

# Physical Activity and Healthy Eating in Minnesota: Addressing Root Causes of Obesity

*Executive Summary*

May 2010



*Obesity and the modifiable behaviors of physical inactivity and unhealthy eating increase risk for chronic diseases such as heart disease, cancer and type 2 diabetes.<sup>1-3</sup> Preventing obesity and chronic diseases requires addressing the key root causes of physical inactivity and unhealthy eating.*

*Whether an individual is obese or not, an active lifestyle that includes a balanced diet reduces risk for chronic diseases. Further, physical activity improves energy balance — the match between calories consumed through eating and drinking and calories used for daily living. Fruits and vegetables can help control total calorie intake when they substitute for foods that are high in calories and low in nutrients.<sup>1</sup>*

*Comprehensive prevention efforts recognize that individuals are strongly influenced by the environments in which they live, work and play, as well as by their attitudes and beliefs.<sup>4</sup>*

*Individually focused programs aim to build participants' skills to engage in healthy behavior. Yet, healthy choices must be easy choices. To create sustainable behavior change, a comprehensive approach builds social support and changes social, physical and policy environments in organizations and communities.*

*Blue Cross and Blue Shield of Minnesota and the Minnesota Department of Health collaboratively conducted the 2007 Minnesota Physical Activity Survey (n=3,428) and the 2008 Minnesota Healthy Eating Survey (n=2,458)<sup>i</sup> to measure the prevalence of physical inactivity, unhealthy eating and obesity among adult Minnesotans. The surveys also measure factors contributing to these outcomes at the individual level, as well as social, physical and policy environments.*

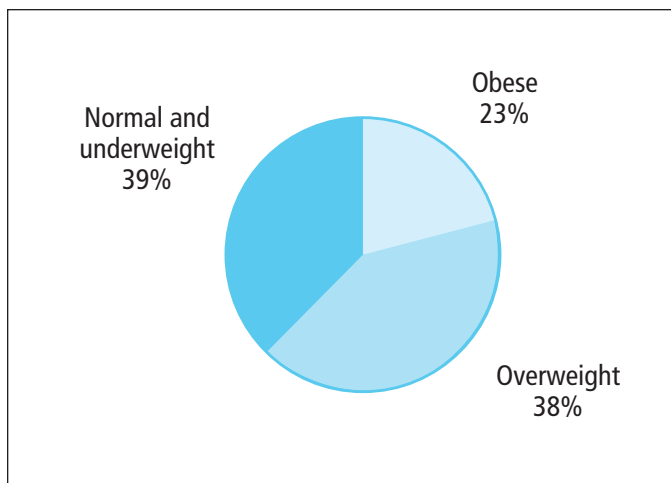
*The survey results provide Minnesota-specific data to guide policy development, advocacy and program planning to benefit the health of all Minnesotans. This executive summary presents key findings and offers how government agencies, health plans and other organizations can implement a comprehensive approach. The complete report is available at [bluecrossmn.com/preventionminnesota](http://bluecrossmn.com/preventionminnesota).*

# Obesity

**Prevalence:** The majority of — about 2.2 million — adult Minnesotans are overweight or obese, meaning they have a body mass index (BMI)<sup>11</sup> of more than 25.0 kg/m<sup>2</sup>. Twenty-three percent — 834,000 Minnesotans — are obese (BMI: 30.0+ kg/m<sup>2</sup>). Another 38 percent are overweight, that is, have a body weight above normal but not in the obese range (Figure 1).

Five percent of adult Minnesotans are *very obese* (BMI: 35.0-39.9 kg/m<sup>2</sup>), and 3 percent are *extremely*, or morbidly, *obese* (BMI ≥ 40.0 kg/m<sup>2</sup>). These fast-growing groups face the greatest risk for diseases and incur the greatest health care costs among the obese.<sup>5-6</sup> One percent of adult Minnesotans is underweight (BMI <18.5 kg/m<sup>2</sup>).

Figure 1



Source: Minnesota Physical Activity Survey, 2007

**Attitudes toward weight loss:** Even modest weight loss could effectively prevent or reduce chronic disease risk factors among the overweight and obese.<sup>7</sup> The majority (69 percent) of obese and nearly one-third (29 percent) of overweight adult Minnesotans understand that their current weight raises their risk for future health problems. In fact, most obese (69 percent) and overweight (53 percent) adult Minnesotans are currently trying to lose weight.

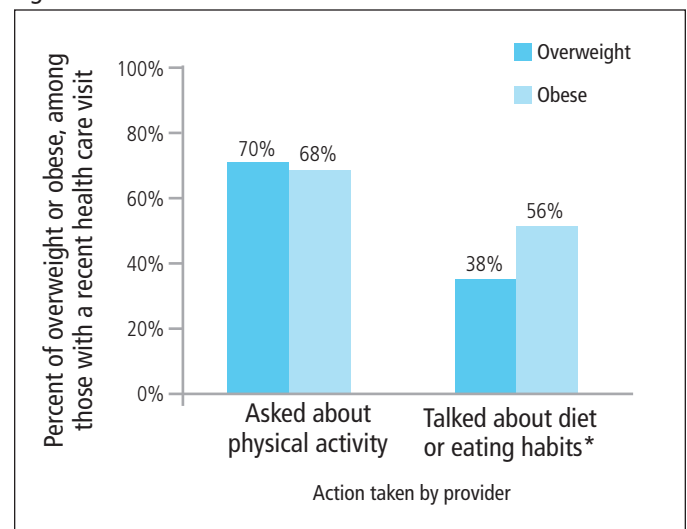
Overweight and obese Minnesotans prefer the recommended weight loss approach of lifestyle change to other methods. More than 80 percent of those currently trying to lose weight would consider eating less and about half (51 percent) would consider exercising at least one hour a day. They are less willing to try prescribed weight loss

medicine or having surgery, which are only recommended in severe cases.

**Clinical treatment:** Very few adult Minnesotans say their health care providers, follow clinical guidelines for treatment of overweight and obesity, which recommend introducing weight management or lifestyle change.<sup>8</sup>

About 80 percent of overweight or obese adult Minnesotans visit a health care provider annually. Among them, about 70 percent say their provider asked them about their level of physical activity (Figure 2). Only 38 percent of overweight and about half (56 percent) of obese patients say their provider discussed their diet. The percent of these patients getting advice from their health care provider to adopt healthy behaviors is even lower. Very few receive assistance, such as a program referral or personal plan.

Figure 2



\*Significant difference between overweight and obese respondents  
Sources: Minnesota Physical Activity Survey, 2007 and Minnesota Healthy Eating Survey, 2008

## Responding with a comprehensive approach:

- Offer individually tailored weight management programs and lifestyle change resources
- Encourage health care providers to follow the clinical guidelines for treatment of overweight and obesity
- Support physical activity and healthy eating to prevent weight gain in the entire population

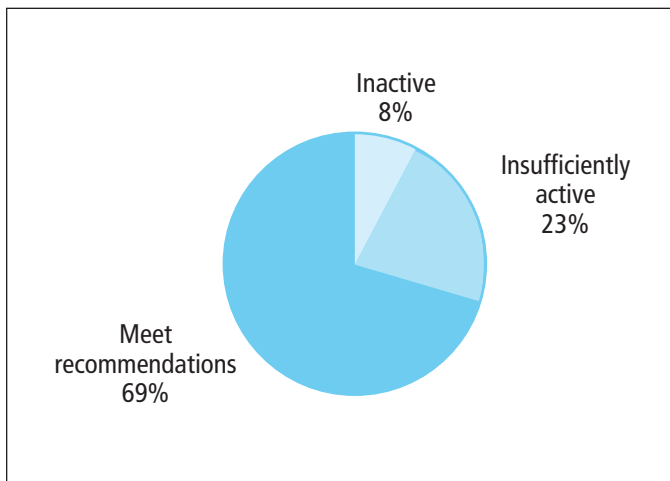
# Physical inactivity

## Prevalence:

Nearly one-third (31 percent) of adult Minnesotans fail to meet the Centers for Disease Control and Prevention's recommendations for physical activity. About two-thirds (69 percent) are *sufficiently active*, that is, they get at least 150 minutes of moderate activity or 75 minutes of vigorous activity weekly or some combination of the two (Figure 3).<sup>iii</sup>

Eight percent of adult Minnesotans are completely *inactive*. Twenty-three percent are *insufficiently active*, meaning they do some 10-minute increments of physical activity but not enough to meet recommendations. If 200,000 adults within this group — 6 percent of all adult Minnesotans — could add just 30 moderate or 15 vigorous minutes of activity weekly, they would meet recommendations.

Figure 3



Source: Minnesota Physical Activity Survey, 2007

Adult Minnesotans who do meet recommendations prefer moderate to vigorous activity. Nearly 60 percent (57 percent) meet them primarily through moderate activity, which causes *some* increase in breathing or heart rate, such as brisk walking or bicycling. Only 12 percent meet them primarily through vigorous activity, which causes *large* increases in breathing or heart rate, such as running or heavy yard work.

## Individual influences:

Attitudes toward physical activity could influence the choice of an active lifestyle or not. Only half of adult Minnesotans look forward to physical activity, while 14 percent perceive it as a chore or dreaded obligation. Yet, more than half (57 percent) of the combined group of inactive and insufficiently active adult Minnesotans are interested in adding more walking, the most common and accessible way to increase physical activity.

## Social influences and environments:

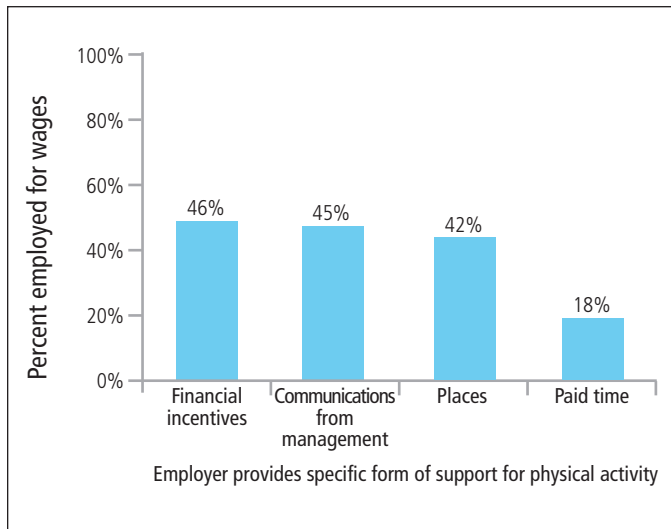
Individuals have difficulty sustaining healthy behaviors without supportive social environments.

**Social norms:** Minnesota's current social norms, or unwritten rules of behavior, encourage physical activity in planned workouts. The majority of adult Minnesotans would not be embarrassed to be physically active in public places (85 percent) or to be seen sweaty after exercising (86 percent). However, norms discourage taking everyday opportunities for activity. Only 27 percent of adult Minnesotans would be embarrassed to drive when they could walk and only 40 percent would be embarrassed to take the elevator up one level instead of the stairs.

**Work sites:** More than two-thirds (67 percent) of adult Minnesotans work for wages or are self-employed, suggesting the potential reach of work-site health promotion. Among them, two-thirds (66 percent) have sedentary jobs. Further, nearly eighty percent (78 percent) of employed Minnesotans spend no time doing physical activity while on their breaks or mealtimes during work hours in a usual week.

Minnesota work environments may not encourage physical activity. Fewer than half of adult Minnesotans working for wages have employers that provide supports for activity including: financial incentives, such as discounts on fitness center memberships or health insurance premiums (46 percent); management communications encouraging activity (45 percent); and places to be physically active, such as onsite fitness centers, walking paths and attractive stairwells (42 percent, Figure 4). Only 18 percent can take paid time to get physical activity — a newer, untested strategy.

Figure 4



Source: Minnesota Physical Activity Survey, 2007

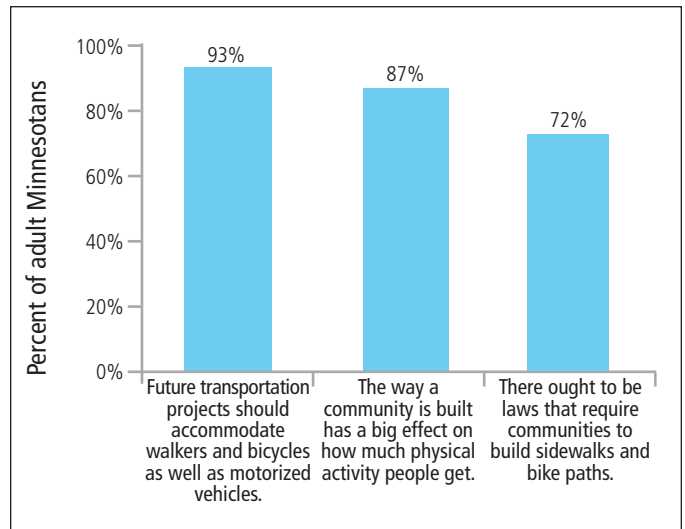
### Physical and policy environments:

The need for transportation provides everyday opportunities for physical activity. About two-thirds (63 percent) of adult Minnesotans walk for at least 10 minutes at a time to go from place to place in a usual week. Only 4 percent bike at least 10 minutes for transportation in a week.

Neighborhoods can influence levels of activity for transportation or leisure. Currently, fewer than one-quarter of adult Minnesotans strongly agree that their neighborhood includes either access to recreation facilities, such as walking trails or bike paths, or sidewalks, transit stops, and commercial areas within walking distance. One-third or fewer also felt that their neighborhood is safe for walking at night or that traffic levels are acceptable for walking.

Still, adult Minnesotans clearly believe the built environment influences physical activity and support policies that build communities to encourage active transportation. Nearly 90 percent agree that how a community is built has a big effect on how much physical activity individuals get (Figure 5). Nearly all (93 percent) believe that future transportation projects should accommodate walkers and bicyclers as well as motorized vehicles, while 72 percent agree that there ought to be laws that require communities to build sidewalks and bike paths. Minnesotans from the seven-county metropolitan area and Greater Minnesota are equally supportive.

Figure 5



Source: Minnesota Physical Activity Survey, 2007

### Responding with a comprehensive approach:

- Develop social support for physical activity, such as walking clubs, in community and work-site settings
- Conduct media campaigns promoting everyday activities such as taking the stairs or walking longer distances
- Create work environments that encourage exercise through promotion, incentives and places to be active
- Enhance communities' physical environments for active transportation through urban design policies

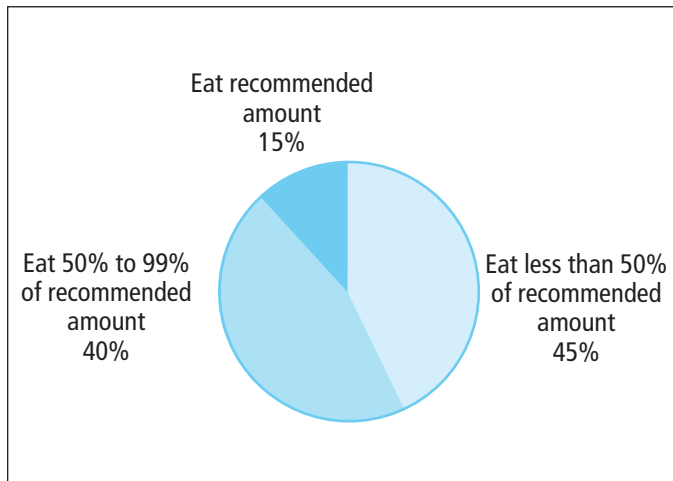
## Healthy and unhealthy eating

### Prevalence:

**Fruits and vegetables:** Eighty-five percent of adult Minnesotans fail to eat enough fruits and vegetables to meet daily recommendations for their age and gender (Figure 6).<sup>iv</sup> Forty-five percent eat less than half of the recommended daily amount. The remaining 40 percent consume at least half, but not the full recommended amount.

On average, adult Minnesotans eat 2.7 cups of fruits and vegetables daily. They would need to eat an *additional* 1.8 cups of fruits or vegetables daily in order to get the average 4.5 cups recommended.

Figure 6

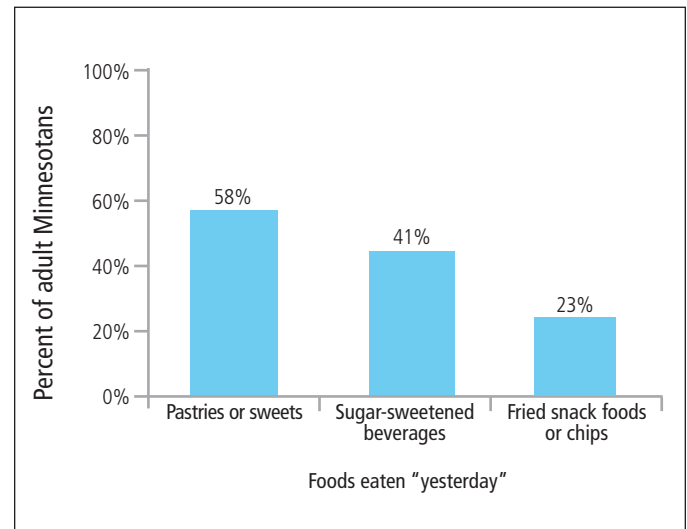


Source: Minnesota Healthy Eating Survey, 2008

Specifically, recommendations suggest an average of 2.0 cups of fruit and 2.5 cups of vegetables daily. Yet, only 22 percent of adult Minnesotans eat enough fruit and only 14 percent eat enough vegetables.

**Nutrient-poor, energy-dense foods:** Daily, more than half (58 percent) of adult Minnesotans eat pastries or sweets, 41 percent drink sugar-sweetened beverages and 23 percent eat fried snack foods (Figure 7). Weekly, two thirds (66 percent) — about 2.5 million adult Minnesotans — eat fast-food meals at a restaurant, take-out, drive-thru or pizza delivery.

Figure 7



Source: Minnesota Healthy Eating Survey, 2008

**Breakfast:** Yet, only about half (56 percent) of adult Minnesotans eat breakfast every day in a typical week. Ten percent never engage in this healthy behavior, completely missing its potential health and weight management benefits.<sup>9</sup>

### Individual influences:

Even though most adult Minnesotans do not eat enough fruits and vegetables, only one-quarter (24 percent) feel dissatisfied with the amount they currently eat. While nearly all (99 percent) adult Minnesotans agree fruits and vegetables make an important difference to health, only one-quarter (24 percent) know how many cups they need daily.

### Social influences and environments:

**Social norms:** Ideally, social norms would encourage Minnesotans to serve or eat healthy meals in social situations. Yet, just half (53 percent) of adult Minnesotans say their friends would find serving dinner at a social gathering without any vegetables unacceptable. Only 42 percent of employed adult Minnesotans who do not work from home believe that being seen eating an unhealthy fast food meal at work every day would be unacceptable.

**Work sites:** People who eat meals during work may either bring them from home or buy them from a cafeteria, vending machine, restaurant or store.

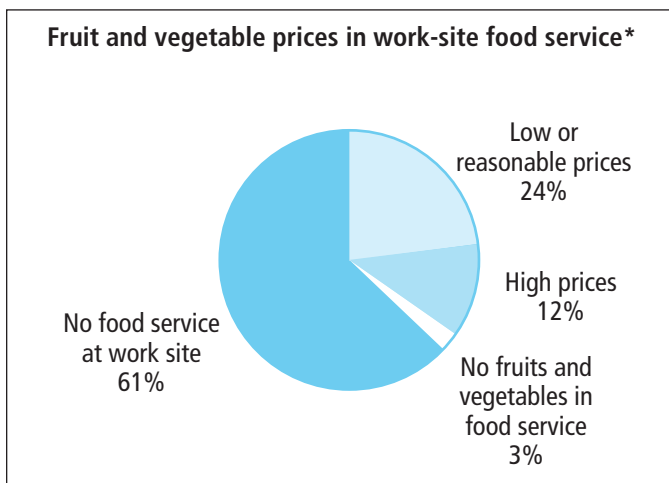
Nearly two-thirds (63 percent) of employed adult Minnesotans who do not work from home bring their meals to work more often than they buy them. Home-prepared meals contain fewer calories and more nutrients than meals prepared away from home.<sup>10</sup>

In fact, the majority of adult Minnesotans have physical features at work to support bringing meals including: a microwave (93 percent), a refrigerator (91 percent) or a break room (85 percent).

Workers who buy meals need access to fruits and vegetables. Only 24 percent of Minnesota workers with a work site can buy them at low or reasonable prices through a work-site food service (Figure 8). The remaining workers' food services, either sell them at a high price (12 percent) or not at all (3 percent). Sixty-one percent have no food service.

Only 11 percent of workers have work-site vending machines with fruits and vegetables.

Figure 8



\*Among only employed who do not work from home  
Source: Minnesota Healthy Eating Survey, 2008

### Physical and policy environments:

Local food environments can promote or impede access, that is, availability and affordability, to fruits and vegetables.<sup>11-12</sup> Ninety percent of adult Minnesotans have a means of transportation to grocery shop as often as they would like. Nearly three-quarters (74 percent) live within five miles of a grocery store with a good produce selection, and 65 percent have purchased fruits or vegetables directly from a local farm or farmers market. Sixty-two percent think fruits and vegetables are affordable.

Still, some Minnesotans face barriers to accessing fruits and vegetables. For example, just three quarters (74 percent) of adult Minnesotans who experience food insecurity — the inability to buy enough food — have regular transportation to grocery shopping compared with 92 percent of the food-secure. Food-insecure adult Minnesotans are also less likely to live near a grocery store, have bought fruits and vegetables from a local farm or think they are affordable compared to those without this concern.

In addition, low-income, less-educated and rural adult Minnesotans more often face some or all of these barriers to accessing fruits and vegetables than higher income, more-educated and urban adult Minnesotans.

### Responding with a comprehensive approach:

- Increase access to affordable fruits and vegetables in work-site cafeterias and vending machines
- Limit access to nutrient-poor, energy-dense foods in work sites through price or availability
- Provide point-of-purchase information, such as fat and calorie content, on menus
- Improve underserved communities' food environments through zoning changes and food retailer incentives
- Connect local farms to institutions, such as schools and work sites, so they serve healthier meals

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## Endnotes

<sup>i</sup> Minnesota Physical Activity Survey data were collected September through December 2007. Minnesota Healthy Eating Survey data were collected September through November 2008.

<sup>ii</sup> BMI, the measure of overweight or obese status, is calculated by dividing weight in kilograms by height in meters squared.

<sup>iii</sup> The 2007 Minnesota Physical Activity Survey specifically asked about activity when not at work, potentially including transportation, domestic or leisure-time activity.

<sup>iv</sup> Because the 2008 Minnesota Healthy Eating Survey did not assess physical activity, the measure of meeting fruit and vegetable recommendations assumes the respondent was physically inactive.