

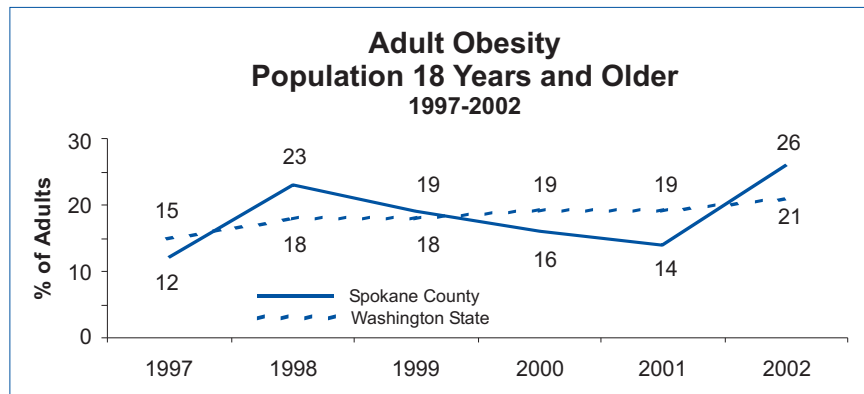
# Healthy Families Active Kids

## through *Environmental Change*

Physical Activity ♦ Weight Control ♦ Nutrition

Obesity has been called an epidemic in the United States. While obesity itself is not a chronic condition, it is a risk factor for many chronic conditions, including four of the ten leading causes of death in the United States - coronary heart disease, type II diabetes, stroke and several forms of cancer. Those who are obese report more activity limitations and feelings of sadness and hopelessness than those who are not obese. Only tobacco use causes more preventable deaths than obesity.<sup>1</sup>

In Spokane County, the proportion of adults who were obese decreased from 1998-2001 to 14% of the overall population. However, the proportion of obese adults significantly increased in 2002 to 26% of the overall population; an estimated 78,100 individuals. Comparatively, the proportion of obese adults statewide has been gradually increasing.



Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System (BRFSS), 1997-2001

The Healthy People 2010 initiative developed within the U.S. Department of Health and Human Services has set goals for increasing physical activity, improving nutrition, and reducing obesity; major public health concerns in the United States and for our community.

### Make a healthy impact...

- Poor health outcomes are preventable by making good lifestyle choices.
- Organizational policies can support a healthy environment and provide strong education toward healthy lifestyle choices.
- Community resources are available.

### Table of Contents

#### Behaviors

Nutrition	2
Overweight/Obesity	2
Physical Activity	3
Other Risk Factors	4

#### Outcomes

Diabetes	4
Heart Disease	4
Asthma	5
Hospitalizations & Mortality	5
Costs	5

<b>Healthy Choices</b>	<b>6</b>
<b>Environmental Change</b>	<b>7</b>
<b>Community Resources</b>	<b>8</b>

# Behaviors

## Nutrition

Almost 1/3, or 29.5%, of adults in Spokane County ate 5 or more serving of fruits and vegetables per day. Females, those over 45 years of age, and over 200% of Federal Poverty Level were more likely to eat “5-a-day.”<sup>2</sup>

The greatest barrier to eating a healthy diet was lack of time or scheduling difficulty for adults in Spokane County (29.6%). The second greatest barrier was cost (14.8%).<sup>3</sup>

About 25% of what adolescents eat is considered to be junk food, such as deep fried foods, desserts, regular soft drinks, candy, cookies, pies, and cakes.<sup>4</sup>

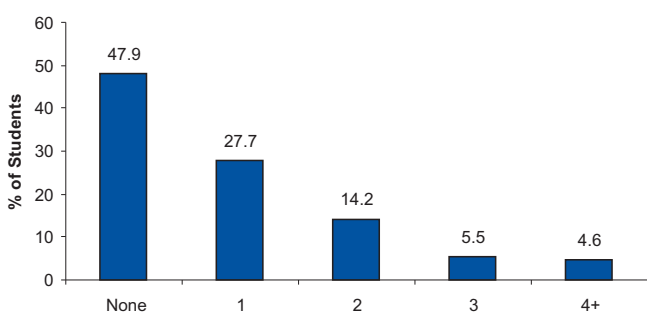
One in five Spokane County students in grades 8-12 reported eating five or more servings of fruits and vegetables per day (20.8%). There was no difference by grade, but females were less likely than males to eat 5 or more servings per day.



## Healthy People 2010 Goals:

75% of population eating at least two daily servings of fruit; 50% eating at least 3 daily servings of vegetables.

Number of Sodas Drank in a Day Among 6-12th Graders  
Spokane County, 2002



Washington State Department of Health, Office of Epidemiology, Healthy Youth Survey (HYS), 2002.

Excluding diet soda, almost half of Spokane County youth in 6-12th grades did not drink soda the day before they were surveyed. Youth who drink soda regularly are more likely to be overweight. The risk of obesity increases 1.6 times for each additional serving of sugar sweetened soft drink consumed.<sup>5</sup>

## Overweight/Obesity\*

In 2002, 32.4% of Spokane County adults were overweight with another 26.2% obese, resulting in over one half of adults at an unhealthy weight.<sup>2</sup>

In adults, obesity increased with age up to 64 years and was lower in those with a college degree than those without a degree. The proportion of obesity was similar among men and women.<sup>2</sup>

In addition, 9.1% of adolescents in 8-12th grade were in the top 5% of the BMI-for-age charts, the overweight category.<sup>5</sup> Female youth respondents were significantly less likely to be in the overweight category than males.

## Healthy People 2010 Goals:

60% of adults aged 20 and over will be at a healthy weight; less than 15% of adults will be in the obese category; and less than 5% of adolescents aged 12 to 19 will be overweight.

*\*The National Institutes of Health define **overweight** as a Body Mass Index (BMI) of 25 to 29.9; **obesity** as a BMI of 30 or more; **underweight** as a BMI below 18.5 and **normal weight** as a BMI of 18.5 to 24.9. BMI is an indirect measure of body fat based on height and weight that applies to both adult men and women. BMI is calculated for adults using the formula  $(\text{BMI} = (\text{weight in pounds} \times 703) / (\text{height in inches})^2)$ . In children ages 2-20, BMI is evaluated in conjunction with the BMI-for-Age Growth Charts.*

## Physical Activity

Research has demonstrated that virtually all individuals will benefit from regular physical activity. These health benefits include a reduced risk of heart disease, diabetes, colon cancer, high blood pressure, and symptoms of anxiety and depression.

### Adults

In Spokane County, 57% of adults aged 18 years and older met the Healthy People 2010 goal for moderate or vigorous physical activity. Males and those younger than 65 years of age were more likely to be physically active.<sup>2</sup>

Adults reported a lack of time as the greatest barrier to becoming more physically active (34.3%). Other barriers included illness or health problems (11.3%) and laziness (8.1%).<sup>3</sup>

The majority of adults (52.7%) did not need to learn anything in order to become more physically active. However, some things that could help add more physical activity into their daily life included having someone to participate with (14.2%), greater motivation (12.0%), and more time (11.5%).<sup>3</sup>



## Healthy People 2010 Goals

50% of adults aged 18 years and older will report light or moderate physical activity for at least 30 minutes five or more times per week or vigorous physical activity for at least 20 minutes three or more times per week.

35% of students in grades 9-12 will report participating for at least 30 minutes in physical activity that did not make them sweat or breathe hard on 5 or more of the 7 days.

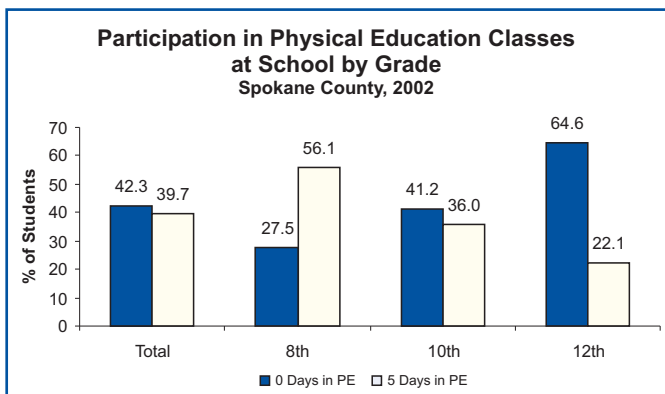
85% of students in grades 9-12 will report exercising or participating for at least 20 minutes in physical activity that made them sweat and breathe hard on 3 or more of the 7 days.

### Youth

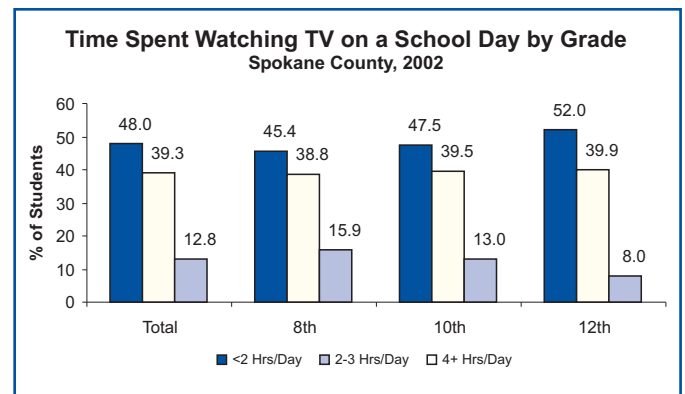
In Spokane County, 34.5% of youth in 8-12th grade participated in moderate physical activity and 72.7% participated in vigorous physical activity as defined in the Healthy People 2010 goals.<sup>5</sup>

Among youth in 8-12th grade, 39.7% attended a physical education (PE) class every day at school. The percent of students attending a PE class daily decreased as the grade increased. Among students who take PE, 87.3% of students spent at least half of a PE class actually exercising more than 20 minutes. The proportion of students who spent more than 20 minutes exercising in a PE class was the same for each grade.<sup>5</sup>

Forty-eight percent of students in 8-12th grade watched less than 2 hours of television on an average school day. The percent of students watching less than 2 hours of television per day increased slightly as the grade increased.<sup>5</sup>



Washington State Department of Health, Office of Epidemiology, Healthy Youth Survey (HYS), 2002.



Washington State Department of Health, Office of Epidemiology, Healthy Youth Survey (HYS), 2002.

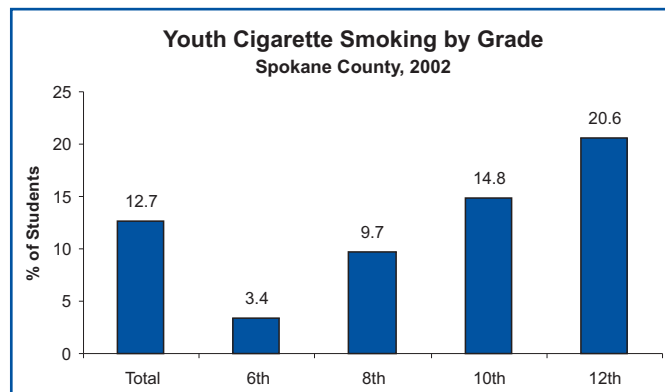
## Other risk factors:

A higher BMI is associated with a decline in physical activity.<sup>6</sup> Physical inactivity and cigarette smoking are both known risk factors for developing chronic disease and poor health outcomes. However, increased physical activity has a positive influence on smoking cessation and strategies to improve diet.<sup>6</sup>

In 2001, 22% of the adult population in Spokane County were current smokers. Smoking decreases with age ranging from 25% in 18-34 year olds to 12% in those 65 and older. Adults living under 200% FPL and those having a high school degree or less were more likely to smoke than individuals with higher incomes or with more education.

An average of 12.7% of 6-12th grade students smoked cigarettes in the previous 30 days. The proportion of students smoking increased as the grade increased until one in five 12th grade students smoked.

**Healthy People  
2010 goal:**  
Decrease the adult population of smokers to 12% and the youth population of smokers to 16%.



Washington State Department of Health, Office of Epidemiology, Healthy Youth Survey (HYS), 2002.

## Outcomes: Disease and Costs

*Obese and overweight individuals are more prone than normal weight individuals to develop hypertension, elevated blood cholesterol, and diabetes, which increase the risk of heart disease. Overweight individuals are also at increased risk of some types of cancer, gall bladder disease, liver disease, sleep apnea and respiratory problems, and osteoarthritis.*

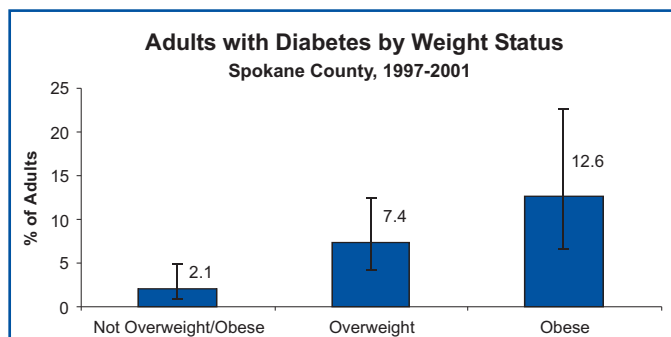
The Health of Washington State, Washington State Department of Health, 2002

### Diabetes

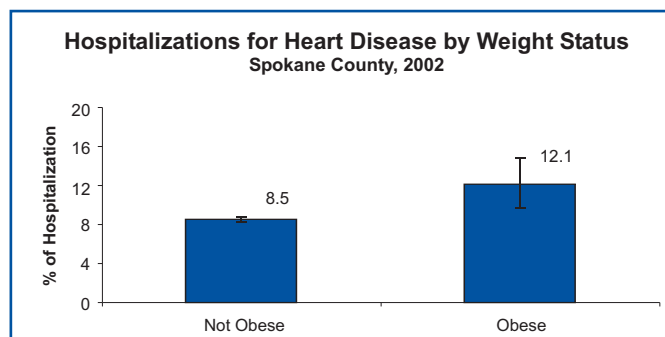
Diabetes affects 5.5% of the adult population. Compared to non-overweight individuals, the likelihood of having diabetes was three times greater for overweight individuals and six times greater for obese individuals.<sup>2</sup> Diabetes was the sixth leading cause of hospitalization for obese individuals.<sup>9</sup>

### Heart Disease

In 2002, 8.8% of all hospitalizations were for heart disease. Compared to non-obese individuals, obese individuals were significantly more likely to be hospitalized for heart disease.<sup>9</sup>



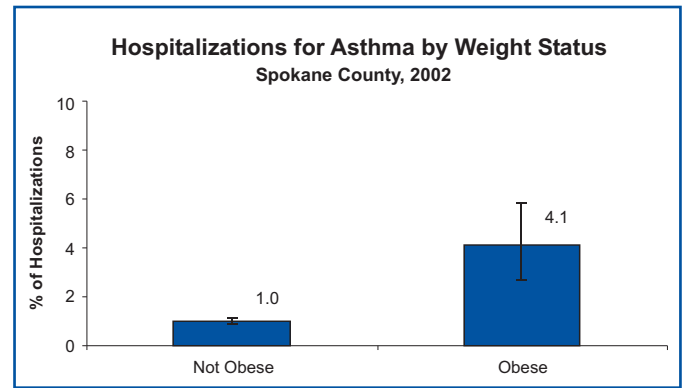
Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System (BRFSS), 1997-2001



Washington State Department of Health, Center for Health Statistics, Comprehensive Hospital Abstract Reporting System (CHARS), 2002.

## Asthma

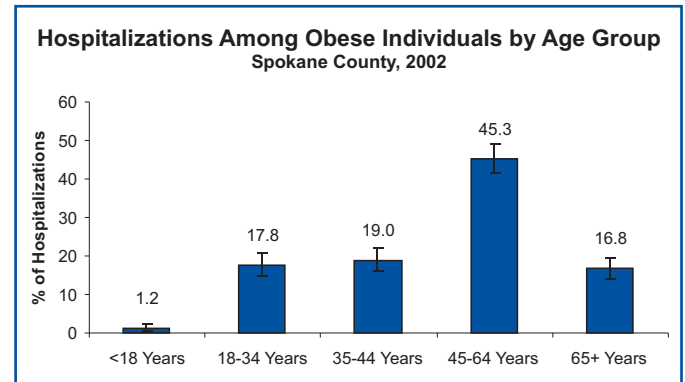
Asthma affects 8.7% of the adult population.<sup>2</sup> In 2002, one percent of all hospitalizations were for asthma. Compared to non-obese individuals, obese individuals were four times more likely to be hospitalized for asthma. Asthma was the third leading cause of hospitalization for obese individuals.<sup>9</sup>



Washington State Department of Health, Center for Health Statistics, Comprehensive Hospital Abstract Reporting System (CHARS), 2002.

## Hospitalizations and Mortality

Among Spokane County residents in 2002, 1.6% of all hospitalizations were for individuals diagnosed as morbidly obese. Obese individuals who were hospitalized were more likely to be female (69.4%) or 45-64 years old (45.3%). The leading cause of hospitalization among obese individuals was osteoarthritis followed by gallstones.<sup>9</sup>



Washington State Department of Health, Center for Health Statistics, Comprehensive Hospital Abstract Reporting System (CHARS), 2002.

Chronic diseases account for 7 of every 10 U.S. deaths.<sup>1</sup> In 2002, the leading causes of death for Spokane County residents were heart disease and cancer, accounting for almost half of all deaths. Heart disease mortality rates have improved over the years, but remains the number one cause of death. Lung cancer was the leading cause of cancer mortality followed by cancer of the prostate, lymphatic system, breast among females, and colorectal cancer. Diabetes was the seventh leading cause of death.<sup>9</sup>

## Cost

Obesity is linked with increased health care expenditures.<sup>10</sup> In 2002, the total cost of hospitalization for obese residents of Spokane County was \$9,743,036, with a mean cost of \$14,202.68 per person.<sup>9</sup> The estimated annual cost of obesity and overweight in the United States is about \$117 billion, \$61 billion direct health care costs and \$56 billion indirect costs due to lost wages and premature death.<sup>11</sup>

Research has shown that health care utilization rates, lowered productivity, increased absenteeism, elevated health and disability insurance premiums, and other consequences are associated with obesity and weight-related conditions. The overall impact of obesity on health and costs outweighs even that of smoking.<sup>12</sup>



# Healthy Choices

Individual behaviors are an important start in maintaining a healthy lifestyle. The American Cancer Society recommends:

## **Aim for a healthy weight**

- ◆ Evaluate your body weight
- ◆ Manage your weight
- ◆ If you need to lose weight, do so gradually
- ◆ Encourage healthy weight in children

## **Eat well**

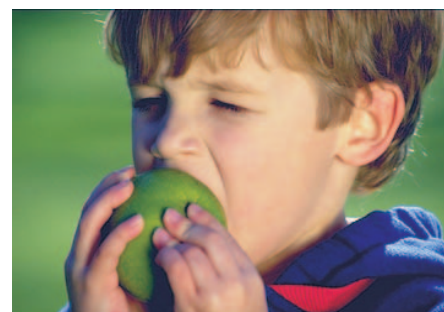
- ◆ Build a healthy base by eating vegetables, fruits, and grains, especially whole grains with little added fat or sugar
- ◆ Select sensible portion sizes

## **Be physically active each day**

- ◆ Make movement a regular part of your daily routine
- ◆ Help children be physically active<sup>13</sup>

## **Make a healthy impact...**

- Poor health outcomes are preventable by making good lifestyle choices.



## **Available Tools**

**American Cancer Society:** Prevention and early detection site, [www.cancer.org](http://www.cancer.org) or call 800-ACS-2345.

**American Dietetic Association:** Nutritional information, [www.eatright.org](http://www.eatright.org)

**American Heart Association:** Health maintenance, [www.americanheart.org](http://www.americanheart.org) and select Healthy Lifestyle

**Center for Nutrition Policy and Promotion:** Dietary guidelines for Americans and food guide pyramid, [www.usda.gov/cnpp](http://www.usda.gov/cnpp)

**Centers for Disease Control:** Nutrition and physical activity resource, [www.cdc.gov/nccdphp/dnpa](http://www.cdc.gov/nccdphp/dnpa)

**Discovery Health Channel:** Health education and tools, [www.health.discovery.com](http://www.health.discovery.com)

**MayoClinic:** Healthy living information and tools, [www.mayoclinic.com](http://www.mayoclinic.com)

**National Cancer Institute:** 5-A-Day Program, [www.5aday.gov](http://www.5aday.gov)

**National Diabetes Education Program:** Resource for diabetes and pre-diabetes, [www.ndep.nih.gov](http://www.ndep.nih.gov)

**National Heart, Lung, and Blood Institute:** BMI calculator, menu planner and healthy weight information, [www.nhlbi.nih.gov/guidelines](http://www.nhlbi.nih.gov/guidelines)

**NIDDK Health Information:** Disease, weight control and nutrition, [www.niddk.nih.gov](http://www.niddk.nih.gov)

**Premera Blue Cross:** Explore ‘Cool Tools’, includes a Calorie Need Calculator, [www.ahealthyadvantage.com](http://www.ahealthyadvantage.com)

**President’s Council on Physical Fitness and Sports:** Resource for exercise and weight control, [www.fitness.gov](http://www.fitness.gov)

**Shape Up America:** Information on weight management and childhood obesity, [www.shapeup.org](http://www.shapeup.org)

**U.S. Department of Health and Human Services:** Dietary guidelines for Americans, [www.health.gov/dietaryguidelines](http://www.health.gov/dietaryguidelines)

**Washington State Dietetic Association:** Nutritional information for Washington State, [www.nutritionwsda.org](http://www.nutritionwsda.org)



# Environmental Change

Individual behavior is important, but good public health policies that create an environment to promote and support healthy choices are key to prevention. The National Worksite Health Promotion Survey fielded by the Association for Worksite Health Promotion (AWHP) found only 55% of worksites meeting the Healthy People 2010 goal in 1998-1999.

*The main barriers to prevention of obesity and overweight are the increase in availability of high-calorie foods and an increase in sedentary lifestyle. Proposed strategies to reduce obesity and overweight include prevention through modification of the environments related both to food choice and availability to physical activity.*

The Health of Washington State, Washington State Department of Health, 2002

## Make a healthy impact...

- Organizational policies can support a healthy environment and provide strong education toward healthy lifestyle choices.

### Healthy People 2010 goal:

Increase the proportion of worksites that offer nutrition or weight management classes or counseling to 85%.



## For assistance with information and materials for schools, community gardening projects, or worksite wellness:

**Action for Healthy Kids:** Creating health-promoting schools that support sound nutrition and physical activity as part of a total learning environment, [www.actionforhealthykids.org](http://www.actionforhealthykids.org)

**Bellingham School District:** Information about strategies that help to improve the nutritional environment in schools. Gaye Lynn MacDonald, Food Services, Bellingham School District, Immediate Past President, American School Food Service Association, (360) 676-6504

**Center for Public Health Nutrition-University of Washington:** Advancing public health approaches to improve nutrition and physical activity through environmental and policy change, [www.cphn.org](http://www.cphn.org)

**Children's Alliance-Access to Healthy Foods in Schools:** Kara Ludlow, Children's Alliance, (206) 324-0340 X13, [www.childrensalliance.org](http://www.childrensalliance.org)

**Food Security Coalition:** *Healthy Farms, Healthy Kids, Evaluating the Barriers and Opportunities for Farm-To-School Programs*, (202) 822-5411, [www.foodsecurity.org](http://www.foodsecurity.org)

**Inland Northwest Business Coalition on Health:** An alliance of employers and health care professionals working together to stabilize health care costs and improve the health of the community, [www.inbch.org](http://www.inbch.org)

**PAL Program:** Provides assistance for high school peer educators who advocate for physical activity and healthy nutrition, (509) 324-1527

**The Public Health Institute:** Local strategies to increase healthy eating and physical activity, [www.phi.org](http://www.phi.org)

**Second Harvest Food Bank:** Contact Skylar, (509) 534-6678 ext.214, or WSU Extension Office, Master Gardener Program, Tonie Fitzgerald (509) 477-2164, [tjfitz@wsu.edu](mailto:tjfitz@wsu.edu)

**Stonyfield Farms:** In 2003, Stonyfield Farms launched a new grassroots program called Menu for Change: Getting Healthy Foods Into Schools, in response to the current obesity crisis facing youth in the US, [www.stonyfieldfarms.com](http://www.stonyfieldfarms.com)

**Washington Schools Purchasing Washington Grown Products:** Where is the Connection? Kelli Sanger, Washington State Department of Agriculture, Small Farm and Direct Marketing Program, (360) 902-1884 or (360) 902-2057, E-mail [smallfarms@agr.wa.gov](mailto:smallfarms@agr.wa.gov)

**Washington State Dairy Council:** Provides nutrition education resources, [www.eatsmart.org](http://www.eatsmart.org)

# Community Resources

## Community resources supporting physical activity and healthy food choices:

**Americans in Motion:** The AIM for Health Program works to improve health, fitness and quality of life, [www.SRHD.org/health/activity](http://www.SRHD.org/health/activity)

**Health Education and Resource Database (HEARD):** Education resources through the Spokane Regional Health District, Health Promotions Division, (509) 324-1530

**Healthy Families, Active Kids Coalition:** The Coalition takes a comprehensive approach to improving the health of our community by working on obesity and physical activity issues, [www.SRHD.org/health/activity](http://www.SRHD.org/health/activity)

**The Heart Institute of Spokane:** Community education on nutritional eating, [www.this.org](http://www.this.org). For a copy of The Heart Institute Food Plan call (509) 625-3000

**Inland Northwest Health Services, Community Health Education Resources (CHER):** Programs and classes, along with health tips and recipes, [www.cherspokane.org](http://www.cherspokane.org) or call (509) 232-8138

**Inland Northwest Wellness Coalition:** A group of employer representatives working on employee wellness issues. The committee provides monthly Employee Wellness Newsletters to area businesses, (509) 241-7200

**Ronald McDonald Care Mobile:** Provides health services, including nutrition and health education, [www.spokanecaremobile.org](http://www.spokanecaremobile.org) or call (509) 324-7291

**Sacred Heart Children's Hospital, Shapedown Program:** 10-week weight management program for children and their families, (509) 474-2986

**Sacred Heart Women's Health Center:** Health Risk Assessment, [www.shmc.org/women/pages/hearttoheart](http://www.shmc.org/women/pages/hearttoheart) or call (509) 474-2400

**Spokane Area Parks and Recreation:** Spokane County, [www.spokanecounty.org](http://www.spokanecounty.org); City of Spokane, [www.spokaneparks.org](http://www.spokaneparks.org); Spokane Valley, [www.spokanevalleyonline.com](http://www.spokanevalleyonline.com)

**Spokane Body Mass Index (BMI) Initiative:** Educates the community on using BMI as a health risk indicator and applying appropriate interventions to improve nutritional and physical activity lifestyles. Contact Spokane Regional Health District, Health Promotions division for more information, (509) 324-1530

**Washington Coalition for Promoting Physical Activity:** Local physical activity resources, [www.beactive.org](http://www.beactive.org)

**WSU Cooperative Extension:** Provides nutrition education, [www.spokane-county.wsu.edu](http://www.spokane-county.wsu.edu)

## Make a healthy impact...

- Community resources are available.



Published by Assessment/Epidemiology Center  
1101 W. College, Room 360  
Spokane WA 99201  
[assessmentcenter@spokanecounty.org](mailto:assessmentcenter@spokanecounty.org)

Phone (509) 323-2853  
Fax (509) 324-3623  
TDD (509) 324-1464  
[www.srhd.org](http://www.srhd.org)

<sup>1</sup> Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, [www.cdc.gov/nccdphp/dnpa/obesity](http://www.cdc.gov/nccdphp/dnpa/obesity).

<sup>2</sup> Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System (BRFSS).

<sup>3</sup> Robinson Research, Physical Activity Survey, 2002.

<sup>4</sup> Meredith, C.N., and Dwyer, J.T., "Nutrition and Exercise; Effects on Adolescent Health", Annual Review of Public Health, 1991, 12:309-333. As reported in SSTHFP 2003.

<sup>5</sup> Washington State Department of Health, Office of Epidemiology, Healthy Youth Survey (HYS), 2002.

<sup>6</sup> National Heart, Lung, and Blood Institute, <http://nhlbi.nih.gov>

<sup>7</sup> World Health Organization, [http://www.who.int/hpr/NPH/docs/gs\\_physical\\_activity.pdf](http://www.who.int/hpr/NPH/docs/gs_physical_activity.pdf)

<sup>8</sup> Spokane Regional Health District, Spokane Counts, 2003.

<sup>9</sup> Washington State Department of Health, Center for Health Statistics, Comprehensive Hospital Abstract Reporting System (CHARS).

<sup>10</sup> Fontaine, KR, Bartlett SJ, (2000) Access and Use of Medical Care Among Obese Persons, Obesity Research, 8:403-406.

<sup>11</sup> U.S. Department of Health and Human Services. [www.acf.hhs.gov](http://www.acf.hhs.gov)

<sup>12</sup> Washington Business Group on Health, Institute on the Costs and Health Effects of Obesity, [www.wbgh.org](http://www.wbgh.org).

<sup>13</sup> American Cancer Society, [http://www.cancer.org/docroot/PED/ped\\_3.asp?sitearea=PED](http://www.cancer.org/docroot/PED/ped_3.asp?sitearea=PED)