Active Living and Low Income Populations

There is an important relationship between household income, the level of routine physical activity people engage in, and their health. We can improve the health of low-income people by lowering community barriers to routine physical activity and by promoting active living, a way of life that integrates physical activity into daily routines. Active Living by Design promotes environments that offer choices for integrating physical activity into daily life.

Low Income Status, Physical Activity and Health

By most definitions, low-income people as a group engage in less physical activity and suffer from poorer health outcomes than the general population.* Consider that:

* Low income status is determined in a variety of ways, including: by income quintile, in comparison to area median income or the federal poverty line, or by qualification for various public services.

- Low-income people suffer disproportionately from health problems related to physical inactivity. People from households with incomes below $15,000 are much more likely to be diagnosed with diabetes or asthma, to be obese, and to be at risk for health problems related to lack of exercise than people from households with incomes above $50,000.iii

- People from households with incomes below $15,000 are three times more likely to live a sedentary lifestyle than people from households with incomes above $50,000. Only 17.6% of people from households earning less than $15,000 report achieving the recommended levels of physical activity and 39.5% report no leisure time activity (sedentary).i,iii

- People from households with incomes below $15,000 are much less likely to rate their health as good or better or to use physical activity or exercise to control or lose weight than people from households with incomes above $50,000.ii

- 25.1% of people from households earning less than $15,000 are considered obese, or approximately 30 pounds overweight.ii Obesity and overweight play a significant role in death and disability and are strongly influenced by physical inactivity.iv Obese individuals have a 50-100% increased risk of premature death versus individuals at a healthy weight.v

<table>
<thead>
<tr>
<th>Issue</th>
<th>Prevalence by Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>&lt;$15,000: 12.5%</td>
</tr>
<tr>
<td>Asthma</td>
<td>&lt;$15,000: 15.5%</td>
</tr>
<tr>
<td>Obese (&gt;30 BMI)</td>
<td>&lt;$15,000: 25.1%</td>
</tr>
<tr>
<td>Sedentary**</td>
<td>&lt;$15,000: 39.5%</td>
</tr>
<tr>
<td>At-risk for health problems related to lack of exercise</td>
<td>&lt;$15,000: 82.4%</td>
</tr>
<tr>
<td>Rate health good or better</td>
<td>&lt;$15,000: 64.0%</td>
</tr>
<tr>
<td>Using physical activity to control or lose weight</td>
<td>&lt;$15,000: 47.2%</td>
</tr>
</tbody>
</table>
• Socioeconomic conditions commonly confronted by low-income people such as polluted environments, inadequate housing, absence of public transportation, lack of educational and employment opportunities, and unsafe working conditions contribute to inequitable health outcomes.\textsuperscript{vi,vii}

** Sedentary is defined as answering no to the question “Did you participate in any physical activities in the past month?”

Specific physical and social barriers to physical activity for low-income people may vary depending on whether they live in urban, suburban or rural areas or in places that are predominantly low-income. Low-income status also disproportionately affects racial minorities and exacerbates racial health disparities.

Regular physical activity improves health and quality of life. It reduces by 50\% the risk of developing coronary heart disease, adult diabetes and obesity. It reduces by 30\% the risk of developing hypertension. It also reduces osteoporosis, relieves symptoms of depression and anxiety, and prevents falls in the elderly.\textsuperscript{viii}

### Low-Income Populations and Common Barriers to Physical Activity

Low-income people often confront difficult social and environmental barriers to physical activity and have less means to overcome them than other income groups. Some of the most common barriers include: long distances to important daily destinations, lack of meaningful transportation choice, unsafe neighborhood and traffic conditions, poor access to parks and recreational facilities, air pollution, lack of time, poor health and lack of social support for exercise. While many of these barriers also exist for other income groups, they often exist to a greater degree in low-income communities. Low-income people are also less able financially to choose more activity-friendly alternatives such as: living closer to work or in a safer and cleaner neighborhood, purchasing a health club membership, paying a fee to visit the community pool or recreation center, or purchasing services that afford time for physical activity such as housecleaning or childcare.

A lack of good transportation choices is the most important single issue that limits routine activities such as walking, biking and transit use by low-income people. Since most roads, schools, shopping centers, workplaces, neighborhoods and other important community destinations are placed and designed only for convenient access by cars, the car is a virtual necessity for even the most basic transportation needs. As a result, auto ownership and use is high and walking and transit use rates are low among low-income people despite their very limited budgets:

• 73.5\% of American households earning less than $20,000 per year own at least one car and three-fourths of their trips are by car. 95\% of households earning $20,000-$39,999 own at least one car.\textsuperscript{ix}

• Low-income neighborhoods suffer from inferior transit service, excessively high fares, overcrowding, and routes that do not match their desired trip patterns.\textsuperscript{vi,ix}

• Households tend to abandon public transportation as soon as they own a car. Low-income people use cars 17 times more than transit for their urban trips (75.9\% vs. 4.6 \%).\textsuperscript{vi}

• People from households earning less than $20,000 make 16\% of their trips by walking and less than 5\% by transit compared with 76\% by automobile.\textsuperscript{vi}
Safety and access to facilities are also especially important issues that affect physical activity among low-income people:

- According to a national survey conducted in 1996, twice as many low-income (31%) as moderate-income (15%) respondents worried about safety in their neighborhoods as an obstacle to physical activity. Low-income respondents were also more likely to identify lack of sidewalks as an obstacle. (17% versus 11%). Affordability of recreational facilities was cited as an important obstacle by 50% of low-income respondents.xi
- Low-income groups report 40% more exposure to crime.xiv
- Lower-income children, and especially children of lower-income minorities, are injured and killed more often while walking and bicycling than are middle-class and upper-income children.xii
- Those who perceive their neighborhood to be unsafe (defined as having a low crime rate) tend to be less physically active than those who feel they live in a safe neighborhood.xiii
- Individuals with lower incomes report greater barriers to park use than individuals with higher incomes.xiv
- A higher poverty rate is significantly associated with reduced availability of sports areas, parks and green spaces, and bike paths. Moving from a high-poverty area (10% rate) to a low-poverty area (1% rate) is associated with a 50% increase in the overall availability of physical activity opportunities.xv

Perceptions of neighborhood physical activity opportunity in general are lower in neighborhoods with more poverty. Lower levels of perceived neighborhood physical activity opportunities are significantly related to physical activity levels.xvi

### Opportunities for Promoting Physical Activity Among Low-Income Populations

Given the more limited resources and choices available to low-income people, it is especially important that their social and physical environments support healthy levels of routine physical activity. Research indicates that: walking, cycling and transit use increase with density, land use mix and street connectivity; xvii density is significantly related to reductions in air pollution xviii; people are more likely to meet physical activity recommendations if they have access to more places for exercise such as sidewalks, walking/jogging trails and parks;xix and if they have support from a friend.xx

If we can make communities more activity-friendly, there are reasons to be optimistic about encouraging the lowest-income people to engage in routine walking and biking:

- People in the lowest 20% for income are already significantly more likely to walk than are people in other income groupsvi; and walking is a very low cost means of travel.
- Transit ridership among people in the lowest income quintile is significantly higher (4.6%) than among all income groups combined (1.7%).vi Either end of a transit trip frequently involves walking or biking.
- A lower rate of car ownership among people in the lowest income quintilevi helps remove the single most powerful barrier to choosing active transportation.
Recent research and decades of public health practice have demonstrated that integrating physical activity into daily routines may be a more effective public health strategy than individual messages or structured exercise programs. More supportive social and physical environments are vital to motivate larger numbers of low-income people to lead more active lifestyles.

**How Much is Enough? Physical Activity Recommendations**

The U.S. Surgeon General’s Physical Activity Recommendations are:

- In order to reduce the risk of chronic disease, adults should accumulate 30 minutes or more of moderate intensity physical activity on five or more days per week. Moderate activities include a brisk walk, bicycling on level ground, mowing the lawn, etc.

**Community Solutions**

In order to realize change in the daily lives of low-income people, communities must be more mixed and compact with safer streets, cleaner air and more accessible recreational facilities so that routine, moderate physical activity can be more accessible, safe, convenient, affordable and practical for them.

In order to deliver initiatives that improve health and well-being, communities can pursue some of the following activities:

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**Active Living by Design Calls to Action**

**Preparation**

- Develop and maintain a multidisciplinary partnership including community development, public health, environmental justice, transportation, housing, public safety, parks and recreation and other disciplines.
- Train low-income people to be active living advocates and involve them early.
- Assess the local physical, social and policy environment for barriers to active living.
- Assess existing policies for their support of active living.
- Identify and generate resources, writing proposals for grant funding.

**Promotion**

- Conduct social marketing campaigns to promote active forms of transportation by low-income groups.
- Promote active living among low-income immigrants using language-appropriate media and culturally-appropriate messages and messengers.
- Use community organizing techniques to build demand for programs, policies and physical projects.
- Organize public events to draw public attention to active living.
- Work with employers, schools, and faith-based organizations to utilize their newsletters, listservs and websites to promote active living.
Programs

- Establish walking and biking clubs, dance and step classes and other organized, culturally appropriate activities.
- Involve neighborhood watch and block groups in helping to make the streets safer.
- Include community policing as a strategy and police departments as a partner in environmentally oriented crime prevention.
- Create reverse commute, commuter choice and other workplace incentive programs that promote the use of public transit, ridesharing and non-motorized forms of travel.
- Start Safe Routes to School and Walking School Bus programs to encourage low-income children to bicycle or walk to school.

Policies

- Focus on convenient siting of affordable housing and safe, multimodal access to important destinations such as public schools, workplaces, shopping and civic buildings.
- Ensure adequate funding for public transit and convenient access to it from low-income neighborhoods.
- Protect low-income households living in activity-friendly communities from displacement due to gentrification.
- Encourage reuse of vacant properties and land, including brownfields and upper-story apartments.
- Establish inclusionary zoning, density bonuses, location efficient mortgages and other incentives for affordable housing in more central, mixed-use and activity-friendly locations.
- Increase funding for parks and recreation facilities and open space preservation and maintenance and ensure safe access from low-income neighborhoods.

Physical Projects

- Place affordable housing near commercial centers, transit lines and parks to encourage routine walking and biking.
- Use “crime prevention through environmental design techniques such as shared courtyards, enhanced lighting and sight lines, and windows facing the street to create safer, self-policing neighborhoods.
- Work with low-income people to create community gardens that encourage physical activity and good nutrition, build social capital and decrease crime.
- Establish vanpools and other transit options for reverse commutes.
- Ensure that low-income neighborhoods have equal access to parks, trails, greenways and other activity-friendly facilities.
- Conduct traffic calming along high-capacity transportation corridors serving low-income neighborhoods.
Resources

For more information on how active living can improve public health and for more resources to improve community design and physical activity in your community, please see the Active Living by Design website at www.activelivingbydesign.org. The site is rich with data sources, funding sources, tools, publications, presentations and links to potential partners.

Active Living by Design

Active Living by Design is a national program of The Robert Wood Johnson Foundation and is administered by the UNC School of Public Health in Chapel Hill, North Carolina. The program establishes and evaluates innovative approaches to increase physical activity through community design, public policies and communications strategies. For more information, please visit our website: www.activelivingbydesign.org.

References:

11 Moore, BJ, Glick N., Romanowdki, B. et al. (1996) “Neighborhood safety, child care, and high costs of fruit and vegetables as barriers to increased activity and healthy eating and linked to overweight and income”. FASEB J, 10:A562.
12 Durkin et al. 1994; Pless et al. 1987; Forkenbrock and Schweitzer 1997.)