

# **A Healthy Active Oregon:**

*Statewide Physical Activity and Nutrition Plan  
2007-2012*

**Prepared by the Nutrition Council of Oregon and  
the Oregon Coalition for Promoting Physical Activity**



## Table of Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
Settings.....	2
Foreword.....	4
<b>BACKGROUND .....</b>	<b>5</b>
Why a Statewide Plan.....	5
Who Will Use the Statewide Plan .....	5
Building on What Has Already Been Done .....	6
National Recommendations for Obesity Prevention, Healthy Eating and Physical Activity .....	7
Fruit and Vegetable Consumption.....	9
Breastfeeding.....	12
Promoting Physical Activity.....	12
Reducing Screen Time .....	14
Social Ecological Model .....	16
Describing the Settings.....	18
Disparities in Health and Weight Status.....	21
Healthy Aging .....	23
<b>THE PLAN .....</b>	<b>25</b>
Goals, Objectives and Strategies.....	25
Built Environment.....	25
Worksite .....	27
Health Care System.....	28
Schools and Child Care Settings.....	30
Community.....	34
Home/Household .....	36
Objectives and Data Source .....	38
<b>SURVEILLANCE .....</b>	<b>43</b>
<b>RESOURCES .....</b>	<b>45</b>
Sources by Topic.....	45
Glossary.....	52
<b>ACKNOWLEDGEMENTS .....</b>	<b>56</b>

*For additional copies, information, or to receive this plan in alternate formats,  
contact the Oregon DHS Physical Activity and Nutrition Program at 971-673-0984.*



## EXECUTIVE SUMMARY


Obesity and chronic diseases – often the result of physical inactivity and unhealthy eating – are leading public health concerns throughout the United States. Obesity is a risk factor in several health conditions that impair and shorten the lives of thousands of Oregonians annually, including heart disease, Type 2 diabetes, stroke, certain cancers, hypertension, osteoarthritis and asthma.

In Oregon, as throughout the nation, obesity rates have reached troubling proportions. Nearly two-thirds of Oregon adults are overweight or obese and nearly one of every four teen-agers is overweight or at risk of becoming overweight. Beyond the problems obesity currently presents in the lives of young people today, excess weight foreshadows potentially even greater health problems for the next generation of adults.

This disturbing trend does not have to continue. Leaders and decision-makers throughout the state are beginning to recognize the significant impact of environments and public policies that can support individuals in making positive changes. Toward that end, the Healthy Active Oregon Statewide Physical Activity and Nutrition Plan is a roadmap for creating environments and policies that support daily physical activity and access to healthy foods for all Oregonians, with the ultimate goal of reducing chronic disease. These changes can also prompt positive improvements in the lives of Oregon's growing oldest population group. Among older adults, increased physical activity and more healthful diets can reduce falls and improve brain health.

This plan updates and combines two documents published in 2003 – the State Physical Activity Plan and the Statewide Public Health Nutrition Plan. The result is a single, improved comprehensive plan aimed at improving the health and well being of all residents of Oregon. Prepared with guidance from the state's Public Health Division Physical Activity and Nutrition Program, it represents the work of dozens of organizations and institutions committed to increasing daily physical activity and access to healthy foods and the reduction of chronic diseases for all Oregonians.

This plan acknowledges that one key factor in fighting obesity and chronic diseases involves a comprehensive approach addressing not individuals and individual behaviors per se, but environments and settings where children and adults spend a significant part of their days – in schools, worksites, the home, the community, in health care systems and the built environments. Such an effort reinforces healthy behaviors in many settings throughout the day for wide numbers of people.



This plan also addresses the issue of the creation of public policies that are long lasting and which reach a broad spectrum of the population in an effort to reduce or eliminate barriers to healthy eating and physical activity.

The following is the Healthy Active Oregon Statewide Physical Activity and Nutrition Plan, complete with a vision, overarching goals and a priority framework over the next five years. It is for policymakers, local and state planners, health care providers, educational systems, employers, and communities and is designed to assist them in reducing barriers to daily physical activity and improving access to healthy foods.

**Vision: Oregonians engage in physical activity and healthy eating in their daily lives and live in communities that support those choices.**

**Overarching goals to prevent obesity and chronic diseases in Oregon:**

- **Increase healthy eating and physical activity opportunities for Oregonians through supportive policies and environments;**
- **Increase the percentage of Oregonians who meet the recommendations for a healthy diet;**
- **Increase the percentage of Oregonians who meet the recommendations for daily physical activity;**
- **Increase the percentage of Oregonians who are at a healthy weight.**

## **Settings**

### ***Built Environment***

Plan and construct communities, including schools and open spaces, to enable people of all ages and abilities to be physically active and have access to healthy food. Accomplish this through effective land use planning and community design and adoption and implementation of effective transportation policies.

### ***Worksites***

For their employees and employees' families, employers will implement policies and programs to create environments that encourage healthy eating and daily physical activity, and help to maintain a healthy weight and prevent and manage chronic diseases. Specifically, employers will offer health care coverage that includes effective obesity-related chronic disease prevention, treatment and management.



## **Health Care Systems**

For their patients and employees, hospitals, health insurers and health care providers will adopt policies and practices that support and promote healthy eating and daily physical activity, and help maintain a healthy weight and prevent and manage chronic diseases.

## **Schools and Child Care**

Schools and child care settings will offer only healthy food choices, be free of food and beverage marketing and fund-raising activities, and support children and youth in meeting daily physical activity recommendations. In addition, child care settings will eliminate or limit time in front of television and video screens and increase the number of schools participating in Farm to School, a program in which local farmers provide fresh fruits and vegetables directly to schools for children's meals.

## **Community**

Communities, organizations and institutions will promote healthy eating and daily physical activity and support related initiatives, policies and social norms. Communitywide social marketing campaigns, interventions, and implementation of policies and environmental supports will be used to help communities promote healthy eating and daily physical activity.

## **Homes/Households**

Families will support practices that support and promote healthy eating and daily physical activity, and help maintain a healthy weight and prevent and manage chronic diseases. Families can support healthy practices by helping ensure nursing mothers breastfeed their babies, family members consume the recommended amounts of fruits and vegetables, participate in daily physical activity, and ensure children under the age of 2 have no screen time and children older than 2 have two or fewer hours of screen time.



## Foreword

This plan represents the next generation of physical activity and nutrition goals, objectives and strategies for Oregon to combat the problem of overweight/obesity, physical inactivity, unhealthy eating.

It combines many of the relevant goals and strategies of the previous “Healthy Active Oregon: Statewide Public Health Nutrition Plan” and “Healthy Active Oregon: Statewide Physical Activity Plan.” It provides more measurable and time-framed objectives that allow for better identification of strategies and more specific targeting of environments.

The creation of this plan began with a review of the previous plans by their primary contributors, the Nutrition Council of Oregon (NCO) and the Oregon Coalition for Promoting Physical Activity (OCPPA). More than 120 organizations and programs subsequently participated in an inventory of various approaches to promoting physical activity and healthy eating. From there, a steering committee composed of NCO and OCPPA representatives and key volunteers developed a framework upon which more than 70 partners, organizations and individuals identified more specific objectives and strategies. With the Oregon Public Health Division’s Physical Activity and Nutrition Program, a smaller work group refined the results of those efforts.



## BACKGROUND

### Why a Statewide Plan

Adequate physical activity and healthy eating are essential ingredients for good health. Yet, too many Oregonians have poor eating habits and lead sedentary lives. Inactivity and poor food choices contribute significantly to the development of obesity, high blood pressure, heart disease, cancer, and diabetes, are leading causes of disease and death among Oregonians.

In the past 20 years, the food environment has changed dramatically, paralleling the increase in obesity rates. Advertisements and media messages, “super-sized” portions and promotional pricing encourage the consumption of foods high in calories, sugar and fat. The abundance of fast-food restaurants, vending machines, and convenience stores make the same poor food choices readily accessible.

At the same time we are encouraged to eat more, we have fewer opportunities to burn those added calories:

- Office jobs require hours of sitting;
- Elevators replace stairs;
- Physical education in schools has been eliminated or cut back;
- Televisions and computers are used extensively during leisure time;
- We rely on automobiles and truck for most of our travel.

Many opportunities for physical activity have been engineered out of our daily lives.

The intent of the statewide Physical Activity and Nutrition Plan is to develop communities where healthy choices are the easy choices:

- Where adults and children have ready access to fresh vegetables, fruits, and other healthy foods at school, work, and in their communities;
- Where Oregonians can safely walk and bicycle to and from work and school, and for errands and for recreation.

### Who Will Use the Statewide Plan

The Healthy Active Oregon Statewide Public Health Physical Activity and Nutrition Plan is intended for Oregonians. It contains specific recommendations for schools and child care providers; city, state and local governments; public and private work places; non-profit agencies and organizations; health care providers; transportation systems; city and urban planning units; state, county, and local coalitions; and Oregon parents.

All of these audience members can implement the strategies outlined in the plan. This can be accomplished through individual behavior change, interpersonal support, institutional/organizational change, community norms, and policy development and implementation.

## **Building on What Has Already Been Done**

Many organizations have participated in the development of plans, reports and recommendations. Elements of these publications have been adopted and used to support policy and environmental change and other community interventions to address overweight, obesity and chronic diseases. All continue to provide a valuable resource to increase opportunities for physical activity and healthy eating.

### ***Physical activity and healthy eating:***

- Healthy Active Oregon: Statewide Physical Activity Plan  
Oregon Coalition for Promoting Physical Activity  
[www.healthoregon.org/hpcdp/physicalactivityandnutrition](http://www.healthoregon.org/hpcdp/physicalactivityandnutrition)
- Healthy Active Oregon: Statewide Public Health Nutrition Plan  
Nutrition Council of Oregon  
[www.healthoregon.org/hpcdp/physicalactivityandnutrition](http://www.healthoregon.org/hpcdp/physicalactivityandnutrition)
- Oregon Overweight, Obesity, Physical Activity, and Nutrition Facts (Annual Publication)  
[www.healthoregon.org/hpcdp/physicalactivityandnutrition](http://www.healthoregon.org/hpcdp/physicalactivityandnutrition)
- Promoting Physical Activity and Healthy Eating Among Oregon's Children: A Report to the Oregon Health Policy Commission  
[www.healthoregon.org/hpcdp/physicalactivityandnutrition](http://www.healthoregon.org/hpcdp/physicalactivityandnutrition)

### **Integration of physical activity and nutrition strategies with existing plans pertaining to chronic disease and other areas:**

The broad spectrum of partners and collaborators involved in the development of this plan are also involved in other numerous statewide chronic disease prevention initiatives, efforts that maintain a collective vision and partnership to promote evidence-based interventions.

- Keeping Oregonians Healthy  
[www.healthoregon.org/hpcdp](http://www.healthoregon.org/hpcdp)
- Oregon's Action Plan for Diabetes: Improving Health and Quality of Life of Oregonians Affected by Diabetes.  
[www.healthoregon.org/diabetes](http://www.healthoregon.org/diabetes)

- Oregon’s Statewide Plan for Heart Disease and Stroke Prevention and Care: Working for a Heart-Healthy and Stroke-Free Oregon  
<http://www.oregon.gov/DHS/ph/HDSP/index.shtml>
- Oregon Comprehensive Cancer Plan: Our Call to Action – A statewide blueprint for cancer prevention and control in Oregon  
[www.healthoregon.org/cancer](http://www.healthoregon.org/cancer)
- The Oregon Arthritis Action Plan: Optimizing the quality of life for Oregonians affected by Arthritis  
[www.healthoregon.org/arthritis](http://www.healthoregon.org/arthritis)
- Oregon Healthy Aging Report and Recommendations  
<http://www.oregon.gov/DHS/spwpd/ltc/fltc/index.shtml>
- Oregon Statewide Comprehensive Outdoor Recreation Plan:  
<http://egov.oregon.gov/OPRD/PLANS/SCORP.shtml>

## **National Recommendations for Obesity Prevention, Healthy Eating and Physical Activity**

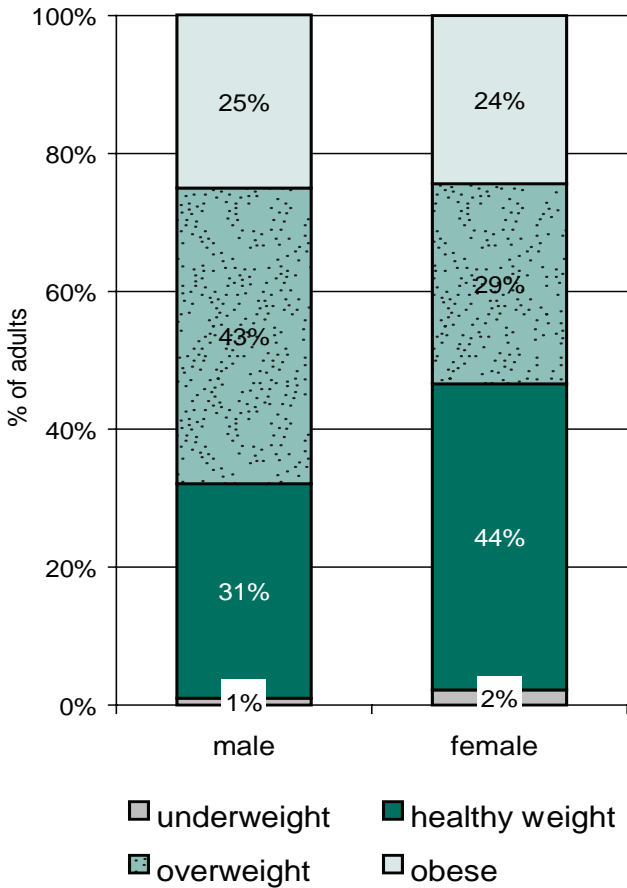
The Centers for Disease Control and Prevention (CDC) recommend obesity prevention strategies that focus on five highly preventable risk factors – calorie imbalance, insufficient fruit and vegetable consumption, physical inactivity, lack of adequate breastfeeding and increased screen-time and sedentary behaviors.

### **Calorie Balance**

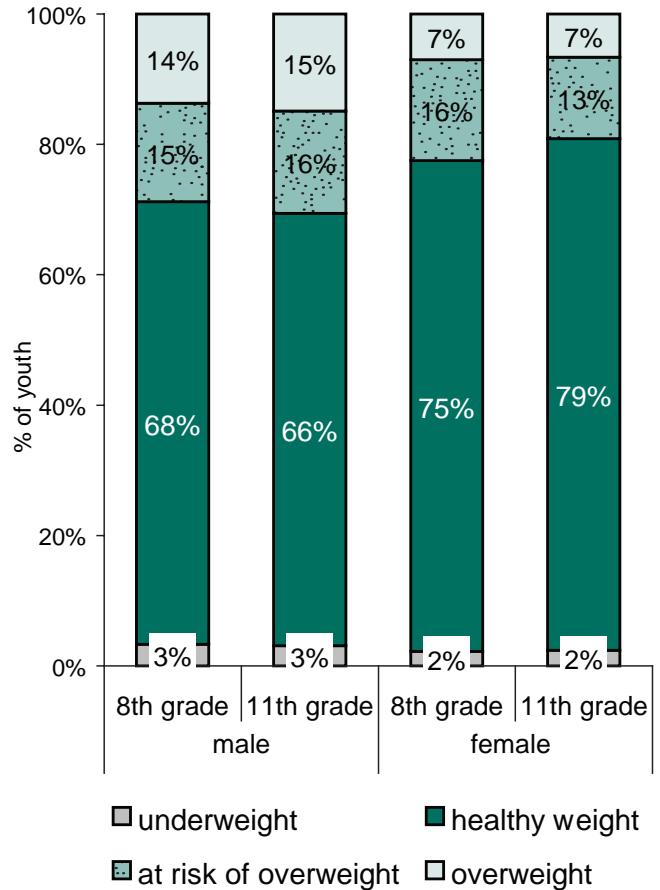
Weight management is achieved through calorie balance, which is when the number of calories taken in through food and beverages equals the number of calories burned through daily activity. Key behaviors that contribute to calorie balance include monitoring portion sizes, reducing the consumption of sweetened beverages, increasing fruit and vegetable consumption, increasing physical activity, and reducing screen time and sedentary behaviors.

Overweight in adults is defined by a body mass index (BMI) of 25 to 29.9 while obesity is defined by a BMI of 30 or more. For children (ages 2-20 years), overweight is defined by a BMI for age at the 95th percentile or greater. BMI is calculated by dividing a person's weight in kilograms by the height in meters squared (kg/ m<sup>2</sup>). The 2006 weight status for Oregon youth and adults is shown in the following graph.

Adults by weight status and sex, Oregon, 2006



Youth by weight status and sex, Oregon, 2006

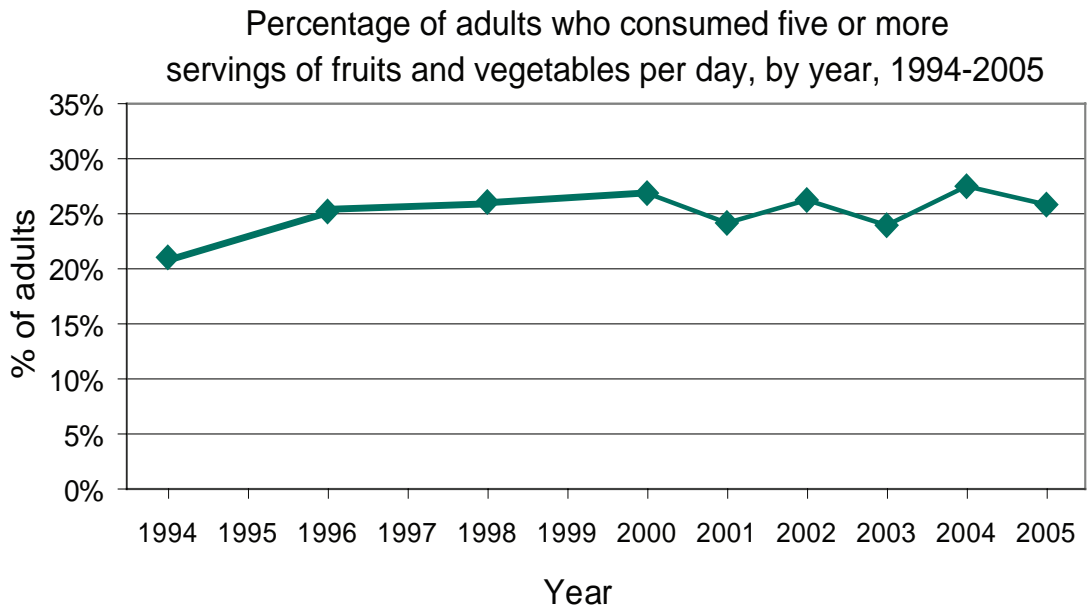


## Fruit and Vegetable Consumption

Research shows that eating more fruits and vegetables is good for health. In addition to decreasing the risk of many chronic diseases, fruits and vegetables are naturally low in fat and help people feel full on fewer calories. Consequently, eating fruits and vegetables helps people maintain a healthy weight. The Dietary Guidelines for Americans 2005 recommend 4½ cups of fruits and vegetables per day for most adults and fewer cups for children, depending on their calorie needs. Oregon data is reported in servings. A serving is about half a cup of a fruit or a vegetable. Adults who eat five servings a day are eating half of the recommended 4½ cups.

### Adults

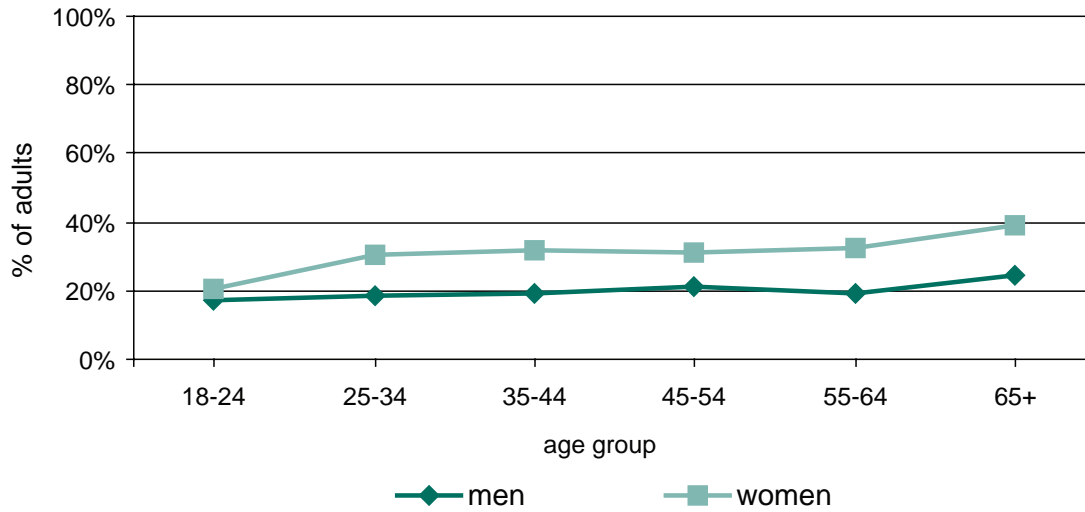
Approximately 26 percent of Oregon adults eat five or more servings of fruits and vegetables a day, only half of the recommended amount. That number has fluctuated since 1997 with no significant increase. Almost all persons need to eat more fruits and vegetables.



Source: Behavioral Risk Factor Surveillance System, CDC, 2005

Adult consumption of fruits and vegetables differs by age and by sex. Women eat more fruits and vegetables than men. Consumption also increases with age. Adults age 65 and older report eating twice as many servings each day as adults ages 18-24 years.

Percentage of adults who consumed five or more servings of fruits and vegetables a day, by age group and sex, Oregon, 2005

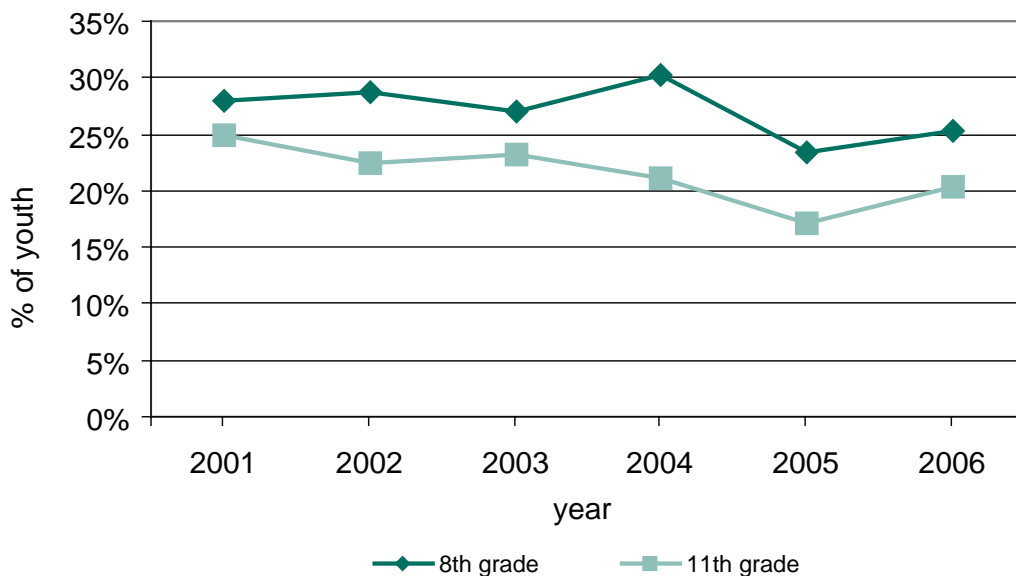


Source: Behavioral Risk Factor Surveillance System, CDC, 2005

### Youth

The number of Oregon youth eating an adequate number of servings of fruits and vegetables is decreasing, prompting another serious concern. Between 2001 and 2005, the fraction of eighth-graders who reported consuming five or more servings of fruits and vegetables decreased from 27.9 percent to 23.4 percent. The decrease was greater for 11th-graders, from 24.9 percent to 17.7 percent. Oregon trends reflect similar national dietary surveys, according to the “American Journal of Preventive Medicine.” Data indicate a critical need to explain this nationwide decrease and to develop effective interventions to increase fruit and vegetable consumption among adolescents.

Percentage of youth consuming five or more fruits and vegetables per day, by grade and year, 2001-2006

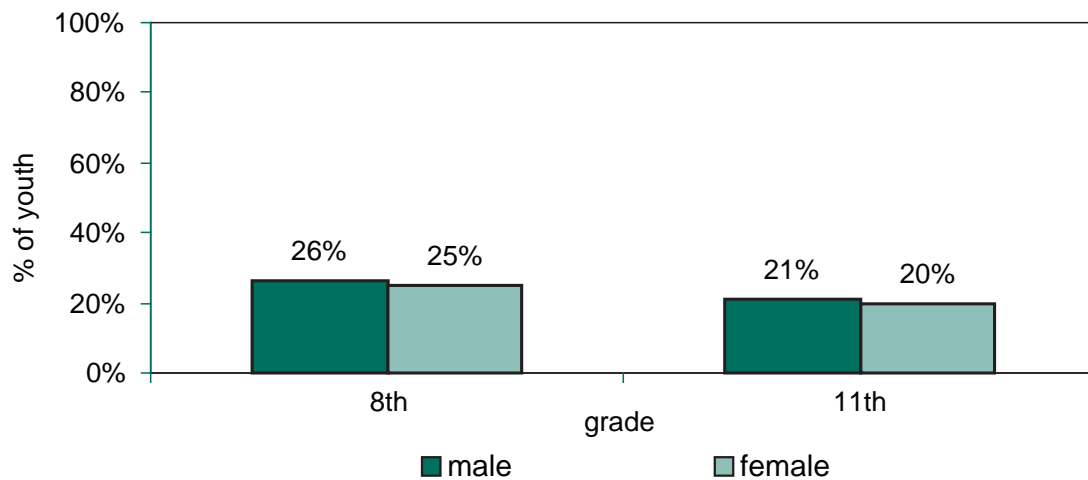


Source: Oregon Healthy Teens 2006

Oregon youth data do not show a significant difference in fruit and vegetable consumption according to sex, but they show a decline according to age, with 11th-graders eating fewer servings than eighth-graders.

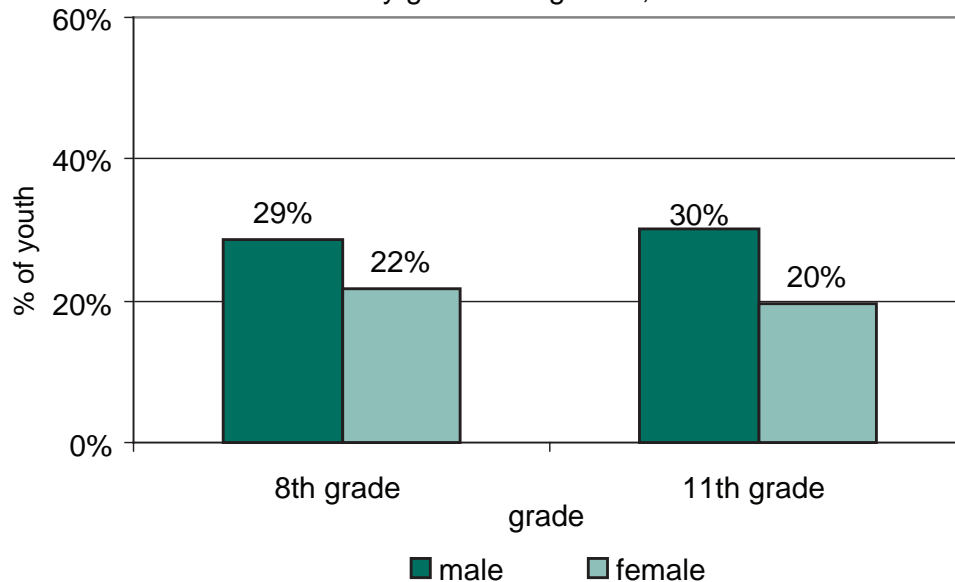
One issue at the core of the childhood obesity concern is the consumption of sweetened beverages, such as soft drinks and flavored drinks that are not 100 percent juice. These beverages increase caloric intake but provide no nutrients. According to the Institute of Medicine, soft drink consumption among adolescents has more than tripled since 1978.

Percentage of youth who consumed five or more servings of fruits and vegetables a day, by sex and grade, Oregon, 2006



Source: OHT 2006

Youth who drank seven or more soft drinks per week, by grade and gender, 2006



Source: OHT 2006

## Breastfeeding

Breast milk is the most complete form of nutrition to promote optimal growth and development in an infant. Breastfeeding helps reduce the likelihood of obesity in children and decreases subsequent risk of obesity in adulthood. For optimal growth and development, the CDC and American Academy of Pediatrics (AAP) recommend exclusive breastfeeding for at least six months following birth. Also, the World Health Organization’s Baby-Friendly Hospital Initiative promotes breastfeeding to hospitals through its “Ten Successful Steps to Breast Feeding” program. The percentage of mothers in Oregon who breastfeed their infants is significantly higher than the national average.

Percentage of Mothers Who Breastfeed in Oregon, by Year

	Ever Breastfed	(Any) Breastfeeding at 6 months	(Any) Breastfeeding at 12 months	Exclusive Breastfeeding at 3 months	Exclusive Breastfeeding at 6 months.
2003	88.0%	54.1%	27.8%	58.1%	26.8%
2004	86.0%	53.0%	26.2%	54.7%	22.3%
2005	89.4%	57.6%	37.0%	59.2%	26.6%

Source: 2005 National Immunization Survey, CDC, Department of Health and Human Services

To determine if a child was breastfed the mother was asked, “Was [child’s name] ever breastfed or fed breastmilk?” Exclusive breastfeeding was defined in the 2005 survey as ONLY breast milk — NO solids, no water, and no other liquids. NOTE: This new definition reflects a change from the 2003 National Immunization Survey, which defined exclusive breastfeeding as “only breast milk and water — no solids or other liquids.”

## Promoting Physical Activity

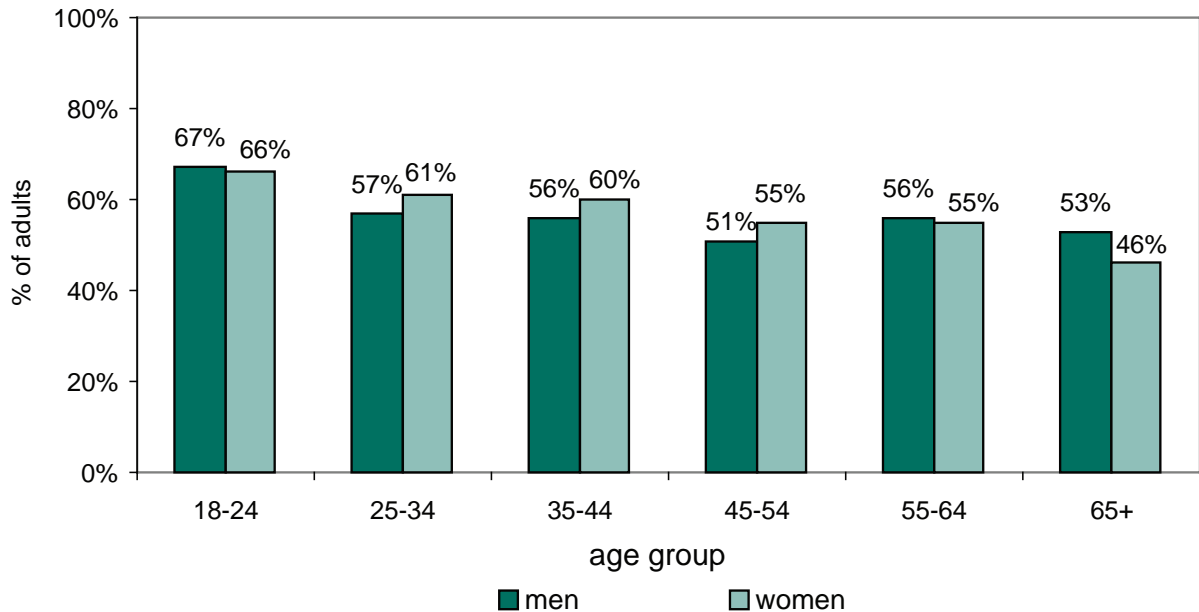
Physical activity has been slowly engineered out of everyday life. Urban sprawl, suburban community design, design of freeways and streets solely for use by motorized vehicles, a lack of physical education in schools, and other changes in our environment have contributed to the reduction in daily physical activity. This state plan provides a variety of policy and environmental approaches to reverse these trends and make physical activity a regular aspect of daily life once again.



To help reduce the risk of chronic diseases, it is recommended that adults engage in a minimum of 30 minutes of moderate-intensity activity five or more days of the week. Children and adolescents should participate in at least 60 minutes of moderate-intensity physical activity, preferably daily.

The following figure illustrates physical activity of Oregonians decreases with age.

Percentage of adults meeting CDC physical activity recommendations\*, by sex and age group, Oregon, 2005

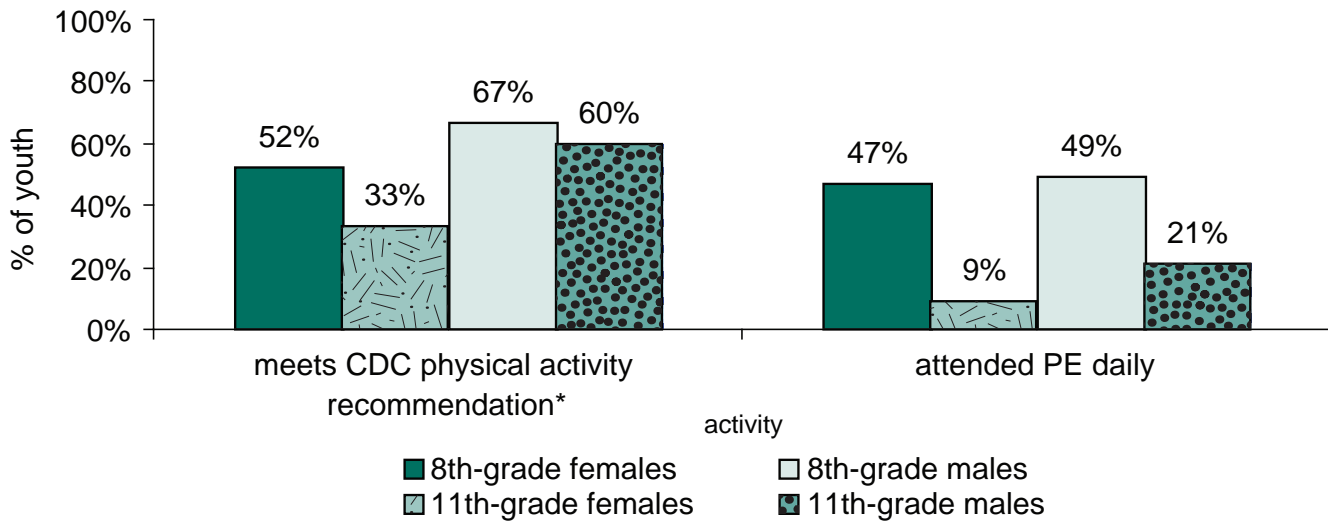


Source: BRFSS 2005

Worksite wellness programs and active transportation initiatives are broad-reaching strategies that can address this issue by helping adult Oregonians remain physically active as they age. Community design strategies also can help diverse populations, such as seniors and people with disabilities, to become and remain active.

The figure on the next page illustrates a decline in physical activity that occurs among Oregon youth between eighth and 11th grades. In eighth grade, half of all girls met CDC activity recommendations, but three years later, 33 percent of girls met the same recommendations. The percentage of active boys also drops between eighth and 11th grade, although in both grades boys are far more likely than girls to meet activity recommendations. Most striking are the declines in physical education attendance. Nearly half of Oregon's eighth-grade girls and boys attend daily physical education. But attendance drops precipitously to 9 and 21 percent among 11th -grade girls and boys respectively. These data indicate the need for policies and environmental supports that increase physical education attendance across all grades and genders. Additional physical activity supports such as walking and biking to school and engaging in after-school programs can help Oregon's youth become and remain active.

Extent of physical activity among youth, by grade and sex, Oregon, 2006



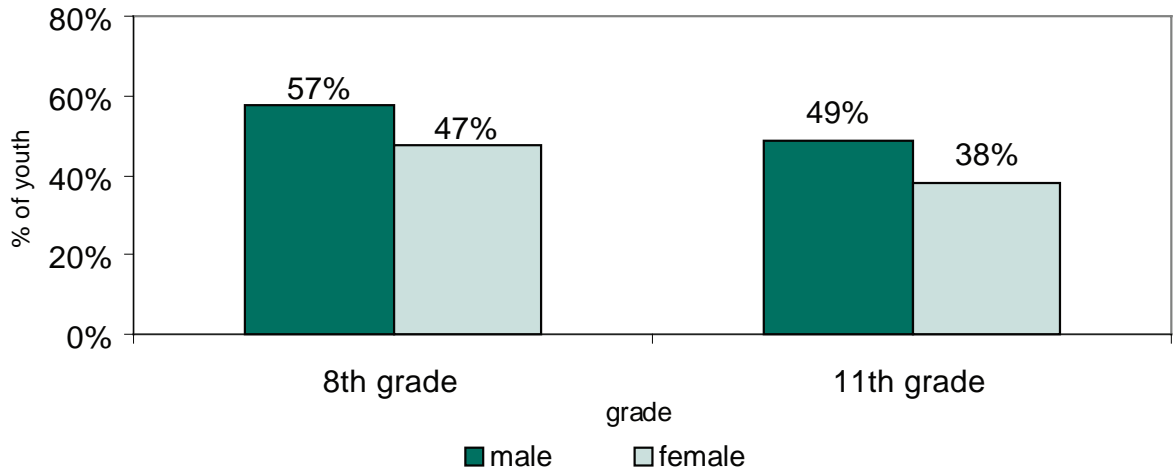
Source: OHT 2005

\*The CDC Physical Activity Recommendation for Youth: Physically active for at least 60 minutes per day five or more days a week.

## Reducing Screen Time

There is a relationship between television viewing and weight gain among school-age children. Not only is television viewing sedentary in nature, evidence suggests the consumption of high-calorie food (which is aggressively marketed on television) while viewing is primarily responsible for weight gain. Other screen-time activities such as computer use, video games and possibly excessive cell and text messaging, contribute to sedentary lifestyles. To counter this, the American Academy of Pediatrics (AAP) recommends children under the age of 2 spend no time in front of a screen and children 2 years and older be limited to two or fewer hours a day of quality programming. In Oregon, 57 percent of eighth-grade boys and 47 percent of eighth-grade girls spent more than two hours of screen time on an average school day. To help Oregon youth meet the AAP recommendation, the state plan has several objectives and strategies specifically addressing television and other screen-time activities.

Percentage of youth with screen time\* of more than two hours per day, by grade and gender, 2006



Source: OHT, 2006

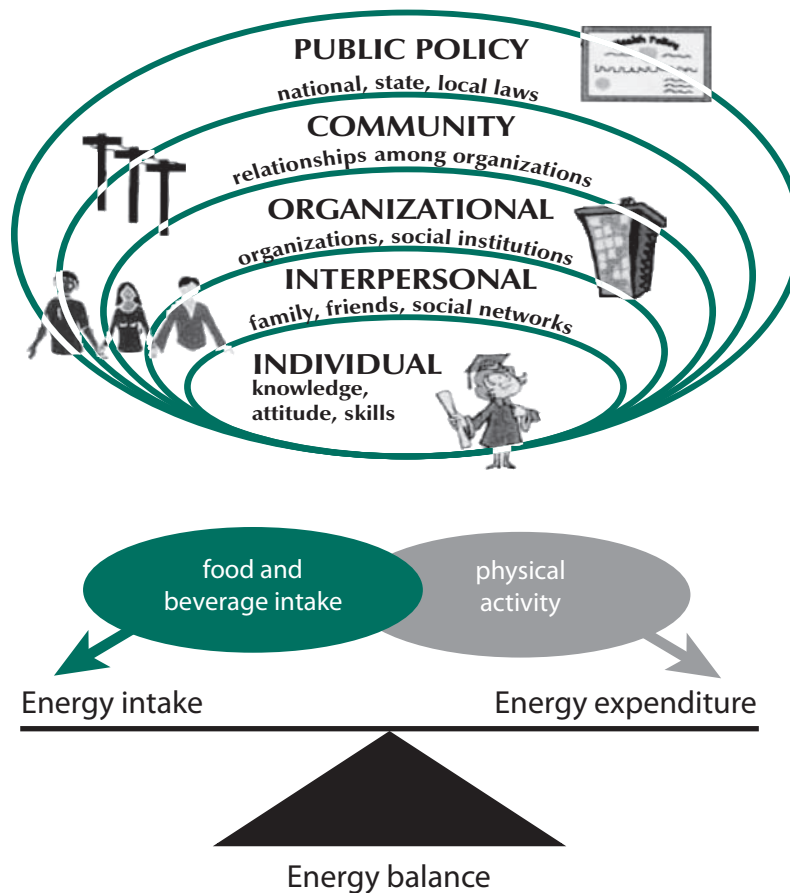
\* Screen time is defined as watching television, playing video games, or using a computer for other than school work.

## Social Ecological Model

Interventions to promote physical activity and healthy eating and reduce disease risk have almost always focused on changing individual behavior. But the environment also has enormous impact on the ability to change behavior.

*It is unreasonable to expect people will change their behavior easily when so many forces in the social, cultural and physical environment conspire against such change. (Institute of Medicine)*

### Social Ecological Model – Framework to Prevent and Control Overweight and Obesity



The challenges and solutions involved in addressing the prevention and control of obesity and weight issues are numerous and, in most cases, overlapping and inter-related. To create a plan that will most effectively address those relationships, preparers employed a Social Ecological Model, a framework that considers the multiple effects and inter-related nature of an environment's social elements and components. Each of the following was considered:

## Society/Policy

This encompassing category includes individuals, organizations and communities working together for policy and environmental change. Elements of a comprehensive strategy aimed at larger-scale changes include new nutrition and physical activity legislation, statewide school policies, media campaigns and partnerships with business and industry.

## Community

A community is a large organization, and therefore is able to make policy and environmental changes that will provide members greater access to healthier foods and places where they can be physically active. Partnerships and collaborations between local government, community organizations and residents can improve nutrition options and physical activity. Examples include changing zoning ordinances, establishing farmers markets and improving park and recreation facilities.

## Organization

This level of the model considers schools, worksites, churches, businesses and other similar settings — locations in which individuals typically spend a significant part of their day away from home. Policies, procedures rules and regulations in each of these settings can influence behaviors. Establishing nutrition standards for vending machines is one example; ensuring school districts meet physical education recommendations is another.

## Interpersonal

This component targets the social support behind an individual's behavior change, including family, friends, peers, clubs and other groups. Interpersonal and group influence can be critical in promoting more healthful behaviors by giving individuals the knowledge and support to make good nutrition and physical activity choices.

## Individuals

Addressing obesity and other chronic diseases involves changing people's behavior, which occurs when knowledge, attitudes and beliefs about healthful eating and physical activity are changed. Inter-connected social relationships — including families, schools, communities, and government — can support and guide individuals to make more informed choices.

## Describing the Settings

Policy and environmental interventions are among the most effective ways of addressing factors influencing physical activity and eating habits and therefore can produce long-term changes in health behaviors. The main actors in these efforts include state and local policy makers, health care providers and insurers, city planners, transportation officials, business and industry leaders, community coalitions and health-advocacy organizations. The plan considers six settings where these actors can influence policy and environmental change.

- Built environment
- Health care
- Community
- Worksite
- School and child care
- Home and household

### **The Built Environment:**

Broadly defined, the built environment includes land-use patterns, transportation systems and design features. The built environment refers to physical environments that comprise zoning, recreation facilities, locations of public buildings, public spaces, parks and trails; physical structures, such as homes, schools and workplaces; and transportation infrastructure, such as streets and sidewalks. These environments, community design and zoning have enormous impact on people's physical activity and both access to and choices about healthful eating.

Today's built environment has largely been shaped around society's dependence on motorized transportation, the values and preferences of homeowners and buyers, and racial and economic concentrations of the poor, which have seen disinvestments in certain neighborhoods.

The built environment can be created in ways that provide people with greater opportunities to be active and to have access to more healthful food. For instance, ready access to parks and trails may encourage greater physical activity, and sidewalks and mixed-use development that encourage nearby food and farmers markets are also likely to promote walking.

With new construction and home renovation, the built environment is constantly under change. Therefore, there are ongoing opportunities to alter the built environment.

Decision-makers, including policy-makers, elected officials, planners and developers and community advocates, can improve the built environment by:

- Fostering collaboration;
- Supporting safe, pedestrian-oriented transportation;

- Supporting the inclusion of active living and easy access to healthful food in land-use planning and development;
- Supporting the development of healthy school sites and facilities;
- Supporting the maintenance and development of recreation facilities, parks and trails.

### The Health Care System:

Health care systems — hospitals, clinics, providers and health plans — can play a significant role in addressing obesity and healthy weight management.

Recent reviews of best practices regarding obesity and weight management recognize the body mass index as a valuable screening measure. Evidence also confirms the efficacy of multi-component programs that integrate low-calorie diets, structured physical activity and behavioral interventions. Beyond patient screening, diagnosis and referrals for treatment, health care systems also can prevent obesity by:

- Preventing barriers and access to care through policy change;
- Educating health care providers;
- Advising patients on healthy eating and physical activity;
- Partnering with community-based efforts on local policy and environmental change, and health promotion;
- Creating healthy environments for staff and patients in their facilities.

### Community:

Community refers to groups of persons with common characteristics such as geographic, professional, cultural, racial, religious or socio-economic similarities. Communities can be defined, too, by ethnicity, age, occupation and shared interest in particular problems or outcomes — or common bonds.

Community also considers relationships between organizations. Like individuals, organizations can be linked by common purpose or by the groups they serve or within a common geographic area. Schools, parks and recreation departments, and the local YMCA collaborating to provide after school activities for children is one example of community. Community can also refer to local farms that provide fresh fruits and vegetables directly to local schools, employers, senior centers and farmers markets. The relationships range from informal agreements to formal contracts supported by organizational policies.

Health disparities often exist between different community groups, in part because of the impact of community norms. Community norms often influence behavior around physical activity, food types and quantities of food consumed, breastfeeding practices, visits to health

care providers, and perceptions of healthy weight. Health-related interventions must consider existing community norms to be optimally effective.

### Worksite:

Given the amount of time adults spend at work, the worksite is an important environment where healthy behaviors can be influenced. Employers benefit from reduced health care costs, increased productivity and decreased absenteeism. Employees can benefit from improved health and morale. The best healthy worksites are those where employees and management work together to develop wellness-related policies and sustainable educational programs.

Examples of healthy worksite policies include:

- Providing healthy food choices at meetings and events, and in cafeterias and vending machines;
- Offering flexible scheduling and worksite shower facilities to encourage employees to incorporate physical activity into their day;
- Providing a locked, private room and a refrigerator for breastfeeding mothers.

Worksite support can take the form of several dimensions of influence, including individual awareness and values; co-worker support, organizational policies, social norms, and implementation of state and federal laws that support wellness.

### Schools and Child Care:

Overweight and obesity are serious health concerns affecting children and adolescents. In addition to present-day concerns, excess weight puts young people at risk for developing health problems during adulthood. According to *The Future of Children*, a publication of the Woodrow Wilson School of Public and International Affairs at Princeton University and the Brookings Institution, almost 80 percent of children ages 5 years and younger with working mothers are in child care on average 40 hours a week. Given their substantial time with their charges, particularly during important developmental years, child care providers share responsibility with parents for providing settings that encourage healthy eating and physical activity habits.

The majority of Americans ages 5-17 attend school for several hours a day. Schools are ideal settings for teaching and supporting healthy eating and physical activity behaviors. The Institute of Medicine (IOM) reports many schools and districts are implementing innovative programs designed to improve nutritional habits and physical activity rates.

### Home and Household:

Beyond the seemingly simple definition of it being a place where people live, home can incorporate a broad range of living arrangements. Beyond the variations of rural, urban or suburban, home can be a single-family dwelling, townhouse, condominium or an apartment.



Group homes, senior-living facilities, assisted-living arrangements and facilities, halfway houses, shelters and other temporary living arrangements for the homeless and migrant populations are also homes.

Home is often where dietary preferences and leisure pursuits are passed from parent to child, and where these concepts are both defined and practiced. Because home plays such a significant role, this setting should be considered when creating goals, objectives and strategies to improve healthful eating and physical activity behaviors.

Parents are in a powerful position to shape their children's habits. Consequently, adults are encouraged to buy and prepare nutritious food, be physically active and use discretion about spending leisure time in sedentary activities, such as television watching.

Preferences within the home also can extend to settings such as schools, workplace and health care. Parents can request schools to develop policies to ensure nutritious food is offered in cafeterias, vending machines and during classroom parties. Adults can help employers develop environmental supports that make physical activity during work an easy option. Adults and children both can talk to their health care providers about healthy habits.

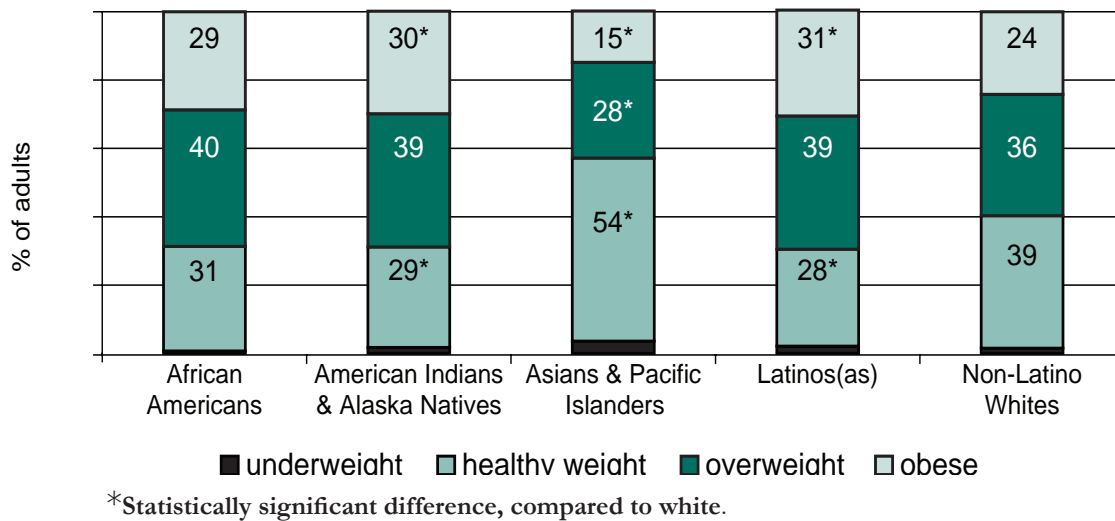
## **Disparities in Health and Weight Status**

In recent decades, disparities in health have been well documented across a broad range of medical conditions and for a wide range of groups. These differences have been noted in health outcomes, such as quality of life and mortality; access to, quality and appropriateness of care; and the prevalence of certain conditions or diseases. Eliminating health disparities associated with physical inactivity, obesity, poor nutrition and related chronic disease continues to be a priority of the Oregon Physical Activity and Nutrition Plan, whether these disparities are based on heritage, age, economic disadvantage or where people live.

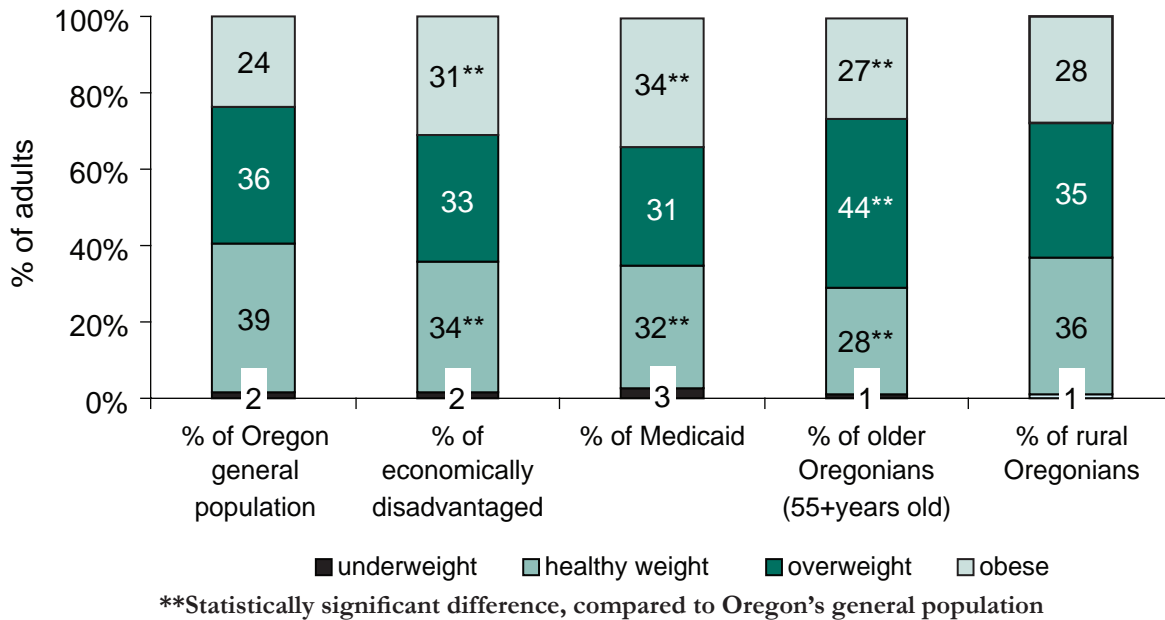
The 2006 National Healthcare Disparities Report (NHDR) and the mid-course update of the Healthy People 2010, another national effort, reports health disparities have been reduced, although greater improvements are still needed.

The graphs on the following page, from the 2005 Behavioral Risk Factor Surveillance System, detail the prevalence of overweight and obesity and chronic diseases in selected Oregon populations.

Weight status of adults among selected populations, Oregon, 2004-2005



Weight status of adults among the general population, the economically disadvantaged, Medicaid\* recipients, older Oregonians, and rural Oregonians, 2005



Being overweight or obese is a major risk factor for numerous chronic diseases including heart disease, stroke, diabetes, asthma and some cancers. Increasing physical activity and healthy eating can help prevent and reduce disability from these chronic conditions.

Increasing opportunities for physical activity and access to healthy foods must be priorities in every community, neighborhood, school and work place, and among health care providers. The plan targets all Oregonians, focusing on communities disproportionately affected by obesity.

Several strategies in the plan address disparities, including:

- Accurate and comprehensive data collection, which is reported annually in *Oregon Overweight, Obesity, Physical Activity, and Nutrition Facts*. These data allow policy-makers to better understand the problem and craft solutions. The data also help identify target areas and provide baseline data to monitor interventions.
- Organizing coalitions and advocacy groups that are representative of the community.
- Developing community-centered approaches to planning and implementing interventions that involve all segments of the community.

## Healthy Aging

Oregon's population is aging. One in eight Oregonians was 65 or older in 2005; by 2030, the number of older adults will be one in five. Oregonians who are 85 and older make up one of the fastest growing groups within the older adult population.

With age, physical activity and healthy eating play critical roles in preventing and managing chronic conditions, preventing falls, avoiding complications with medicines, addressing depression, and ensuring a person's ability to care and provide for himself.

While disability among the older population is on the decline, more than two-thirds of older adults have one or more chronic conditions, and older adults report decreased physical activity as they age. Multiple chronic conditions, medication side effects, care-giver responsibilities, and transportation barriers resulting from giving up driving are additional challenges that can impact physical activity and healthy eating in the older adult population.

To meet goals and objectives for older adults, two factors are particularly important:

- Providers of services for older adults should be involved in the community planning process.
- The wide range of health conditions, and physical activity and dietary habits among older adults should be acknowledged.

Oregon's emphasis on community-based long-term care services mean a greater number of older frail adults with chronic conditions are living in community settings. Consequently, their needs must be included in considerations related to walk-able communities, access to healthy foods, zoning and transportation policies and community-based programming.

Physical activity and healthy nutrition are key to healthy aging.



# THE PLAN

## Goals, Objectives and Strategies

### **Vision**

Oregonians engage in physical activity and healthy eating in their daily lives and live in communities that support those choices.

### **Goals**

In order to prevent obesity and chronic diseases, Oregon will

- Increase healthy eating and physical activity opportunities for Oregonians through supportive policies and environments.
- Increase the percentage of Oregonians who meet the recommendations for a healthy diet.
- Increase the percentage of Oregonians who meet the recommendations for daily physical activity.
- Increase the percentage of Oregonians who are at a healthy weight.

## Built Environment

### **Objectives and Strategies**

- I. By 2012, increase from baseline the number of state and local jurisdictions and communities with land use-planning, community design and transportation policies that support environments that encourage daily physical activity, healthy eating and healthy weight.
  - a). Through comprehensive planning policies that call for suitable infrastructure, increase the ability of residents in a community to walk and ride bicycles. Employ plans and projects such as those initiated by the Robert Wood Johnson Foundation Active Living by Design program and the National Center for Safe Routes to School.
  - b). The Land Conservation Development Commission will require all local municipalities to include health impact assessments in their comprehensive development plans.
  - c). Local zoning boards and planning commissions should require space for community gardens, farmers markets and full-service supermarkets within or adjacent to residential neighborhoods.
  - d). Multidisciplinary partnerships such as the Healthy Eating and Active Living Coalition (HEAL); the Oregon Coalition for Promoting Physical Activity and the Nutrition Council of Oregon; the Oregon Nutrition Policy Alliance and others should continue to expand their work and engage new constituencies.
  - e). State and local transportation policies and funding should support the expansion and maintenance of walking, biking and mass transit options.

- f). The Healthy Eating and Active Living Coalition will disseminate the 5-P model created by the Robert Wood Johnson Foundation Active Living by Design program [partnership, programs, promotions, policies, & physical projects] to promote healthy eating and active living.
  - g). Local public health officials should participate in city and county planning efforts and advise planners on their ability to impact the health of residents.
- II. By 2012, all communities in the state of Oregon will provide easy access to trails, parks, open spaces and recreational facilities.
- a). The state Legislature shall increase funding to state and local parks and recreation departments for the rehabilitation and maintenance of existing recreational facilities and programs.
  - b). The Oregon Parks and Recreation Department and the Oregon Recreation & Park Association will promote and improve access to places for physical activity including trails, parks, and recreational facilities.
  - c). The state Legislature will provide funding to the Oregon Parks and Recreation Department to allow the department to collect more data about park use and use the research to make the parks more accessible and responsive to community needs.
- III. By 2012, all siting and closure decisions by school districts will consider the impact of those actions on physical activity and healthful eating.
- a). Increasing biking and walking to school will be a factor in siting decisions.
  - b). To influence decisions by school districts about the impact of school sitings, organizations and agencies such as 1,000 Friends of Oregon, the Land Conservation and Development Commission, the Oregon Department of Education, and the Oregon School Boards Association will educate and engage stakeholders in discussions.
  - c). Encourage school districts, parks and recreation departments and local non-profits to collaborate on shared use of athletic fields and recreational facilities.

## Worksite

### **Objectives and Strategies**

- I. By 2012, increase by 10 percent the number of worksites with policies and programs that promote and support physical activity and healthy eating for employees and their family members.
  - a). Develop and publicize a business case supporting physical activity and healthy eating policies and programs that include factors such as cost justifications, reductions in sick days and increases in productivity.
  - b). To develop policies and programs, employers should use a worksite wellness toolkit, the state's Breastfeeding Mother Friendly Employer toolkit, or similar publications that provide examples of the benefits of physical activity and healthy eating.
  - c). Employers should identify and designate individuals or decision-makers to continuously support, approve and promote physical activity and healthy eating policies and programs.
  - d). Employers should encourage and support transportation options such as walking, biking and taking public transit by providing showers, lockers, walking maps, bike storage and flexible time policies.
  
- II. By 2012, increase by five percent the number of employees who consume five servings of fruits and vegetables per day.
  - a). Increase the availability and promotion of fruits and vegetables at worksites, including cafeterias, vending machines, break rooms, meetings and events.
  - b). Develop policies and promote healthy choices for cafeterias, vending machines and meetings to include fruit and vegetable offerings.
  - c). Promote healthy cafeterias and eating environments through prominent vegetable placement, displays of fruits and vegetables, appropriate portion size offerings, and point of purchase information that includes nutrition information.
  - d). Promote value pricing on fruits and vegetables in cafeterias and vending machines to make them desirable to purchase.
  - e). Provide nutrition education opportunities for all employees.
  - f). Where possible, organize farmers markets at worksites and/or establish Community Supported Agriculture partnerships with local farmers.

- III. By 2012, increase by five percent the number of employees who are physically active for 30 minutes a day, at least five days a week.
  - a). Design buildings that feature attractive and easy accessible stairs, showers, covered bike parking and racks, and fitness centers.
  - b). Promote and give incentives to employees who integrate physical activity into their day by way of biking, walking and taking public transit to and from work.
  - c). Provide and promote flexible time policies to allow for opportunities for increased physical activity.
  - d). Provide dedicated staff, educational programming and communication that promotes and makes physical activity opportunities more accessible.
  - e). Establish a practice of conducting “walking meetings.”
  
- IV. By 2012, increase by 10 percent the number of employers who offer health care coverage for effective prevention, treatment and management of chronic or obesity-related diseases.
  - a). Develop and publicize a business case for support of health care coverage that includes chronic disease prevention, treatment and management with cost justifications, reductions in sick days and increases in productivity.
  - b). Use a worksite wellness toolkit or similar publication that provides examples of effective chronic disease prevention, treatment, and management coverage. The publication should feature case studies and other resources.
  - c). Identify and designate individuals or decision-makers to continuously support, approve, and promote health care coverage that features prevention, treatment and management of chronic diseases.
  - d). Include coverage and provide meeting space for Weight Watchers or a similar evidence-based weight-loss program.

## Health Care System

### **Objectives and Strategies**

- I. By 2012, to increase support for breastfeeding, 15 percent of Oregon birthing hospitals will achieve the World Health Organization designation of Baby-Friendly Hospital, meaning they are centers of breastfeeding support.
  - a). Encourage all birthing hospitals to adopt baby-friendly policies and communicate them to staff.
  - b). The Legislature should fund the Oregon Public Health Division’s support for the Breastfeeding Coalition of Oregon.



- c). Encourage all birthing hospitals to promote baby-friendly peer counseling in the community.
  - d). Recruit birthing hospitals to be members of Breastfeeding Coalition of Oregon and other local coalitions
  - e). Encourage hospitals to provide lactation support, breast pumps (when needed) and education.
- II. By 2012, increase training, education and resources for physicians and primary-care providers that enable providers to help patients achieve and maintain healthy weight through healthy eating and increased physical activity.
- a). Promote and provide additional training for health care professionals related to prevention of obesity. This training should feature efficient techniques for motivating patients to make lifestyle changes.
  - b). Provide education for medical, allied health care professionals and patients about the importance of nutrition during pregnancy and lactation. Provide nutrition counseling for the mother while she is in the hospital.
  - c). Develop systems of referral to registered dietitians and other allied health professionals.
  - d). For clinicians, create a web-based clearinghouse or directory of community resources about physical activity and healthy nutrition.
- III. By 2012, increase each year the number of health care systems with policies that support physical activity and healthy eating for employees, patients and the community.
- a). Develop and encourage adoption of wellness policies and guidelines related to healthy portion sizes, availability of soda and promotion of fruits and vegetables in hospital and clinic cafeterias and vending machines. This is consistent with the U.S. Department of Health and Human Services and the U.S. Department of Agriculture 2005 Dietary Guidelines for Americans.
  - b). Increase the number of health care systems and providers that measure BMI and discuss results and recommendations with patients.
  - c). Co-sponsor communitywide campaigns and events that promote physical activity and healthy eating.
  - d). Increase advocacy for community physical activity and nutrition policies by hospitals, health care systems and providers.
  - e). Increase hospital and health system support and engagement in community coalitions that focus on healthy eating and physical activity.

- IV. By 2012, increase each year the number of major health plans and insurers that cover obesity prevention and non-surgical treatment.
  - a). Health plans and insurers should offer health care benefits that provide incentives to maintain a healthy weight by encouraging physical activity and healthy eating.
  - b). Support Oregon policy to provide insurance coverage for obesity prevention and treatment.
  - c). Support Oregon policy to make obesity prevention and treatment a billable code for care providers.
  - d). Medicaid and commercial health plans will provide insurance coverage for lactation support and reimbursement for breast pumps.

## **Schools and Child Care Settings**

### ***Objectives and Strategies***

- I. By 2010, all school and child care settings will implement policies requiring all food to meet or exceed current USDA Dietary Guidelines for Americans and all serving sizes to be age appropriate.
  - a). The Oregon Department of Education will develop and implement policies and practices promoting fruit and vegetable consumption in schools. Examples include providing school salad bars, stocking fruit in vending machines, and lowering prices for fruits and vegetables.
  - b). The Department of Education will establish and implement standards to ensure food is not used as a reward in school settings.
  - c). The Public Health Division, the Department of Education Child Nutrition Program and the Child Care Division of the Oregon Employment Department will develop, disseminate and provide training on best practice guidelines regarding appropriate use of food in child care settings.
  - d). Oregon nutrition advocacy groups should identify education leaders and encourage them to advocate in favor of healthy food policies and standards in schools and child care settings.
  - e). The Department of Education will annually recognize schools or school districts and child care settings that implement model food and physical activity policies.
  - f). To improve the quality of food and participation in the Child Nutrition Program, the Legislature will authorize reimbursement to school districts and child care settings for meals served as part of the program.

- g). The Legislature will fund and authorize the Department of Education Child Nutrition Program to establish and monitor statewide nutrition standards for all foods and beverages sold outside of federal meals program.
  - h). The Oregon Child Care Resource and Referral Network shall offer all child care programs and providers training in the preparation of meals in accordance with U.S. Department of Agriculture Dietary Guidelines.
  - i). The Legislature will require all Oregon school districts to monitor and report to the Department of Education on implementation of school wellness policies and publish a yearly report.
  - j). The Child Care Division of the Oregon Employment Department will convene the Oregon Commission for Child Care, Healthy Child Care Oregon, Oregon Department of Education Child Nutrition Program, Oregon Public Health Division, Oregon Child Care Resource and Referral Network and other key partners to develop model standards for child care nutrition and physical activity. The group also will disseminate, provide training for and monitor implementation of these standards, related to financial incentives, licensure and evaluation.
  - k). The Legislature will require and provide funding for all K-12 school districts to collect and provide parents with data about their student's health, including physical activity, nutrition, height, weight and BMI calculations.
- II. By 2012, all Oregon schools and child care settings will have policies prohibiting fund-raising activities and the marketing of food and beverages that do not support a healthful diet as defined by U.S.D.A. Dietary Guidelines for Americans.
- a). The Department of Education, school districts and education advocates should identify alternative fund-raising strategies and promote them in schools.
  - b). The Department of Education, school districts and education advocates should support state policies prohibiting marketing of food and beverage products in schools or child care settings.
  - c). Education, public health and early childhood-development advocates should build public support for improved school and nutrition policies through letters to the editor and other media avenues.
  - d). The Public Health Division should be authorized and funded to support media campaigns that promote healthy food choices such as the Fruits & Veggies—More Matters™ campaign.

- e). The Public Health Division and the Department of Education should be authorized and funded to develop a social marketing campaign that supports healthy food choices such as fruits and vegetables, whole grains, low-fat dairy, water, appropriate portion sizes, and menu labeling in schools and child care settings.
  - f). The Department of Education and local school boards shall train and support teachers, food service personnel and other leaders on promotion of fruit and vegetable consumption.
- III. By 2010, all child care settings, including preschools, will have policies limiting access to screen time, in accordance with American Academy of Pediatrics recommendations.
- a). The Child Care Division of the Oregon Employment Department shall work with the Oregon Child Care Resource and Referral Network to develop policies for preschools and child care settings eliminating all screen time. Those policies shall be a condition of certification and must be monitored.
  - b). The Public Health Division will convene partners to build support for such policies through training, parent education and the development of model standards.
- IV. Seventy-five percent of schools by 2012 will participate in Farm-to-School programs, including school-based gardens. Efforts will be initiated to increase the participation of care child settings in Farm-to-School programs.
- a). The state departments of education and agriculture and other leaders, such as Ecotrust, will research and develop models for family farmers to market and sell their products to school districts. The models shall meet the needs of buyers and sellers.
  - b). The Department of Education Child Nutrition Program will develop a business plan to help school districts transition to Farm-to-School programs.
  - c). The Department of Education Child Nutrition Program will assist farmers, school food service staff, educators, community organizers, and others as needed with the Farm-to-School program. See Rethinking School Lunch at [www.ecoliteracy.org](http://www.ecoliteracy.org).
  - d). School boards, the Department of Education, and health and nutrition advocates shall collaborate to develop and implement farm-to-school food policies at state, local and district levels.
  - e). The Legislature shall support the development of model pilot programs in school districts. The system should support the marketing of school meals that feature local fruits, vegetables, nuts, and legumes.
  - f). School boards, the Department of Education, and health and nutrition advocates shall train and support teachers, food service staff and other leaders on the collaborative promotion of fruit and vegetable consumption.

- g). The Legislature shall provide financial and technical support to the Department of Education for school gardens, requiring schools to link gardens to curriculum and cafeteria meals.
- V. By 2012, increase by 10 percent the number of Oregon children and youth ages 2 and older who meet the minimum recommendations for physical activity and education.
- a). School districts shall increase by 10 percent the number of school-age youth engaged in at least 60 minutes of age-appropriate daily physical activity.
  - b). School districts shall increase the number of school-aged youth participating in standards-based daily physical education that features a lifetime focus.
  - c). The Legislature will require K-12 school districts to collect and communicate to parents data on their student's health, including information about physical activity, nutrition, height, weight, and other factors.
  - d). To expand and promote walking and bicycle riding to school, districts shall retain existing neighborhood schools, site new schools in a manner that fosters such physical activity, designate new routes and implement programs and promotional events.
  - e). Local school districts should foster partnerships with park and recreation districts and community organizations that lead to more physical activity opportunities for youth, including the retention of gyms and playgrounds.
  - f). The Legislature should mandate daily active recess time for all elementary students.
  - g). Physical activity professionals and advocacy groups should recommend and support policies requiring quality, daily physical education for all students K-12, or at a minimum, require quality physical education for a minimum of 150 minutes per week for students in K-5 and 225 minutes for grades 6-12.
  - h). The Legislature shall require certification for physical education teachers and provide funding for continuing professional development of those teachers.
  - i). The Legislature shall require school districts to regularly evaluate the quantity and quality of their physical activity programs and report their findings to the public.
  - j). The Legislature should establish written guidelines, rules and policies ensuring adequate, age-appropriate daily physical activity for children in early childhood programs and child care settings.
  - k). The Legislature shall fund systems to ensure child care providers are trained and have the resources that enable them to make certain children receive adequate, age-appropriate daily physical activity.

- d). Physical Activity and Nutrition Plan partners should advocate for regulations requiring Head Start and other publicly funded or licensed early childhood-education programs to ensure children engage in age-appropriate, daily physical activity as part of their programs.

## Community

### **Objectives and Strategies**

- I. By 2012, increase from baseline the number of communitywide social marketing campaigns designed to promote daily physical activity, healthy eating, healthy weight, breastfeeding, and the prevention and management of chronic diseases.
  - a). Work with diverse community partners to support and provide resources for media campaigns linked to local resources and focused on health disparities.
  - b). Focus social marketing campaigns to meet community needs and address policies.
  - c). State and county health departments should integrate public health messages into existing campaigns.
  - d). Health systems and educational institutions should conduct media literacy campaigns to educate the public on the media's impact on diet and exercise.
  
- II. By 2012, increase from baseline the number of physical activity and healthy eating interventions for populations experiencing health disparities.
  - a). Local parks and recreation departments shall promote and support after-school programs in low-income neighborhoods that encourage physical activity and healthy eating.
  - b). School districts shall use innovative partnerships to expand the use of school facilities as recreation sites for the community.
  - c). Health departments, universities and community organizations shall conduct evaluations to determine barriers to increased physical activity and healthier food choices.
  - d). The Department of Human Services shall support efforts to address physical activity and healthy eating by sharing information and training pertaining to assessment and planning; best-practice interventions; funding; and ways to promote community-level policy and environmental change.
  - e). Develop a Web site for targeted populations identifying local resources and proven strategies for increasing physical activity.
  - f). The Department of Human Services and community coalitions should implement a program recognizing communities that assess and implement model programs.

- III. By 2012, increase from baseline the number of communities implementing policies and environmental supports for physical activity and healthy eating.
- a). The state Department of Human Services shall continue to provide the Healthy Active Oregon Training Institute for county teams.
  - b). The Legislature shall increase funding for more bicycle paths and sidewalks.
  - c). Every community with a population of more than 500 should have, at minimum, one half-mile long trail.
  - d). The Legislature shall increase funding to support community efforts for safe routes to school.
  - e). The state Department of Human Services shall develop a state report card detailing physical activity and healthy eating opportunities and resources, by county.
  - f). State and county governments shall support the development of county food-policy councils to improve access to healthy food for all.
  - g). Public health advocates shall educate community leaders on the meaning and value of policy and environment support.
  - h). State and local coalitions should develop draft policies pertaining to nutrition and physical activity to serve as models for communities to use at the local level.
  - i). The Department of Human Services will maintain a statewide Active Community Environment coalition.
  - j). Expand state and federal funding for the Farm Direct Nutrition Program, which allows senior and WIC participation at farmers markets and produce stands through the state.
  - k). Support community gardens through innovative partnerships and coordinated use of land.
  - l). Subsidize farmers markets in low-income areas with support from federal, state and local governments and community organizations.
  - m). Expand the number of farmers markets accepting Electronic Benefit Transfer (EBT) cards for food-stamp recipients.
  - n). Restaurants shall expand and promote options for healthy foods, beverages and meals by providing calorie content and other key nutritional information.
  - o). Local grocery and convenience stores shall make available more healthy food choices that meet local population preferences.
  - p). Explore effective collection and distribution of fresh fruits and vegetables through food banks prior to spoilage.

- q). Increase the number the number of communities partnering with the national campaign, Fruits & Veggies–More Matters™.

## Home/Household

### **Objectives and Strategies**

- I. By 2012, maintain the current level of breastfeeding initiation and increase by two percent a year the number of mothers who breastfeed exclusively for the first six months of a child’s life.
  - a). The Legislature shall expand Oregon family medical leave to give mothers more time at home and/or flexible work hours after the birth of a child.
  - b). The Legislature shall expand funding for programs that offer education and peer counseling.
  - c). The Legislature shall require all public buildings to have breastfeeding-friendly rooms.
  - d). Health plans, health systems, hospitals and others shall promote breastfeeding campaigns targeting the entire family.
  
- II. By 2012, increase by one percent a year the number of Oregon adults and children who consume five servings of fruits and vegetables per day.
  - a). The Department of Human Services and local coalitions should promote Fruits & Veggies–More Matters™ campaign.
  - b). Local coalitions should promote home and community gardens.
  - c). State and local coalitions should support the State Nutrition Action Plan “SNAP” implementation of the Fruit and Fruits & Veggies–More Matters™ campaign.
  - d). State and local coalitions should support the Oregon State University Extension Family and Community Development Service “Happy Home Meal” program.
  
- III. By 2012, increase by five percent the number of Oregon adults and children who meet the recommendation for daily physical activity.
  - a). The Department of Human Services and state coalitions should identify data sources to establish baselines and evaluate progress on meeting objectives.
  - b). Parents, teachers and child care workers shall encourage and monitor outdoor play.
  - c). Families should include physical activity in their outings and vacations.
  - d). Parents should give their children gifts that encourage physical activity rather than sedentary behaviors.



- e). Parents should be role models for healthy physical activity and eating.
- f). Educational and health organizations should provide families with information and resources promoting physical activity.
- g). Families should incorporate walking and traveling by bicycle in routine daily trips.
- h). Health care providers should prescribe physical activity for children and adults, when appropriate.
- i). Provide state tax deductions to encourage physical fitness, such as for memberships in gyms and exercise clubs.
- j). State and local coalitions, schools, day care centers, health care providers and others who work with families should provide information about the importance of physical activity, including information about how to lead physically active lives.
- k). Communities, parks and recreation departments and local service providers should provide opportunities and resources for children, adults and families that allow them to be physically active. These provisions should be socially, culturally and economically appropriate for their audiences.

IV. By 2012, decrease television and other screen time for children. Specifically, reduce by two percent the number of children ages 2-18 who have more than two hours a day of screen time and work to ensure children 2 years and younger have no screen time.

- a). Parents should select healthy alternatives to using screen time as a babysitter.
- b). Pediatricians and other health professionals shall teach parents that children 2 years and younger should have no television or other screen time.
- c). Families should participate in TV-Turnoff Week each year and meet the American Academy of Pediatrics screen time recommendations throughout the year. Parents should also encourage alternatives to television and screen time, such as by promoting activity rooms in place of media rooms.
- d). Parents should adopt the following practices in the home:
  - 1). No television in the bedrooms
  - 2). No eating while watching television
  - 3). Not using television or screen time as a reward or punishment.
- e). State and local community coalitions should urge parents to be role models by encouraging them to increase their physical activity, limit their time in front of the television and provide children with resources that foster active rather than sedentary behavior.

## Objectives and Data Source

The following includes information sources that provide a baseline for plan objectives. For some objectives an information source must yet be identified.

### **Built Environment**

By 2012, increase from baseline the number of state and local jurisdictions and communities with land-use planning, community design and transportation policies that support environments that are conducive to daily physical activity, healthy eating and healthy weight.

Data source: The Oregon Department of Land Conservation and Development. Additional sources to be identified.

By 2012, all communities provide easy access to trails, parks, open spaces and recreational facilities.

Data source: According to the Oregon Statewide Trail User and Non-Motorized Boater Survey 2004, Oregon Parks and Recreation Department, 32.9 percent of Oregon households have a member who uses trails for walking and non-motorized biking.

By 2012, all siting and closure decisions by school districts will consider the impact of those actions on physical activity and healthful eating.

Data source: Source to be identified.

### **Worksite**

By 2012, increase by 10 percent the number of worksites with policies and programs that promote and support physical activity and healthy eating for employees and their family members.

Data source: Eleven percent of employers have policies encouraging nutritious foods and 17 percent of employers provide a flexible-time policy that allows for physical activity, according to the Oregon Healthy Worksites Initiative Employer Survey 2005.

By 2012, increase by five percent the number of employees who consume five servings of fruits and vegetables.

Data source: Twenty-five percent of working Oregonians consume five servings of fruits and vegetables per day, according to the Oregon Behavior Risk Factor Surveillance System (BRFSS) 2004.

By 2012, increase by five percent the number of employees who are physically active 30 minutes per day at least five days a week.

Data source: Sixty-one percent of employed Oregonians meet the Centers for Disease Control and Prevention recommendations for daily physical activity at least five days a week, according to Oregon BRFSS 2005.

By 2012, increase by 10 percent the number of employers who offer health care coverage for the effective prevention, treatment and management of chronic disease or obesity-related chronic diseases.

Data source: Source to be identified.

### **Health care**

By 2012, to increase support for breastfeeding, 15 percent of Oregon birthing hospitals will achieve the World Health Organization designation of Baby-Friendly Hospital, meaning they are centers of breastfeeding support.

Data source: Four birthing hospitals/birthing centers in Oregon have achieved the World Health Organization designation of a Baby-Friendly Hospital – UNICEF/Baby Friendly Hospital Initiative in the USA 2007.

By 2012, increase training, education and resources for physicians and primary-care providers that enable providers to help patients achieve and maintain healthy weight through healthy eating and increased physical activity.

Data source: Source to be identified.

By 2012, increase each year the number of health care systems with policies that support physical activity and healthy eating for employees, patients and the community.

Data source: Source to be identified.

By 2012, increase each year the number of major health plans and insurers that cover obesity prevention and non-surgical treatment.

Data source: Source to be identified.

### **Schools and Child care**

By 2010, all school and child care settings will implement policies requiring all food to meet or exceed current USDA Dietary Guidelines for Americans and all serving sizes to be age appropriate.

Data source: Source to be identified.

By 2012, all Oregon schools and child care settings will have policies prohibiting fund-raising activities and the marketing of food and beverages that do not support a healthful diet as defined by U.S.D.A. Dietary Guidelines for Americans.

Data source: Source to be identified.

By 2010, all child care settings, including preschools, will have policies limiting access to screen time, in accordance with American Academy of Pediatrics recommendations.

Data source: Source to be identified.

Seventy-five percent of schools by 2012 will participate in Farm-to-School programs, including school-based gardens. Efforts will be initiated to increase the participation of care child settings in Farm-to-School programs.

Data source: The Oregon Department of Education. Additional sources to be identified.

By 2012, increase by 10 percent the number of Oregon children and youth ages 2 and older who meet the minimum recommendations for physical activity and physical education.

Data source: According to the 2006 report, Oregon Healthy Teens, 59.5 percent of eighth-graders and 46.5 percent of 11th-graders meet the CDC recommendations for physical activity levels. According to the report, 48 percent of eighth-graders and 15 percent of 11th-graders engage in daily physical education.

### **Community**

By 2012, increase from baseline the number of communitywide social marketing campaigns designed to promote daily physical activity, healthy eating, healthy weight, breastfeeding, and the prevention and management of chronic diseases. Two organizations implemented campaigns resembling “Social Marketing Campaigns.”

Data source: Statewide survey of organizations and groups identified as being involved in physical activity and nutrition initiatives 2006.

By 2012, increase from baseline the number of physical activity and healthy eating interventions implemented for populations experiencing health disparities.

Data source: Thirty percent of organizations identified the population served as Latino, African American, American Indian, seniors, rural, low income, Medicaid eligible or WIC clients.

Statewide survey of organizations and groups identified as being involved in physical activity and nutrition initiatives 2006.


By 2012, increase from baseline the number of communities implementing policies and environmental supports for physical activity and healthy eating.

Data source: Fifty-six percent of organizations reported policy and/or environmental change as a program focus. Statewide survey of organizations and groups identified as being involved in physical activity and nutrition initiatives 2006.

### **Home/Household**

By 2012, maintain the current level of breastfeeding initiation and increase by two percent a year the number of mothers who breastfeed exclusively for the first six months of a child’s life.

Data source: The percentage of mothers who reported breastfeeding initiation was 89.4; the percentage of mothers who reported exclusive breastfeeding at 6 months was 26.6. – National Immunization Survey 2005.



By 2012, increase by five percent the number of Oregonians who consume five servings of fruits and vegetables.

Data source: The percentage of adults who reported eating five or more servings of fruits and vegetables a day was 25.9, according to the BRFSS 2005. The percentage of eighth-graders who reported eating five or more servings of fruits and vegetables a day was 23.4 and the percentage of 11th-graders was 17.7. – Oregon Healthy Teens 2006

By 2012, increase by five percent the number of Oregon adults and children who achieve the recommended amounts of daily physical activity.

Data source: The percentage of adult Oregonians who met the CDC recommendations for levels of daily physical activity was 56.4.– BRFSS 2005. The percentage of eighth-graders who met the CDD recommendations for physical activity levels was 59.5 and the percent of 11th-graders was 46.5.– Oregon Healthy Teens 2006

By 2012, decrease television and other screen time for children. Specifically reduce the number of children ages 2-18 who have more than two hours a day of screen time and work to ensure children two years and younger have no screen time.

Data source: Fifty-seven percent of eighth-graders and 43.5 percent of 11th-graders reported watching TV, playing video games and using the computer for other than school work for more than two hours per day. – Oregon Healthy Teens 2006. On an average school day, 40.6 percent of children ages 6-17 watch TV, play video games and use a computer for purposes other than school work. – The National Survey of Children’s Health 2003. TV and screen time for 2-year-olds – Pregnancy Risk Assessment Monitoring System 2, 2005.

Additional sources to be identified.



## **SURVEILLANCE**

Four primary sources were used to gather the data in the Oregon Physical Activity and Nutrition Plan. The data is published in “Oregon Overweight, Obesity, Physical Activity and Nutrition Facts.” It is an annual publication and allows for ongoing systematic collection, analysis, interpretation and dissemination of data.

### ***Behavioral Risk Factor Surveillance System***

The Behavioral Risk Factor Surveillance System (BRFSS) is an ongoing random-digit dialed telephone survey of adults concerning health-related behaviors. The BRFSS was developed by the Centers for Disease Control and Prevention (CDC) and is conducted in all states. Each year, 3,000-7,000 adult Oregonians are interviewed. The BRFSS includes questions on health-behavior risk factors; such as seat belt use, diet, weight control, tobacco and alcohol use; physical activity; preventive health screenings; and the use of preventive and other health care services. The data are weighted to represent all adults ages 18 years and older. A core set of questions, which includes questions on body weight and height, is asked annually and other topics are surveyed on a rotating basis every other year. Nutrition and physical activity questions are surveyed on a rotating basis.

Data presented by race/ethnicity are from a special combined 2004 and 2005 file, which includes additional surveys among African-Americans, American Indians/Alaska Natives, and Asian/Pacific Islanders. The additional surveys were done to ensure a minimum of 250 surveys for each racial/ethnic group. Data for each racial/ethnic group were weighted to represent the group’s population by age and gender. Rates presented have been age-adjusted so they will not be affected by differences in the age distribution between the various groups.

### ***Oregon Healthy Teens Survey***

The Youth Risk Behavior Survey (YRBS) was developed by the CDC and was administered in a sample of Oregon schools every other year from 1991-2000. The sample size varied between 1,600 and 32,000 students and the final data were weighted to more accurately represent the Oregon high school population. The questionnaire assessed behavioral risks among Oregon high school students (grades nine through 12) in the areas of vehicle safety, weapon carrying and violence, tobacco and alcohol use, other drug use, sexual activity and pregnancy, HIV knowledge and attitudes, eating behaviors, nutrition, physical activity, and access to health care, including use of school-based health centers. A sample of middle school students (grades six through eight) was added in 1997.

Since 2000, the YRBS and the Oregon Public School Drug Use Survey have been combined into a single annual survey, Oregon Healthy Teens. Surveys are administered annually to nearly one-half of Oregon's eighth- and 11th-graders. The OHT collected information from about 30,000 Oregon adolescents in 2005. Participating students came from 248 schools in 34 counties. Each year, a random sampling process is used to select districts within counties and schools within districts for participation.

### **National Immunization Survey**

The National Immunization Survey (NIS) has been conducted annually since 1994 by the National Immunization Program and the National Center for Health Statistics, CDC. The NIS is used to obtain national, state, and selected urban area estimates of vaccination coverage rates for U.S. children between the ages of 19 and 35 months. The NIS is a random-digit dialed telephone survey of households with age-eligible children followed by a mail survey of the children's vaccination providers to validate immunization information. Additionally, beginning in January 2003, all respondents to the household telephone survey were asked questions about breastfeeding. In 2005, the breastfeeding questions analyzed for this data were: "Was [child's name] ever breastfed or fed breast milk?"; "How long was [child's name] breastfed or fed breast milk?"; and "How old was [child's name] when [he/she] was fed something other than breast milk? This includes formula, juice, solid foods, cow's milk, water, sugar water, anything else."



# RESOURCES

## Sources by Topic

### Data

- National Center for Health Statistics. Prevalence of overweight and obesity among Adults: United States, 2003-2004. Retrieved March 8, 2007, from [http://www.cdc.gov/nchs/products/pubs/pubd/hestats/obese03\\_04/overwght\\_adult\\_03.htm](http://www.cdc.gov/nchs/products/pubs/pubd/hestats/obese03_04/overwght_adult_03.htm).
- Ngo, D., & Leman, R. (2005). Oregon overweight, obesity, physical activity and nutrition facts. Portland, OR: Department of Human Services.
- Ogden, C.L., Flegal, K.M., Carroll, M.D., & Johnson, C.L. (2002). Prevalence and trends in overweight among U.S. children and adolescents, 1999–2000. *Journal of the American Medical Association*, 288, 1728-1732.

### General Sources

- Division of Nutrition and Physical Activity, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. Retrieved March 5, 2007, from the <http://www.cdc.gov/nccdphp/dnpa>.
- Task Force on Community Preventive Services. (2005). *The guide to community preventive services: What works to promote health?* New York: Oxford University Press.
- U.S. Department of Health and Human Services. (2000). *Healthy People 2010: Understanding and improving health* (2nd ed). Washington, DC: U.S. Government Printing Office.

### Nutrition

- American Heart Association. (2005). Dietary recommendations for children and adolescents: A guide for practitioners. Consensus statement from the American Heart Association. *Circulation*, 112, 2061-2075.
- Bray, G., Nielsen S.J., & Popkin B.M. (2004). Consumption of high-fructose corn syrup in beverages may play a role in the epidemic of obesity. *American Journal of Clinical Nutrition*, 79 (4), 537-543.
- Brown, K.H., & Jameton, A.L. (2000). Public health implications of urban agriculture [Electronic version]. *Journal of Public Health Policy*, 21(1), 20-39.

- Cotterill, R.W., & Franklin, A.W. (1995). The urban grocery store gap. University of Connecticut: Food Marketing Policy Center. Retrieved August 28, 2006, from <http://www.fmpc.uconn.edu/publications/ip/ip8.pdf>.
- Fields, S. (2004). The fat of the land: Do agricultural subsidies foster poor health? [Electronic version]. *Environmental Health Perspectives*, 112 (14). Retrieved August 29, 2006, from <http://www.ehponline.org/members/2004/112-14/spheres.html>.
- Grummer-Strawn, L.M., & Mei, Z. (2004). Does breastfeeding protect against pediatric overweight? Analysis of longitudinal data from the Centers for Disease Control and Prevention Pediatric Nutrition Surveillance System. *Pediatrics*, 113 (2), 81-86.
- McGinnis, J.M., Gootman, J.A., & Kraak, V.I. (Eds.). (2006). *Food marketing to children and youth: Threat or opportunity?* Washington, DC: The National Academies Press.
- Morris, P.M. (1990). *Higher prices, fewer choices: Shopping for food in rural America*. Washington, DC: Public Voice for Food and Health Policy.
- Murphy, J.M. (2003). *Findings from the evaluation study of The Edible Schoolyard*. Berkeley, CA: Center for Ecoliteracy.
- Prevention Institute. (2002). *Educating consumers about healthy food choices: Point-of-sale interventions*. Center for Health Improvement. Retrieved August 29, 2006, from [http://www.preventioninstitute.org/pdf/CHI\\_Point\\_of\\_Sale.pdf](http://www.preventioninstitute.org/pdf/CHI_Point_of_Sale.pdf).
- Shealy, K.R., Li, R., Benton-Davis S., & Grummer-Strawn L.M. (2005). *The CDC guide to breastfeeding interventions*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
- U.S. Department of Agriculture. (2005). *Dietary guidelines for Americans 2005*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Agriculture. (2001). *Foods sold in competition with USDA school meal programs: A report to Congress*. Retrieved August 28, 2006, from [http://www.fns.usda.gov/cnd/Lunch/CompetitiveFoods/report\\_congress.htm](http://www.fns.usda.gov/cnd/Lunch/CompetitiveFoods/report_congress.htm).
- Videon, T.M., & Manning, C.K. (2003). Influences on adolescent eating patterns: The importance of family meals. *Journal of Adolescent Health*, 32, 365-373.

## **Nutrition and Physical Activity**

Backman, D.R., Carman, J.S., & Aldana, S.G. (2004). Fruits and vegetables and physical activity at the worksite Business leaders and working women speak out on access and environment. Public Health Institute. Retrieved August 29, 2006, from <http://www.phi.org/library.html>.

Oregon Department of Human Services, Public Health Division. (2007). Promoting physical activity and healthy eating among Oregon's children: A Report to the Oregon health policy commission. Portland, OR.

U.S. Department of Health and Human Services. Resource guide for nutrition and physical activity interventions to prevent obesity and other chronic diseases. Centers for Disease Control and Prevention. Retrieved August 29, 2006, from [http://www.cdc.gov/nccdphp/dnpa/pdf/guidance\\_document\\_3\\_2003.pdf](http://www.cdc.gov/nccdphp/dnpa/pdf/guidance_document_3_2003.pdf).

## **Obesity**

Cawley, J. (2006). Markets and childhood obesity policy [Electronic version]. *The Future of Children*, 16 (1), 69-88.

Center for Science in the Public Interest, Policy Options. Policy options to support nutrition and activity. Retrieved August 29, 2006, from [http://www.cspinet.org/nutritionpolicy/policy\\_options.html](http://www.cspinet.org/nutritionpolicy/policy_options.html).

Committee on Nutrition. (2003). Prevention of pediatric overweight and obesity. *Pediatrics*, 112 (2), 424-430.

Daniels, S.R., Arnett, D.K., Eckel, R.H., Gidding, S.S., Hayman, L.L., Kumanyika, S., et al. (2005). Overweight in children and adolescents: Pathophysiology, consequences, prevention, and treatment. *Circulation*, 111. Retrieved August 28, 2006, from <http://circ.ahajournals.org/cgi/content/abstract/111/15/1999>.

Dietz, W.H. (1998). Health consequences of obesity in youth: Childhood predictors of adult disease. *Pediatrics*, 101 (3) Suppl: 518-525.

Jain, A. (2004). What works for obesity? A summary of the research behind obesity interventions. United Kingdom: BMJ Publishing Group Limited. Retrieved August 29, 2006, from <http://www.unitedhealthfoundation.org/obesity.pdf>

- Katz, D.L., O'Connell, M., Yeh, M.C., Nawaz, H., Njike, V., Anderson, et al. (2005). Public health strategies for preventing and controlling overweight and obesity in school and worksite settings. *Morbidity and Mortality Weekly*, 54 (RR10), 1-12.
- Krebs, N.F., & Jacobson, M.S. (2003). Prevention of pediatric overweight and obesity. *Pediatrics*, 112 (2), 424-30.
- Koplan, J.P., Liverman, C.T., & Kraak, V.I. (Eds.). (2005). *Preventing childhood obesity: Health in the balance*. Washington, DC: The National Academies Press.
- Mokdad, A.H., Ford, E.S., Bowman, B.A., Dietz, W.H., Vinicor, F.; Bales, V.S., & Marks, J.S. (2003). Prevalence of obesity, diabetes and obesity-related health risk factors, 2001. *Journal of the American Medical Association*, 289 (1), 7-9.
- National Heart Lung and Blood Institute. (1998, 2000). *The practical guide: Identification, evaluation and treatment of overweight and obesity*. Washington, DC: National Institutes of Health.
- Paxson, C., Donahue, E., Orleans, C.T., & Grisso, J.A. (Eds.). (2006). Childhood obesity. *The Future of Children*, 16 (1). Retrieved May 30, 2007, from [http://www.futureofchildren.org/pubs-info2825/pubs-info\\_show.htm?doc\\_id=349724](http://www.futureofchildren.org/pubs-info2825/pubs-info_show.htm?doc_id=349724).
- Robert Wood Johnson Foundation. (2007). Childhood obesity. Retrieved March 13, 2007, from <http://www.rwjf.org/programareas/programarea.jsp?pid=1138>
- Story, M., Kaphingst, K., & French, S. (2006). The role of schools in obesity prevention. *The Future of Children*, 16 (1), 109-142. Retrieved from [http://www.futureofchildren.org/information2826/information\\_show.htm?doc\\_id=355544](http://www.futureofchildren.org/information2826/information_show.htm?doc_id=355544)
- U. S. Department of Health and Human Services. (2001). *The Surgeon General's call to action to prevent and decrease overweight and obesity*. Rockville, MD.
- U.S. Preventive Services Task Force. (2003). *Screening and interventions to prevent obesity in adults*. U.S. Department of Health & Human Services. Retrieved August 29, 2006, from <http://www.ahrq.gov/clinic/uspstf/uspsobes.htm>.

## **Physical Activity**

- Baranowski, T., Bar-Or, O., Blair, S., Corbin, C., Dowda, M., Freedson, P., et al. (1997). Guidelines for school and community programs to promote lifelong physical activity among young people. *Morbidity and Mortality Weekly Report*, 46 (RR-6), 1-36. Retrieved August 28, 2006, from <http://www.cdc.gov/MMWR/preview/mmwrhtml/00046823.htm>.
- Council of Physical Education for Children. (2001). Physical education is critical to a complete education. Retrieved August 28, 2006, from [http://www.aahperd.org/NASPE/pdf\\_files/pos\\_papers/pe\\_critical.pdf](http://www.aahperd.org/NASPE/pdf_files/pos_papers/pe_critical.pdf).
- Frank L.D, Schmid, T.L., Sallis, J.F., Chapman, J. & Saelens, B.E. (2005). Linking objectively measured physical activity with objectively measured urban form: Findings from SMARTRAQ. *American Journal of Preventive Medicine*. 28 (2S2) 117-125.
- Kerr, N.A., Yore, M.M, Ham, S.A., & Dietz, W.H. (2004). Increasing stair use in a worksite through environmental changes. *American Journal of Health Promotion*. 18 (4) 312-315.
- Lawrence D., Frank, L.D., Evgelke, P.O., & Schmid T.L. (2003). *Health and community design: The impact of the built environment on physical activity*. Washington, DC: Island Press.
- Litman, T. (2004). *Quantifying the benefits of nonmotorized transportation for achieving mobility management objectives [Electronic version]*. Victoria, BC: Victoria Transportation Policy Institute.
- McArdle, W. Katch, F., & Katch, V., (2001). *Exercise physiology: Energy, nutrition and human performance*. Philadelphia: Lippincott Williams & Wilkins.
- National Association for Sport and Physical Education. (2001). *2001 Shape of the nation report: Status of physical education in the USA*. Reston, VA.
- National Association for Sport and Physical Education. (2004). *Moving into the future: National standards for physical education*. St. Louis: Mosby.
- The National Association for Sport and Physical Education. (2002). *Physical activity for children; A statement of physical activity guidelines for children ages 5-12*. Reston, VA.
- The National Association for Sport and Physical Education. (2002). *Active start: A statement of physical activity guidelines for children birth to five years*. Reston, VA.

- National Center for Bicycling and Walking. (2002). Increasing physical activity through community design: A guide for public health practitioners. Retrieved March 5, 2007, from [http://www.bikewalk.org/ncbw\\_pubs.php](http://www.bikewalk.org/ncbw_pubs.php).
- Oregon Parks and Recreation Department. (2003). 2003-2007 Oregon statewide comprehensive outdoor recreation plan.
- Oregon Revised Statutes. (2005). Chapter 366.514. Retrieved August 28, 2006, from <http://www.leg.state.or.us/ors/366.html>.
- Pate, R.R., Davis, M.G., Robinson, T.N., Stone, E.J., McKenzie, T.L., & Young, J.C. (2006). Promoting physical activity in children and youth: A leadership role for schools. *Circulation*, 114. Retrieved August 30, 2006, from <http://circ.ahajournals.org/cgi/reprint/CIRCULATIONAHA.106.177052v1>.
- Rosenberger, R., Sneh, Y., Phipps, T., & Gurvitch, R. (2005). A spatial analysis of linkages between health care expenditures, physical inactivity, obesity and recreation supply. *Journal of Leisure Research*, 37 (2), 216-235.
- Task Force on Community Preventive Services. (2001). Increasing physical activity: A report on the recommendations of the task force on community and preventive services. *Morbidity and Mortality Weekly*, 50 (RR18), 1-16.
- U.S. Department of Health and Human Services. (1996). Physical activity and health: A report of the Surgeon General. Atlanta, GA.
- U.S. Department of Health and Human Services, U.S. Department of Education. (2000). Promoting better health for young people through physical activity and sports: Report to the president. Washington, DC: U.S. Government Printing Office.
- Wilkinson, B., & Chauncey, B. (2004). Does it work? State department of transportation project assessment [Electronic version]. Washington, DC: National Center for Bicycling and Walking.



## **Screen Time**

American Academy of Pediatrics. Media guidelines for parents. Retrieved May, 8, 2007, from <http://www.aap.org/healthtopics/mediause.cfm>.

American Academy of Pediatrics. (2001). Children, adolescents and television. *Pediatrics*, 107 (2).

Centers for Disease Control and Prevention, Nutrition and Physical Activity Communication Team. (2007). Reducing children's TV time to reduce the risk of childhood overweight: The children's media use study. Atlanta, GA.

Henry J. Kaiser Family Foundation. (2006). *The media family: Electronic media in the lives of infants, toddlers, preschoolers and their parents*. Menlo Park, CA.

Henry J. Kaiser Family Foundation. (2007). *Food for thought: Television food advertising to children in the United States*. Menlo Park, CA.

## Glossary

**Active community environments (ACEs):** Places where people of all ages and abilities can easily enjoy walking, bicycling and other forms of physical activity. ACEs have sidewalks, on-street bicycle facilities, multi-use paths and trails, parks, open space and recreational facilities. They encourage mixed-use development and a connected grid of streets, allowing homes, work places, schools and stores to be close together and accessible to pedestrians and bicyclists.

**Basic food groups:** In the USDA food intake patterns, the basic food groups are grains; vegetables; milk, yogurt and cheese, and; meat, fish, poultry, dried peas beans, eggs and nuts. In the DASH Eating Plan, nuts, seeds and dry beans are a separate food group from meat, fish and poultry.

**Best practices:** Best practices are programs, initiatives or activities that meet a lower standard of proof compared to evidence-based programs. Best practices are programs, initiatives or activities that are recognized as effective based on supportive but limited evidence. Evidence may include encouraging program evaluation results.

**Behavioral Risk Factor Surveillance System (BRFSS):** Ongoing data collection program sponsored by the Centers for Disease Control and Prevention to monitor the prevalence of major behavioral risks among adults associated with premature morbidity and mortality.

**Body Mass Index (BMI):** A number calculated from a person's weight and height. BMI is a reliable indicator of body fatness for people. The BMI formula is  $\text{weight (kg)} / [\text{height (m)}]^2$

**Business case:** A structured proposal to encourage a business to change policies or procedures and justified in terms of costs and benefits.

**Case study:** A strategy used to conduct an in-depth examination of a single instance or limited number of events.

**Chronic disease:** An illness that is prolonged, does not resolve spontaneously and is rarely cured completely. Chronic diseases such as heart disease, cancer and diabetes account for seven of every 10 deaths and affect the quality of life of 90 million Americans. Although chronic diseases are among the most common and costly problems, they are also among the most preventable. Adopting healthy behaviors such as eating nutritious foods, being physically active and avoiding tobacco use can prevent or control these diseases.



**Community:** A place such as a neighborhood or small town in which people may feel a connection or share a sense of belonging.

**Communitywide social marketing campaign:** The application of social marketing technologies to a large group of people to positively influence health behaviors such as eating fresh fruits and vegetables and increasing physical activity.

**Electronic Benefit Transfer (EBT):** An electronic system that allows state governments to provide benefits to recipients via a plastic debit card. Food stamps are a common benefit provided via EBT.

**Environment:** Physical places in which people work, live and recreate. Environments can range from the inside of one's home to a neighborhood to a city or town.

**Evidence-based:** Programs and activities of known effectiveness substantiated through rigorous evaluation. Evidence-based programs and activities have been evaluated by one or more studies appearing in peer reviewed journals.

**Goal:** A broad, general statement that describes what a program aims to accomplish in the long term.

**Health:** A condition of complete physical, mental and emotional well-being, not merely the absence of disease.

**Healthy eating:** Following the eating recommendations found in Dietary Guidelines for Americans when making food choices.

**Leisure-time physical activity:** Physical activity that is performed during exercise, recreation or any additional time other than that associated with one's regular job duties or occupation.

**Moderate physical activity:** Any activity that burns 3.5 to 7 kcal/min or the equivalent of 3 to 6 metabolic equivalents (METs) and results in achieving 60 to 73 percent of peak heart rate. Examples of moderate physical activity include walking briskly, mowing the lawn, dancing, swimming or bicycling on level terrain. A person should feel some exertion but should be able to carry on a conversation comfortably during the activity.

**Nutrient-dense foods:** Foods that provide substantial amounts of vitamins and minerals and relatively fewer calories.

**Objectives:** Objectives describe outcomes that must be achieved to accomplish a goal. SMART objectives are specific, measurable, achievable, relevant and time-bound.

**Overweight and obesity:** For adults, overweight and obesity ranges are determined by using weight and height to calculate Body Mass Index (BMI). BMI is used because, for most people, it correlates with their amount of body fat. An adult who has a BMI between 25 and 29.9 is considered overweight. An adult who has a BMI of 30 or higher is considered obese.

For children and teens, BMI ranges above a normal weight have different labels (“at risk of overweight” and “overweight”). Additionally, BMI ranges for children and teens take into account normal differences in body fat between boys and girls and differences in body fat at various ages. BMI for children and teens is often referred to as “BMI-for-age.” “At risk of overweight” is the 85th to less than the 95th percentile. “Overweight” is equal to or greater than the 95th percentile.

**Physical activity:** Any bodily movement produced by skeletal muscles that results in energy expenditure and may include both occupational and leisure physical activity.

**Policies:** Policies are a plan of action to guide decisions and actions. Policies can range from formal, legal requirements to informal agreements.

**Point of purchase:** A checkout counter or other area where items are purchased.

**Portion Size:** The amount of a food consumed in one eating occasion.

**Public health:** The science of protecting and improving the health of communities through education, promotion of healthy lifestyles and research for disease and injury prevention.

**Quality of life:** In relation to health, quality of life is the gap between our expectations of health and our experience of it.

**Recommended Dietary Allowance (RDA):** The dietary intake level that is sufficient to meet the nutrient requirement of nearly all (97 to 98 percent) healthy individuals in a particular life stage and gender group.

**Serving size:** A standardized amount of a food, such as a cup or an ounce, used in providing dietary guidance or in making comparisons among similar foods.

**Social marketing:** The application of commercial marketing technologies to the analysis, planning, execution and evaluation of programs designed to influence behavior in order to improve personal and community welfare.

**World Health Organization Baby Friendly Hospital:** Hospitals that adopt the “10 Steps to Successful Breastfeeding, which are: (1) have a written breastfeeding policy that is routinely communicated to all health care staff; (2) train all health care staff in skills necessary to implement this policy; (3) inform all pregnant women about the benefits and management of breastfeeding; (4) help mothers initiate breastfeeding within one half-hour of birth; (5) show mothers how to breastfeed and maintain lactation, even if they should be separated from their infants; (6) give newborn infants no food or drink other than breastmilk, unless medically indicated; (7) practice rooming-in, which allows mothers and infants to remain together 24 hours a day; (8) encourage breastfeeding on demand; (9) give no artificial teats or pacifiers to breastfeeding infants; and (10) foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

## ACKNOWLEDGMENTS

Oregon Physical Activity and Nutrition Plan Contributors

Liz Adams, Oregon Health & Science University, Child Development and Rehabilitation Center

Inge Aldersebaes, Oregon Department of Human Services, Public Health Division, Adolescent Health, Office of Family Health

Jean Anderson, Oregon Department of Human Services, Public Health Division, Diabetes/Heart Disease and Stroke Program

Dora Asana, African American Health Coalition

Margaret Bates, Oregon Department of Education

Terry Bergerson, Oregon Parks and Recreation Department

Nicole Baker-Wagner, Immigrant and Refugee Community Organization

Gary Brodowicz, Portland State University

Bev Bromfield, American Diabetes Association\*

Shawna Care, Kaiser Permanente

Jim Chesnutt, Oregon Health & Science University, Department of Orthopedics and Rehabilitation

John Chism, Oregon Department of Human Services, Public Health Division, Physical Activity and Nutrition Program\*\*

Minot Cleveland, Oregon Coalition for Promoting Physical Activity\*\*

Carlos Crespo, Portland State University

Jennifer Dill, Portland State University\*

Nathan Derstine, Intel

Eliza Devlin, Oregon Department of Human Services, Office of Child Support and Food Stamps, Food Stamp Program

Noelle Dobson, Community Health Partnership, Healthy Eating Active Living\*

Joyce Dougherty, Oregon Department of Education\*\*

Charles Drum, Oregon Office on Disability and Health

Gary English, Oregon Department of Education

Barbara Fritz, Northwest Parish Nurse Ministries

Anne Goetze, Oregon Dietetic Association\*

Sara Goodrich, Oregon Department of Human Services; Public Health Division; Office of Family Health; Women, Infants and Children

Susan Greathouse, Oregon Department of Human Services; Public Health Division; Office of Family Health; Women, Infants and Children

George “Bud” Harris, Oregon Governor’s Council on Physical Fitness and Sports  
Rod R. Hart, Regence Bluecross Blueshield of Oregon  
Carolyn Harvey, Confederated Tribes of Warm Springs  
Kimra Hawk, Providence St. Vincent Medical Center  
Anne Hoisington, Oregon State University, Extension Family and Community Development  
David Hudson, Oregon Department of Human Services, Public Health Division, Physical Activity and Nutrition Program\*\*  
Monica Hunsberger, Oregon Dietetic Association\*  
Frank Jagodnik, Oregon Recreation and Park Association\*  
Janet Jones, Umatilla County Health Department \*  
Jennifer Jordan, Lane County Health Department  
Kelly Jurman, Washington County Department of Health and Human Services  
Chris Kabel, Northwest Health Foundation\*\*  
Lydia Kowalski, Portland Parks and Recreation  
Kitty Lake, Oregon Association of Child Care Directors, Child Care Division  
Janet Lamb, Arthritis Foundation, Pacific Northwest Chapter, Oregon Branch  
Sonia Manhas, Multnomah County Health Department  
Theb Manivanh, Immigrant and Refugee Community Organization  
Kari McFarlan, Community Health Partnership  
Jennifer Mead, Oregon Seniors and People with Disabilities\*\*  
Mary Nemmers, Oregon Child Care Resources and Referral Network  
Jane M. Moore, Oregon Department of Human Services, Public Health Division, Health Promotion and Chronic Disease Prevention Program \*\*  
Melinda Neri, Oregon Office on Disability and Health  
Joan Ottinger, Oregon Department of Human Services, Public Health Division, Physical Activity and Nutrition Program \*\*  
Patricia Parsons, Benton County Health Department\*\*  
Dianna Pickett, Oregon Department of Human Services, Public Health Division, Office of Family Health, Child Health  
Amelia Psmythe, Nursing Mothers Counsel of Oregon  
Carolyn Raab, Oregon State University, Extension Family and Community Development  
Joan Randall, Oregon Health & Science University, Center for the Study of Weight Regulation\*\*

Lynn Reinoso, Oregon Department of Education, Child Nutrition Program

Brian Ritacco, Oregon Department of Human Services, Public Health Division, Physical Activity and Nutrition Program\*\*

Laura Saddler, Oregon Department of Human Services, Public Health Division, Heart Disease and Stroke Program

Rachel Saunders, Oregon Department of Human Services, Public Health Division, Diabetes/Heart Disease and Stroke Program

Patricia Schoonmaker, Oregon Department of Human Services, Public Health Division, Comprehensive Cancer Program

Terese Scollard, Providence Health System, PSA Acute Care

Molly Shipley, Providence Health System, Fitness and Wellness

Audrey Sienkiewicz, Oregon Department of Human Services, Public Health Division, Arthritis Program

Robin Stanton, Oregon Department of Human Services, Public Health Division, Office of Family Health

Pamela Stuver, Lane County Health Department

Rebecca Sweatman, Oregon Department of Administrative Services, Public Employees Benefit Board

Jeanne Suihkonen, Oregon Family Child Care Network

Moses M. Timah, Wasco and Sherman Counties Public Health Department

Lauren Tobey, Oregon State University, Extension Family and Community Development

Claire Tranchese, Oregon Office of Rural Health

Jimmy Unger, Lane County Healthy Active Youth\*

Jenny Vannoy, Oregon Dairy Council

Adriana Voss-Andreae, Oregon Health & Science University, Center for the Study of Weight Regulation

Catherine Van Ginkel, Community Health Partnership, Healthy Eating Active Living

Carrie Washburn, Oregon Department of Human Services, Public Health Division, Diabetes Program

Angela Weaver, Oregon Office on Disability and Health

Paige Webster, Oregon Medical Association

Charlene Welch, American Heart Association American Stroke Association

Susan Woodbury, Oregon Department of Human Services; Public Health Division; Office of Family Health; Women, Infants and Children

Jennifer Young, Oregon Department of Human Services, Public Health Division, Office of Family Health, Adolescent Health\*\*

\* Plan Steering Committee Members

\*\* Plan Steering Committee and Writing Group Member



***Statewide Physical Activity and Nutrition Plan 2007-2012***

*Prepared by the Nutrition Council of Oregon and  
the Oregon Coalition for Promoting Physical Activity*