<http://www.preventioninstitute.org/>

The Prevention Institute is a national organization that works to advance primary prevention in areas such as, injury and violence prevention, traffic safety, health disparities, nutrition and physical activity, and youth development. The nutrition and physical activity section of their website contains information about their current projects and publications. A closely related coalition of nutrition and physical activity advocates, called *The Strategic Alliance for Healthy Food and Activity Environments*, has created the E.N.A.C.T. tool (Environmental Nutrition and Activity Community Tool) at <http://www.preventioninstitute.org/sa/enact.html>. The tool is divided into seven environment areas: neighborhood environments, preschools/daycare, schools, after-school programs, workplace environments, government environments, and healthcare environments. For each topic area, possible strategies for improving the nutrition and/or physical activity environment are presented. Links for each strategy provide general information about the strategy, as well as a description and links to more information about model programs/policies, tools, publications, fact sheets, case studies, evaluations, and resources as applicable and available for each action. Further information about how to use ENACT to assess, prioritize, implement, and evaluate strategies

using a community process is provided. Most strategies outlined in this highly useful tool are policy and environmentally focused.

### **Public Health Institute**

<http://www.phi.org/>

The Public Health Institute is a California-based organization that provides support and management for diverse public health projects, including several in nutrition and physical activity. The resource library offers an array of publications that address nutrition and physical activity and other public health topics, including *Fresh Ideas for Community Nutrition and Physical Activity*, *Policy Ideas for Community Nutrition and Physical Activity*, *Healthy Food Policy Resource Guide*, and *Fruits and Vegetables and Physical Activity at the Worksites: Business Leaders and Working Women Speak Out on Access and the Environment*.

### **The Robert Wood Johnson Foundation**

<http://www.rwjf.org/index.jsp>

The Robert Wood Johnson Foundation is a philanthropy organization devoted to providing resources for health and healthcare in the United States. One of RWJF's program areas focuses on active living, obesity, and nutrition and is available at

<http://www.rwjf.org/programs/infoByArea.jsp?value=Active+Living%2C+Obesity+and+Nutrition&id=000002>. Some of the multiple resources available from this site include description and links to RWJF's national programs including *Active Living Leadership*, *Active Living Research*, *Active Living Resource Center*, *Active Living by Design*, and *Active for Life*; funding opportunities; a database of active grants and grant results; reports from recent RWJF-funded programs; publications including *Healthy Schools for Healthy Kids* and *Healthy Places, Healthy People: Promoting Public Health & Physical Activity Through Community Design*; and a list of recent news and journal articles relevant to physical activity, nutrition, or obesity.

Each national program has its own website. Direct links and descriptions are provided below.

- **Active Living Leadership:** <http://activelivingleadership.org/>

This program area was designed to support government leaders for the purposes of creating and promoting policies and programs that support active living. The website provides an explanation of active living, resources and publications, and information about five leadership states (one of which is Washington).

- **Active Living Research:** <http://www.activelivingresearch.org/>

This program is working to build a new interdisciplinary field of active living researchers, build the evidence base, and provide resources about active living. Available information on the website is a list of available grant opportunities, guidance for grant seekers and grantees, a list of funded projects, facts sheets based on current research, and information about the annual conference hosted by Active Living Research.

- **Active Living Resource Center:**  
[http://www.bikewalk.org/active\\_living.htm](http://www.bikewalk.org/active_living.htm)

This site is hosted by the National Center for Bicycling and Walking and contains multiple links to other Active Living sites.

- **Active Living by Design:** <http://www.activelivingbydesign.org/>

The purpose of this program, which is sponsored in collaboration with the University of North Carolina's School of Public Health, is to establish and evaluate innovative approaches to increase physical activity through community design, public policies, and communication strategies. The website is divided into seven active living domains: physical activity and health; parks, trails and greenways; land use; transportation; communications and social marketing; crime; and low income. Under each domain is a brief summary of the field and extensive lists of recommended publications, resources, organizations, and tools. Other topics on the website include descriptions of the 25 Active Living by Design partners/grantees and resources that include an image library, list of conferences and events, publications, organizations, and tools.

- **Active Living for Life:** <http://www.activeforlife.info/default.aspx>

This program was established to determine how to provide research-based physical activity programs to older adults using existing community resources and is operated from the Texas A&M University System Health Science Center School of Rural Public Health. This site contains information about the program grantees; resources including tools & tips, helpful links, funding opportunities, reports and papers, upcoming events; and descriptions of the program's key partnerships with other organizations.

## **School Meals**

Food and Nutrition Service, U.S. Department of Agriculture

<http://www.fns.usda.gov/cnd/>

This site provides information about the National School Lunch and Breakfast programs, as well as other school nutrition programs offered by the USDA. Publications of interest include *Competitive Food Policies by State*, *Foods of Minimal Nutritional Value*, *Small Farms/School Meal Initiative*, among others.

## **SHHPS: School Health Policies and Programs Study**

National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

<http://www.cdc.gov/HealthyYouth/shpps/index.htm>

SHHPS is a national survey conducted periodically to assess school health policies and programs at the state, district, school, and classroom levels. The survey is covers multiple health topics, not only nutrition and physical activity. This website contains facts sheets sorted by topic area, state-level summaries of the survey data sorted by topic area, state report cards, and links to the survey data files and documentation. SHHPS was conducted in 1994, 2000 and will be conducted again in 2006.

**The Wellness Councils of America:** <http://www.welcoa.org>

This organization's focus is worksite wellness. Their website provides multiple resources and technical assistance for companies beginning worksite wellness programs. Resources include a wellness magazine, "how to" guides for beginning a worksite wellness program, ready-made PowerPoint presentations, employee incentive programs, monthly employee health newsletters, sample surveys and other forms, a wellness library, and employer case studies. Access to some resources requires a membership. Further assistance is available from the organization via their consulting service. The organization also has nine locally affiliated wellness councils that host regional conferences and meetings and help to unite and focus local businesses and healthcare systems. WELCOA also awards Well Workplace awards to those employers who have established model worksite wellness programs.

## PUBLICATIONS

### ***Blueprint for Action on Breastfeeding***

This is a U.S. Department of Human and Health Services publication that outlines an action plan for increasing initiation and duration of breastfeeding through education, training, awareness, support, and research.

Available at <http://www.cdc.gov/breastfeeding/00binaries/bluprntbk2.pdf>

### ***Food Marketing and Advertising Directed at Children and Adolescents: Implications for Overweight***

This publication is a policy paper from the American Public Health Association.

Available at <http://www.apha.org/legislative/policy/2003/2003-017.pdf>

### ***A Guide to Writing and Implementing a Physical Activity Policy in the Workplace***

This publication is provided by the Health at Work program of the Greater Glasgow National Health Board's Health Promotion Department of Scotland. It provides a step-by-step guide to developing a worksite physical activity policy.

Available at <http://www.healthatwork.org.uk/pdf.pl?file=haw/files/PhysicalActivityPolicy.pdf>

### ***Guidelines for Offering Healthy Foods at Meetings, Seminars, and Catered Events***

This publication from University of Minnesota School of Public Health offers practical tips about incorporating healthy food into meetings, seminars, and other events.

Available at [http://www.ahc.umn.edu/ahc\\_content/colleges/sph/shp\\_news/Nutrition.pdf](http://www.ahc.umn.edu/ahc_content/colleges/sph/shp_news/Nutrition.pdf)

### ***Inventory of Major School Nutrition and Physical Activity Programs and Initiatives***

This inventory was prepared for the 2003 *Food and fitness in our schools: policies, challenges, and strategies for improvement*, a Safe Table Forum offered by the Health Policy Analysis Program and the Center for Public Health Nutrition. This document provides useful information about existing programs, projects, and resources regarding school nutrition and physical activity in Washington State.

Available at [http://depts.washington.edu/hpap/vital\\_signs/past\\_forums.html](http://depts.washington.edu/hpap/vital_signs/past_forums.html)

 ***State Policies and School Facilities: How States Can Support or Undermine Neighborhood Schools and Community Preservation***

This publication from the National Trust for Historic Preservation discusses steps states and school boards can take to preserve historic neighborhood schools. The policy-level actions described in this publication have the potential to make schools more accessible to facilitate increased walking and biking to school.

Available at [http://www.nationaltrust.org/issues/schools/schools\\_state\\_policies.pdf](http://www.nationaltrust.org/issues/schools/schools_state_policies.pdf)

 ***The Washington State Nutrition and Physical Activity State Plan***

This document is intended to provide a framework from which policy makers can work together to build and support environments that make it easier to choose healthy foods and be physically active. The document outlines two overarching goals and six objectives for accomplishing these changes.

Available at <http://depts.washington.edu/uwcphn/NPAStatePlan.pdf>

## REFERENCES

1. Behavioral risk factor surveillance system. *National Center for Chronic Disease Prevention and Health Promotion* [website]. Available at: <http://www.cdc.gov/brfss/>. Accessed August 24, 2004.
2. National diabetes fact sheet. *National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention*. Available at: <http://www.cdc.gov/diabetes/pubs/estimates.htm#prev4>. Accessed October 26, 2004.
3. Finkelstein EA, Fiebelkorn IC, Wang G. State-level estimates of annual medical expenditures attributable to obesity. *Obes Res*. 2004;12:18-24.
4. Physical activity and good nutrition: essential elements to prevent chronic disease and obesity. *National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention*. Available at: [http://www.cdc.gov/nccdphp/aag/aag\\_dnpa.htm](http://www.cdc.gov/nccdphp/aag/aag_dnpa.htm). Accessed September 3, 2004.
5. Overweight and obesity: health consequences. *National Center for Chronic Disease Prevention and Health Promotion* [website]. Available at: <http://www.cdc.gov/nccdphp/dnpa/obesity/consequences.htm>. Accessed August 26, 2004, 2004.
6. Goldstein MG, Whitlock EP, DePue J. Multiple behavioral risk factor interventions in primary care. *Am J Prev Med*. 2004;27(2S):61-79.
7. McLeroy KR, Bibeau D, Steckler A, Glanz K. An ecological perspective on health promotion programs. *Health Educ Behavior*. 1988;15(4):351-377.
8. Theory at a glance: a guide for health promotion practice. *National Cancer Institute* [website]. February 27, 2003. Available at: <http://www.nci.nih.gov/aboutnci/oc/theory-at-a-glance/page1>. Accessed August 24, 2004.
9. Cohen L, Aboelata M, Gantz T, Wert JV. Collaboration math: enhancing the effectiveness of multidisciplinary collaboration. *Prevention Institute*. Available at: <http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1013&context=its/tsc>.
10. Framework for program evaluation in public health. *MMWR*. 1999;48(No. RR-11).
11. Ludwig DS, Peterson KE, Gortmaker SL. Relation between consumption of sugar-sweetened drinks and childhood obesity: a prospective, observational analysis. *Lancet*. 2001;357:505-508.
12. James J, Thomas P, Cavan D, Kerr D. Preventing childhood obesity by reducing consumption of carbonated drinks: cluster randomised controlled trial. *BMJ*. 2004;328(7450):1237-1241.
13. Harnack L, Stang J, Story M. Soft drink consumption among US children and adolescents: nutritional consequences. *J Am Diet Assoc*. 1999;99(4):436-442.
14. Policy statement: soft drinks in schools. *Pediatrics*. 2004;113(1):152-154.

15. Anderson JV, Bybee DI, Brown RM, et al. 5 a day fruit and vegetable intervention improves consumption in low income populations. *J Am Diet Assoc.* 2001;101(2):195-202.
16. WIC Farmers' Market Nutrition Program. *California WIC Association.* June 28, 2004. Available at: [http://www.calwic.org/farmers\\_market.htm](http://www.calwic.org/farmers_market.htm). Accessed July 7, 2004.
17. Smith LT, Johnson DB, Beaudoin S, Monsen ER, LoGerfo JP. Qualitative assessment of participant utilization and satisfaction with the Seattle senior farmers' market nutrition pilot program. *Preventing Chronic Disease.* 2004;1(1):1-11.
18. Johnson DB, Beaudoin S, Smith LT, Beresford SAA, LoGerfo JP. Increasing fruit and vegetable intake in homebound elders: the Seattle senior farmers' market nutrition pilot program. *Preventing Chronic Disease.* 2004;1(1):1-9.
19. Kunkel ME, Luccia B, Moore AC. Evaluation of the South Carolina seniors farmers' market nutrition education program. *J Am Diet Assoc.* 2003;103(7):880-883.
20. Cody S. *Food stamp program--elderly nutrition demonstrations: interim report on elderly participation patterns:* Economic Resesarch Service, USDA; 2004.
21. Applicants and recipients: EBT farmers' market demonstration project update. *Food and Nutrition Service, U.S. Department of Agriculture* [website]. Available at: [http://www.fns.usda.gov/fsp/ebt/ebt\\_farmers\\_markstatus.htm](http://www.fns.usda.gov/fsp/ebt/ebt_farmers_markstatus.htm). Accessed July 22, 2004.
22. Offerman K. *Evaluation of the Hilo farmers' market demonstration.* Alexandria, VA: Office of Analysis, Nutrition and Evaluation, USDA Food and Nutrition Service; 1999.
23. Clark V. Plan would add supermarkets in city. *The Philadelphia Inquirer.* May 5, 2004.
24. Fresh ideas for community nutrition and physical activity. *Center for Civic Partnerships; Public Health Institute.* Available at: <http://www.civicpartnerships.org/files/CHCC.pdf>.
25. Donkin AJM, Dowler EA, Stevenson SJ, Turner SA. Mapping access to food in a deprived area: the development of price and availability indices. *Public Health Nutr.* 2000;3(1):31-38.
26. Morland K, Wing S, Roux AD, Poole C. Neighborhood characteristics associated with the location of food stores and food service places. *Am J Prev Med.* 2002;22(1):23-29.
27. Horowitz CR, Colson KA, Herbert PL, Lancaster K. Barriers to buying healthy foods for people with diabetes: evidence of environmental disparities. *Am J Public Health.* 2004;94(9):1549-1554.
28. Morland K, Wing S, Roux AK. The contextual effect of the local food environment on residents' diets: the atherosclerosis risk in communities study. *Am J Public Health.* 2002;92(11):1761-1767.
29. Cheadle A, Psaty BM, Curry S, et al. Community-level comparisons between the grocery store environment and individual dietary practices. *Preventive Medicine.* March 1991;20(2):250-261.

30. Wrigley N, Warm D, Margetts B. Deprivation, diet, and food-retail access: findings from the Leeds 'food deserts' study. *Env and Plan A*. 2003;35:151-188.
31. Supermarket shuttle customers home. *National Association of Convenience Stores*. Los Angeles; 2003.
32. Cassady D, Mohan V. Doing well by doing good? A supermarket shuttle feasibility study. *J Nutr Educ Behav*. 2004;36:67-70.
33. *Nutrition and your health: dietary guidelines for Americans*. Washington, D.C.: US Department of Health and Human Services; US Department of Agriculture; 2000.
34. Cullen KW, Eagan J, Baranowski T, Owens E, Moor Cd. Effect of a la carte and snack bar foods at school on children's lunchtime intake of fruits and vegetables. *J Am Diet Assoc*. 2000;100:1482-1486.
35. Kubik MY, Lytle LA, Hannan PJ, Perry CL, Story M. The association of the school food environment with dietary behaviors of young adolescents. *Am J Public Health*. 2003;93(7):1168-1173.
36. Cullen KW, Zakeri I. Fruits, vegetables, milk, and sweetened beverages consumption and acces to a la cart/snack bar meals at school. *Am J Public Health*. 2004;94(3):463-467.
37. Redmond L. Engaging schools and communities in urban food access solutions. Paper presented at: Inviting everyone to the table; July 18, 2004; Salt Lake City, UT.
38. P-patch community gardens. *City of Seattle* [website]. Available at: <http://www.seattle.gov/neighborhoods/ppatch/>. Accessed July 24, 2004.
39. *Seattle municipal code: land use code*. Seattle, WA: City of Seattle.
40. Seattle's comprehensive plan: a plan for managing growth 1994-2014. Available at: <http://www.ci.seattle.wa.us/dclu/planning/comprehensive/homecpl.htm>. Accessed August 18, 2004.
41. *From organizational practices to public policies: local strategies to increase healthy eating and physical activity*: Public Health Institute.
42. Schukoske JE. Community development through gardening: state and local policies transforming urban open space. *J Legislation Public Policy*. 2000;3(2):351-392.
43. *Counting calories: report of the working group on obesity*. Washington, D.C.: Center for Food Safety and Applied Nutrition; March 12 2004.
44. Kreuter MW, Brennan LK, Scharff DP, Lukwago SN. Do nutrition label readers eat healthier diets? Behavioral correlates of adults' use of food labels. *Am J Prev Med*. 1997;13(4):277-283.
45. Kim S-Y, Rodolfo M, Nayga J, Oral Capps J. Food label use, self-selectivity, and diet quality. *J Consumer Affairs*. 2001;35(2):346-363.
46. Swinburn BA, Caterson I, Seidell JC, James WPT. Diet, nutrition and the prevention of excess weight gain and obesity. *Public Health Nutr*. 2004;7(1A):123-146.
47. Neuhouser ML, Kristal AR, Patterson RE. Use of food nutrition labels is associated with lower fat intake. *J Am Diet Assoc*. 1999;99(1):45-53.

48. Williams RA, Jessup A, Lando A, et al. *Helping consumers lead healthier lives through better nutrition: a social sciences approach to consumer information, food choices and weight management*. Division of Market Studies, Office of Scientific Analysis and Support, FDA CFSA; January 2004.
49. Albright CL, Flora JA, Fortmann SP. Restaurant menu labeling: impact of nutrition information on entree sales and patron attitudes. *Health Educ Q*. 1990;17(2):157-167.
50. Colby JJ, Elder JP, Peterson G, Knisley PM, Carleton RA. Promoting the selection of healthy food through menu item description in a family-style restaurant. *Am J Prev Med*. 1987;3(3):171-177.
51. Seebeck P. Menu2 pilot results. *Heath Institute of Spokane*. Available at: [http://www.this.org/comm\\_edu/mn2rest.html](http://www.this.org/comm_edu/mn2rest.html). Accessed August 2, 2004.
52. Aaron JI, Evans RE, Mela DJ. Paradoxical effect of a nutrition labelling scheme in a student cafeteria. *Nutrition Research*. 1995;15(9):1251-1261.
53. Fiske A, Cullen KW. Effects of promotional materials on vending sales of low-fat items in teachers' lounges. *J Am Diet Assoc*. 2004;104:90-93.
54. Winner's Circle. *Eat Smart Move More North Carolina* [website]. Available at: <http://www.eatsmartmovemorenc.com/programs/winnerscircle/index.php>. Accessed August 11, 2004.
55. French SA, Jeffery RW, Story M, et al. Pricing and promotion effects on low-fat vending snack purchases: the CHIPS study. *Am J Public Health*. 2001;91(1):112-117.
56. McCullum C, Achterberg CL. Food shopping and label use behavior among high school-aged adolescents. *Adolescence*. 1997;32(125):181-197.
57. Hrovat KB, Harris KZ, Leach AD, Russell BS, Harris BV, Sprecher DL. The new food label, type of fat, and consumer choice. A pilot study. *Arch Fam Med*. 1994;3(8):690-695.
58. 50 states summary of breastfeeding laws. *National Conference of State Legislatures*. Available at: <http://www.ncsl.org/programs/health/breast50.htm>. Accessed June 16, 2004.
59. Ortiz J, McGilligan K, Kelly P. Duration of breast milk expression among working mothers enrolled in an employer-sponsored lactation program. *Pediatric Nursing*. 2004;30(2):111-118.
60. Cohen R, Mrteck MB. The impact of two corporate lactation programs on the incidence and duration of breast-feeding by employed mothers. *Am J Health Promot*. 1994;8(6):436-441.
61. Cohen R, Mrtek MB, Mrtek RG. Comparison of maternal absenteeism and infant illness rates among breast-feeding and formula-feeding women in two corporations. *Am J Health Promot*. 1995;10(2):148-153.
62. Bonoan R. *Breastfeeding support at the workplace*. Washington, DC: Washington Business Group on Health; 2000.
63. Bailey D. *Breastfeeding: the best investment*. International Lactation Consultant Association; 1998.
64. Braun MLG, Giugliani ERJ, Soares MEM, Giugliani C, Oliveira APd, Danelon CMM. Evaluation of the impact of the baby-friendly hospital

- initiative on rates of breastfeeding. *Am J Public Health*. 2003;93(8):1277-1279.
65. Jacobson MF, Brownell KD. Small taxes on soft drinks and snack foods to promote health. *Am J Public Health*. 2000;90(6):854-857.
  66. Reducing tobacco use: a report of the surgeon general. *Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services*. Available at: [http://www.cdc.gov/tobacco/sgr/sgr\\_2000/FullReport.pdf](http://www.cdc.gov/tobacco/sgr/sgr_2000/FullReport.pdf).
  67. Mercer SL, Green LW, Rosenthal AC, Husten CG, Khan LK, Dietz WH. Possible lessons from the tobacco experience for obesity control. *Am J Clin Nutr*. 2003;77 (Suppl):1073S-1082S.
  68. Chaloupka FJ, Grossman M, Saffer H. The effects of price on alcohol consumption and alcohol-related problems. *National Institute on Alcohol Abuse and Alcoholism*. August 2002. Available at: <http://www.niaaa.nih.gov/publications/arh26-1/22-34.htm>. Accessed September 9, 2004.
  69. Castner L, Schirm AL. *Reaching those in need: state food stamp participation rates in 2001*: Food and Nutrition Service, USDA; 2004.
  70. Cortes F, Steeples M, Stone M. Promoting healthy eating: Contra Costa County's food policy. *Am J Public Health*. 1995;85(10):1449-1450.
  71. French SA. Pricing effects on food choice. *J Nutr*. 2003;133:841S-843S.
  72. Jeffery RW, French SA, Faether C, Baxter JE. An environmental intervention to increase fruit and salad purchases in a cafeteria. *Preventive Medicine*. 1994;23:788-792.
  73. French SA, Story M, Jeffery RW, et al. Pricing strategy to promote fruit and vegetable purchase in high school cafeterias. *J Am Diet Assoc*. 1997;97:1008-1010.
  74. French SA, Jeffery RW, Story M, Hannan P, Snyder MP. A pricing strategy to promote low-fat snack choices through vending machines. *Am J Public Health*. 1997;87(5):849-851.
  75. *School nutrition and food services: coordinating school health programs*: Maine Department of Education and Maine Department of Human Services; 2002.
  76. California childhood obesity prevention act; 2003.
  77. Gordon AR, McKinney P. Sources of nutrients in students' diets. *Am J Clin Nutr*. 1995;61(1 (Suppl)):232S-240S.
  78. Gleason P, Sutor C. *Children's diets in the mid-1990s: dietary intake and its relationship with school meal participation*. Washington, D.C.: US Department of Agriculture, Food and Nutrition Service; 2001.
  79. Position of the American Dietetic Association: dietary guidance for healthy children ages 2 to 11 years. *J Am Diet Assoc*. 2004;104(4):660-677.
  80. Regarding food and beverages sold at public schools. *SB 5436*; 2004.
  81. Distribution and sales of competitive foods. *Seattle Public Schools*. Available at: <http://www.seattleschools.org/area/policies/e/e13-01.pdf>. Accessed September 27, 2004.

82. *Standards for school nutrition policy*: West Virginia Department of Education.
83. Andersen K, Caldwell D, Dunn C, Hoggard L, Thaxton S, Thomas C. *Eat Smart: North Carolina's recommended standards for all food available in school*. Raleigh, NC: North Carolina Department of Health and Human Services, NC Division of Public Health; 2004.
84. French SA, Story M, Fulkerson JA, Hannan P. An environmental intervention to promote lower-fat food choices in secondary schools: outcomes of the TACOS study. *Am J Public Health*. 2004;94(9):1507-1512.
85. Perry CL, Bishop DB, Taylor GL, et al. A randomized school trial of environmental strategies to encourage fruit and vegetable consumption among children. *Health Educ Behavior*. 2004;31(1):65-76.
86. Breakfast and lunch program. *Seattle Public Schools*. Available at: <http://www.seattleschools.org/area/policies/e/e11-01.pdf>. Accessed September 27, 2004.
87. Gleason PM. Participation in the National School Lunch Program and the School Breakfast Program. *Am J Clin Nutr*. 1995;61(1 Suppl):213S-220S.
88. Flock P, Petra C, Ruddy V, Peterangelo J. *A salad bar featuring organic choices: revitalizing the school lunch program*. Olympia: Olympia School District; 2003.
89. Slusser W, Neumann C, Lange L. *Evaluation of the effectiveness of the salad bar program in the Los Angeles School District*: Brown Bag Lecture Series, Center for Advanced Studies in Nutrition and Social Marketing, University of California Davis; 2002. slides.
90. *School lunch salad bars*. Washington, D.C.: US Department of Agriculture, Food and Nutrition Service; 2002.
91. *The commercial-free schools act (prohibiting exclusive vendor contracts, brand names, and tobacco subsidiary food products)*. San Francisco, CA: San Francisco Unified School District Board of Education; June 22 1999.
92. Mascarenhas M, Gottlieb R. *The farmers' market salad bar: assessing the first three years of the Santa Monica-Malibu Unified School District program*. Los Angeles, CA: Urban and environmental policy institute; 2000.
93. *Berekeley Unified School District food policy*. Berekeley, CA: Berkeley Unified School District; 1999.
94. *Food marketing and advertising directed at children and adolescents: implications for overweight*: American Public Health Association; November 18 2003.
95. Story M, French S. Food advertising and marketing directed at children and adolescents in the US. *Int J Beh Nutr Phy Act*. 2004;1(3).
96. *The role of media in childhood obesity: issue brief*. Washington, D.C.: The Henry J. Kaiser Family Foundation; February 2004.
97. *An act concerning childhood nutrition in schools, recess and lunch breaks*. HB 5344: Connecticut; June 8, 2004.
98. Recess before lunch policy: kids play and then eat! *Montana Office of Public Instruction*. Available at:

- <http://www.opi.state.mt.us/schoolfood/recessBL.html>. Accessed August 3, 2004.
99. Getlinger MJ, Carol VT, Bell E, Akre C. Food waste is reduced when elementary-school children have recess before lunch. *J Am Diet Assoc.* 1996;96(9):906-908.
  100. *Pilot project report: a recess before lunch policy in four Montana schools.* Helea, MT: Montana Office of Public Instruction; 2003.
  101. Vending machines: better choices. *National Institutes of Health* [website]. Available at: <http://odp.od.nih.gov/whpp/nutrition/vending.html>. Accessed June 30, 2004.
  102. Cafeteria: deLITEful entrees. *National Institutes of Health, NIH Worksite Health Promotion Committee* [website]. Available at: <http://odp.od.nih.gov/whpp/nutrition/cafeteria.html>. Accessed June 30, 2004.
  103. Health department staff create self sustaining healthy snack bar. *Eat Smart Move More North Carolina.* Available at: <http://www.eatsmartmovemorenc.com/success/chron28.pdf>. Accessed August 4, 2004.
  104. *Workplace policies to offer nutritious foods.* Oakland, CA: Prevention Institute.
  105. Backman DR, Carman JS, Aldana SG. Fruits and vegetables and physical activity at the worksite: business leaders and working women speak out on access and the environment. *California 5-a-day Worksite Program.* Available at: <http://www.phi.org/pdf-library/dhs-worksite.pdf>.
  106. Faugier J, Lancaster J, Pickles D, Dobson K. Barriers to healthy eating in the nursing profession: part 2. *Nurs Stand.* 2001;15(37):33-35.
  107. Biener L, Glanz K, McLerran D, et al. Impact of the Working Well Trial on the worksite smoking and nutrition environment. *Health Educ Behavior.* 1999;26(4):478-494.
  108. Sorensen G, Thompson B, Glanz K, et al. Worksite-based cancer prevention: primary results from the Working Well Trial. *Am J Public Health.* July 1996;86(7):939-947.
  109. Emmons K, Linnan L, Shadel WG, Marcus B, Abrams DB. The Working Healthy Project: a worksite health-promotion trial targeting physical activity, diet, and smoking. *J Occup Environ Med.* 1999;41(7):545-555.
  110. Hider P. Environmental interventions to reduce energy intake or density: a critical appraisal of the literature. *New Zealand Health Tech Assess.* 2001;4(2).
  111. Market basket community supported agriculture. *Pike Place Market.* Available at: [http://www.pikeplacemarket.org/shop/market\\_basket/default.asp](http://www.pikeplacemarket.org/shop/market_basket/default.asp). Accessed August 4, 2004.
  112. *Farmers' market evaluation.* Philadelphia, PA: The Food Trust; 2002.
  113. Texas mother-friendly worksite program. *Texas Department of Health.* July 21, 2004. Available at: <http://www.tdh.state.tx.us/lactate/mother.htm>. Accessed July 29, 2004.

114. BCW outstanding employer awards. *Breastfeeding Coalition of Washington*. Available at: [http://www.hmhbwa.org/forprof/BCW/employer\\_awards.htm#2000](http://www.hmhbwa.org/forprof/BCW/employer_awards.htm#2000). Accessed July 29, 2004.
115. Aldana SG. Financial impact of health promotion programs: a comprehensive review of the literature. *Am J Health Promot*. 2001;15(5):296-320.
116. Janer G, Sala M, Kogevinas M. Health promotion trials at worksites and risk factors for cancer. *Scand J Work Environ Health*. 2002;28(3):141-157.
117. Pelletier KR. A review and analysis of the clinical- and cost-effectiveness studies of comprehensive health promotion and disease management programs at the worksite: 1998-2000 update. *Am J Health Promot*. 2001;16(2):107-116.
118. UNICEF/WHO. *The UNICEF/baby friendly hospital initiative: ten steps to successful breastfeeding*. New York, NY: UNICEF/WHO; 1992.
119. US baby-friendly hospitals and birth centers. *Baby-friendly USA*. Available at: <http://www.babyfriendlyusa.org/>. Accessed July 29, 2004.
120. Kramer MS, Chalmers B, Hodnett ED, et al. Promotion of breastfeeding intervention trial (PROBIT): a randomized trial in the Republic of Belarus. *JAMA*. 2001;285(4):413-420.
121. Gau M-L. Evaluation of a lactation intervention program to encourage breastfeeding: a longitudinal study. *Int J Nurs Stud*. 2004;41:425-435.
122. Merewood A, Philipp BL, Chawla N, Cimo S. The baby-friendly hospital initiative increases breastfeeding rates in a US neonatal intensive care unit. *J Hum Lact*. 2003;19(2):166-171.
123. Philipp BL, Malone KL, Cimo S, Merewood A. Sustained breastfeeding rates at a US baby-friendly hospital. *Pediatrics*. 2003;112(3).
124. Guise J-M, Palda V, Westhoff C, Chan BKS, Helfand M, Lieu TA. The effectiveness of primary care-based interventions to promote breastfeeding: systematic evidence review and meta-analysis for the US Preventive Services Task Force. *Ann Fam Med*. 2003;1(2):70-78.
125. *Northwest Hospital Child Care Center Parent Handbook*. Seattle: Northwest Hospital Medical Center; 2002.
126. Fairbank L, O'Meara S, Renfrew MJ, Woolridge M, Sowden AJ, Lister-Sharp D. A systematic review to evaluate the effectiveness of interventions to promote the initiation of breastfeeding. *Health Tech Assess*. 2000;4(25).
127. Protheroe L, Dyson L, Renfrew MJ, Bull J, Mulvihill C. *The effectiveness of public health interventions to promote the initiation of breastfeeding*: Health Development Agency; 2003.
128. Durand M, Labarere J, Brunet E, Pons J-C. Evaluation of a training program for healthcare professionals about breast-feeding. *Eur J Obstet Gynecol Reprod Biol*. 2003;106:134-138.
129. Ahluwalia IB, Tessaro I, Grummer-Strawn LM, MacGowan C, Benton-Davis S. Georgia's breastfeeding promotion program for low-income women. *Pediatrics*. 2000;105(6).
130. Wagner CL, Husley TC, Southgate WM, Annibale DJ. Breastfeeding rates at an urban medical university after initiation of an educational program. *South Med J*. 2002;95(8):909.

131. Counseling to promote a healthy diet in adults: a summary of the evidence for the U.S. Preventive Services Task Force. *Am J Prev Med.* 2003;24:75-92.
132. Qualified wellness or disease management programs. Rep. Hunt RC, and Sen. Flanders, trans. 2004 session ed; 2004.
133. *Wenatchee urban area comprehensive plan.* Wenatchee, WA 2002.
134. *Comprehensive plan for Olympia and the Olympia growth area.* Olympia, WA 1994.
135. Kahn EB, Ramsey LT, Brownson RC, et al. The effectiveness of interventions to increase physical activity: a systematic review. *Am J Prev Med.* 2002;22(4S):73-107.
136. Brownson RC, Baker EA, Housemann RA, Brennan LK, Bacak SJ. Environmental and policy determinants of physical activity in the United States. *Am J Public Health.* 2001;91:1995-2003.
137. Brownson RC, Housemann RA, Brown DR, et al. Promoting physical activity in rural communities. *Am J Prev Med.* 2000;18(3):235-241.
138. Humpel N, Owen N, Leslie E. Environmental factors associated with adults' participation in physical activity: a review. *Am J Prev Med.* 2002;22(3):188-199.
139. Sallis JF, Frank LD, Saelens BE, Kraft MK. Active transportation and physical activity: opportunities for collaboration on transportation and public health research. *Transportation Research Part A.* 2004;38:249-268.
140. Giles-Corti B, Macintyre S, Clarkson JP, Pikora T, Donovan RJ. Environmental and lifestyle factors associated with overweight and obesity in Perth, Australia. *Am J Health Promot.* 2003;18(1):93-102.
141. *HB 266.* Alabama January 15 2002.
142. Bicycling guide map. *King County Department of Transportation.* Available at: <http://www.metrokc.gov/kcdot/roads/bikemap.cfm>. Accessed August 9, 2004.
143. Physical activity: walking maps in King County. *Public Health--Seattle & King County* [website]. June 14, 2004. Available at: <http://www.metrokc.gov/HEALTH/exercise/maps.htm>. Accessed August 9, 2004.
144. *Moses Lake activity paths.* Moses Lake, WA: City of Moses Lake Parks and Recreation Department.
145. Thurston County interactive bicycle map. *Thurston County, Washington* [website]. Available at: <http://gis.evergreen.edu/Website/ThurstonBike/viewer.htm>. Accessed August 9, 2004.
146. Sharpe PA, Granner ML, Gutto B, Ainsworth BE. Association of environmental factors to meeting physical activity: recommendations in two South Carolina counties. *Am J Health Promot.* 2003;18(3):251-257.
147. Saelens BE, Sallis JF, Frank LD. Environmental correlates of walking and cycling: findings from the transportation, urban design, and planning literatures. *Ann Behav Med.* 2003;25(2):80-91.

148. King WC, Brach JS, Belle S, Killingsworth R, Fenton M, Kriska AM. The relationship between convenience of destinations and walking levels in older women. *Am J Health Promot.* 2003;18(1):74-82.
149. *Planning commission recommended comprehensive plan.* Moses Lake, WA: City of Moses Lake, Community Development Department; 2001.
150. *Washington state nutrition and physical activity plan: policy and environmental approaches:* Washington State Department of Health; June 2003.
151. Comprehensive plan & program elements. Available at: <http://www.cityoftacoma.org/54CompPlan/Elements.htm?redir=no>. Accessed August 20, 2004.
152. *Neighborhood connections: retro-fitting the suburbs to improve connectivity for bicycle and pedestrian transportation.* Olympia, WA: Climate Solutions and the City of Olympia; 2001.
153. *Comprehensive plan for Olympia and the Olympia growth area.* Olympia, WA.
154. *Comprehensive plan update.* Pullman, WA March 1999.
155. Trails and paths. *RCW 47.3.* Available at: <http://www.leg.wa.gov/RCW/index.cfm?section=47.30.050&fuseaction=section>.
156. *Revised - 1996 WSDOT bicycle and pedestrian transportation plan (draft):* Washington State Department of Transportation; 2004.
157. *Sidewalk construction planned in Greensboro.* Greensboro, NC: Eat Smart, Move More North Carolina.
158. Overcoming obstacles to smart growth through code reform: an executive summary of smart growth zoning codes: a resource guide. *Local Government Commission.* Available at: [http://www.lgc.org/freepub/PDF/Land Use/sg\\_code\\_exec\\_summary.pdf](http://www.lgc.org/freepub/PDF/Land Use/sg_code_exec_summary.pdf).
159. Craig CL, Brownson RC, Cragg SE, Dunn AL. Exploring the effect of the environment on physical activity: a study examining walking to work. *Am J Prev Med.* 2002;23(2S):36-43.
160. *The 2002 summary of safe routes to school programs in the United States.* New York City: Transportation Alternatives; 2002.
161. Retting RA, Ferguson SA, McCartt AT. A review of evidence-based traffic engineering measures designed to reduce pedestrian-motor vehicle crashes. *Am J Public Health.* 2003;93(9):1456-1463.
162. Bellevue comprehensive plan. Available at: <http://www.ci.bellevue.wa.us/page.asp?view=3415>. Accessed August 18, 2004.
163. Berrigan D, Troiano RP. The association between urban form and physical activity in U.S. adults. *Am J Prev Med.* 2002;23(2S):74-79.
164. Cervero R, Duncan M. Walking, bicycling, and urban landscapes: evidence from the San Francisco Bay area. *Am J Public Health.* 2003;93(9):1478-1483.
165. Ewing R, Schieber RA, Zegeer CV. Urban sprawl as a risk factor in motor vehicle occupant and pedestrian fatalities. *Am J Public Health.* 2003;93(9):1541-1545.

166. Ewing R, Schmid T, Killingsworth R, Zlot A, Raudenbush S. Relationship between urban sprawl and physical activity, obesity, and morbidity. *Am J Health Promot.* 2003;18(1):47-57.
167. Saelens BE, Sallis JF, Black JB, Chen D. Neighborhood-based differences in physical activity: an environment scale evaluation. *Am J Public Health.* 2003;93(9):1552-1557.
168. Lopez R. Urban sprawl and risk for being overweight or obese. *Am J Public Health.* 2004;94(9):1574-1579.
169. New, health-conscious buildings are fit to work in. *Seattle Post-intelligencer.* August 9, 2004.
170. Kerr NA, Yore MM, Ham SA, Dietz WH. Increasing stair use in a worksite through environmental changes. *Am J Health Promot.* 2004;18(4):312-315.
171. Boutelle KN, Jeffery RW, Murray DM, Schmitz MKH. Using signs, artwork, and music to promote stair use in a public building. *Am J Public Health.* 2001;91(12):2004-2006.
172. Killingsworth RE, Nazelle Ad, Bell RH. *A new role for public health in transportation creating and supporting community models for active transportation.* Chapel Hill, NC: Active Living by Design.
173. Location efficient mortgage. *Seattle Office of Housing, City of Seattle.* Available at: <http://www.cityofseattle.net/housing/LEM/>. Accessed September 10, 2004.
174. Travel options: location of racks and lockers. *King County Metro Transit* [website]. Available at: <http://transit.metrokc.gov/tops/bike/lockers.html>. Accessed August 9, 2004.
175. Des Moines comprehensive plan. Available at: [http://66.175.4.144/dept/development/plan/comp\\_download.html](http://66.175.4.144/dept/development/plan/comp_download.html). Accessed August 19, 2004.
176. New Millennium Park bicycle station opens. *Chicago Department of Transportation.* Available at: [http://egov.cityofchicago.org/city/webportal/portalContentItemAction.do?BV\\_SessionID=@@@@0379742760.1095022725@@@@&BV\\_EngineID=ccc\\_cadcmhlghfdicefeceddfhdfn.0&contentOID=536911409&contentTypeName=COC\\_EDITORIAL&topChannelName=SubAgency&blockName=Chicago+Bike+Program%2FI+Want+To&context=dept&channelId=0&programId=0&entityName=Chicago+Bike+Program&deptMainCategoryOID=](http://egov.cityofchicago.org/city/webportal/portalContentItemAction.do?BV_SessionID=@@@@0379742760.1095022725@@@@&BV_EngineID=ccc_cadcmhlghfdicefeceddfhdfn.0&contentOID=536911409&contentTypeName=COC_EDITORIAL&topChannelName=SubAgency&blockName=Chicago+Bike+Program%2FI+Want+To&context=dept&channelId=0&programId=0&entityName=Chicago+Bike+Program&deptMainCategoryOID=). Accessed September 10, 2004.
177. *City of Kirkland Comprehensive Plan.* Kirkland, WA: City of Kirkland.
178. Woodinville comprehensive plan. Available at: <http://www.ci.woodinville.wa.us/regulations/regs-stds-comp-plan.asp>. Accessed August 19, 2004.
179. *Regional bicycle and pedestrian implementation strategy for the central Puget Sound region.* Seattle, WA: Puget Sound Regional Council; 2002.
180. *Portland pedestrian master plan.* Portland, OR: Office of Transportation, City of Portland; 1998.

181. Sallis JF, Johnson MF, Calfas KJ, Caparosa S, Nichols JF. Assessing perceived physical environmental variables that may influence physical activity. *Res Q Exerc Sport*. 1997;68(4):345-351.
182. Jakicic JM, Wing RR, Butler BA, Jeffery RW. The relationship between presence of exercise equipment in the home and physical activity level. *Am J Health Promot*. 1997;11:363-365.
183. CDC. National partnership promotes health and recreation. *Centers for Disease Control and Prevention*. Available at: <http://www.cdc.gov/nccdphp/dnpa/physical/partnership.htm>. Accessed July 6, 2004.
184. Moses Lake School District. *Moses Lake School District*. Available at: <http://www.moseslakeschools.org>. Accessed July 5, 2004.
185. Beaumont CE. *State policies and school facilities: how states can support or undermine neighborhood schools and community preservation*: National Trust for Historic Preservation; 2003.
186. Sallis JF, Conway TL, Prochaska JJ, McKenzie TL, Marshall SJ, Brown M. The association of school environments with youth physical activity. *Am J Public Health*. 2001;91(4):618-620.
187. Stratton G. Promoting children's physical activity in primary school: an intervention study using playground markings. *Ergonomics*. 2000;43(10):1538-1546.
188. Safe routes to school projects. *Washington State Department of Transportation* [website]. Available at: [http://www.wsdot.wa.gov/Bike/Safe\\_Routes\\_Projects.htm](http://www.wsdot.wa.gov/Bike/Safe_Routes_Projects.htm). Accessed August 9, 2004.
189. Safe Routes 2 School Program. *Partnership for a Walkable America* [website]. Available at: <http://www.walktoschool-usa.org>. Accessed August 10, 2004.
190. Cooper AR, Page AS, Foster LJ, Qahwaji D. Commuting to school: are children who walk more physically active? *Am J Prev Med*. 2003;25(4):273-276.
191. Staunton CE, Hubsmith D, Kallins W. Promoting safe walking and biking to school: the Marin County success story. *Am J Public Health*. 2003;93(9):1431-1434.
192. *Safe routes to schools demonstration project: final report*. Marin County, CA: Marin County Bicycle Coalition for the National Highway Traffic Safety Administration; September 27 2001.
193. Rowland D, DiGiuseppi C, Gross M, Afolabi E, Roberts I. Randomised controlled trial of site specific advice on school travel patterns. *Ach Dis Child*. 2003;88:8-11.
194. New York City Department of Transportation launches programs to boost traffic safety and promote walkign at city schools. *New York City Department of Transportation*. Available at: [www.nyc.gov/html/dot/html/about/pr2004/pr04\\_30.html](http://www.nyc.gov/html/dot/html/about/pr2004/pr04_30.html). Accessed August 10, 2004.

195. Barriers to children walking and biking to school--United States, 1999. *CDC MMWR*. 2002;51(32):701-704.
196. Phoenix school safety program. *Pedestrian and bicycle information center* [website]. Available at: [http://www.bicyclinginfo.org/cps/saferoutes\\_phoenix.htm#3](http://www.bicyclinginfo.org/cps/saferoutes_phoenix.htm#3). Accessed August 9, 2004.
197. School walking routes. *City of Springfield* [website]. Available at: <http://www.ci.springfield.mo.us/community/walktoschool/>. Accessed August 10, 2004.
198. Trudeau F, Laurencelle L, Tremblay J, Rajic M, Shephard RJ. Daily primary school physical education: effects on physical activity during adult life. *Med Sci Sports Exerc*. 1999;31(1):111-117.
199. Sallis JF, McKenzie TL, Conway TL, et al. Environmental interventions for eating and physical activity. *Am J Prev Med*. 2003;24(3):209-217.
200. *Daily school physical activity*. Louisiana: SB 871; July 6, 2004.
201. *Physical activity programs for elementary students*: Texas State Board of Education; March 2002.
202. Datar A, Sturm R. Physical education in elementary school and body mass index: evidence from the Early Childhood Longitudinal Study. *Am J Public Health*. 2004;94(9):1501-1505.
203. Zask A, Beurden Ev, Barnett L, Brooks LO, Dietrich UC. Active school playgrounds--myth or reality? Results of the "Move It Groove It" project. *Prev Med*. 2001;33:402-408.
204. McKenzie TL, Sallis JF, Elder JP, et al. Physical activity levels and prompts in young children at recess: a two-year study of a bi-ethnic sample. *Res Q Exerc Sport*. 1997;68(3):195-202.
205. McKenzie TL, Sallis JF, Prochaska JJ, Conway TL, Marshall SJ, Rosengard P. Evaluation of a two-year middle-school physical education intervention: M-SPAN. *Med Sci Sports Exerc*. 2004;36(8):1382-1388.
206. Boss S. Gym Class Renaissance. *Northwest Education Magazine*. Vol 6; 2000.
207. Healthy schools for healthy kids. *The Robert Wood Johnson Foundation*. Available at: <http://www.rwjf.org/publications/publicationsPdfs/healthySchools.pdf>.
208. Dale D, Corbin D. Physical activity participation of high school graduates following exposure to conceptual or traditional physical education. *Res Q Exerc Sport*. 2000;2000(71):61-68.
209. StairWELL to better health: a worksite intervention. *National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention* [website]. May 3, 2004. Available at: <http://www.cdc.gov/nccdphp/dnpa/stairwell/index.htm>. Accessed August 7, 2004.
210. Stein AD, Shakour SK, Zuidema RA. Financial incentives, participation in employer-sponsored health promotion, and changes in employee health and productivity: HealthPlus Health Quotient Program. *J Occup Environ Med*. 2000;42:1148-1155.

211. IHRSA trend report. *International Health, Racquet and Sportsclub Association*. April. Available at: [http://download.ihrsa.org/trendreport/04\\_2004trend.pdf](http://download.ihrsa.org/trendreport/04_2004trend.pdf).
212. Redmond police department salary and benefits. *City of Redmonds*. Available at: <http://www.ci.redmond.wa.us/insidecityhall/police/benefits.asp>. Accessed July 6, 2004.
213. Employee incentives. Paper presented at: A leadership summit on obesity. Employers, employees, and the obesity epidemic: controlling costs and improving health, 2004.
214. 2nd Wind. *HealthPartners*. Available at: <http://www.healthpartners.com/Menu/0,1598,20855,00.html>. Accessed July 29, 2004.
215. HealthPartners frequent fitness program. *HealthPartners*. Available at: <http://www.healthpartners.com/Menu/0,1598,17797,00.html>. Accessed July 29, 2004.
216. Behavioral counseling in primary care to promote physical activity: recommendation and rationale. *Ann Intern Med*. 2002;137:205-207.



