

## Obesity/Overweight and the Role of Working Conditions: A Qualitative, Participatory Investigation

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The rising U.S. prevalence of obesity has generated significant concern and demonstrates striking socioeconomic and racial/ethnic disparities. Most interventions target individual behaviors, sometimes in combination with improving the physical environment in the community but rarely involving modifications of the work environment. With 3.6 million workers earning at or below the federal minimum wage, it is imperative to understand the impact of working conditions on health and weight for lower income workers. To investigate this question, a university–community partnership created a participatory research team and conducted eight focus groups, in English and Spanish, with people holding low-wage jobs in various industries. Analysis of transcripts identified four themes: physically demanding work (illnesses, injuries, leisure-time physical activity), psychosocial work stressors (high demands, low control, low social support, poor treatment), food environment at work (available food choices, kitchen equipment), and time pressure (scheduling, having multiple jobs and responsibilities). Physical and psychosocial features of work were identified as important antecedents for overweight. In particular, nontraditional work shifts and inflexible schedules limited participants' ability to adhere to public health recommendations for diet and physical

activity. Workplace programs to address obesity in low-wage workers must include the effect of working conditions as a fundamental starting point.

**Keywords:** worksite safety and health; obesity; community-based participatory research; qualitative research; Hispanic; Latino; Black; African American

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## ► INTRODUCTION

Obesity is widely recognized as a significant public health issue. Its prevalence among U.S. employed persons has risen substantially in recent years, with important differences by race, ethnicity, and socioeconomic status. Black, non-Hispanic workers have the highest rates of obesity among U.S. working adults, especially among women (nearly 40%; Gu et al., 2014). Latinos have a higher average body mass index than non-Latino Whites (Schiller, Lucas, Ward, & Peregoy, 2012).

Most public health obesity interventions have focused primarily on encouraging healthy behaviors (eating, active living, etc.) through programs delivered in clinical, community, and worksite settings. Worksite health promotion (WHP) activities typically include awareness campaigns, skills development, and environmental supports (Anderson et al., 2009). This approach is consistent with the social-ecological model, which posits that health behaviors are influenced by the interplay between personal attributes, social context, and environmental conditions (Stokols, 1996). However, WHP programs often do not reach the full socioeconomic spectrum of the workforce. Low-wage workers are notoriously underrepresented in WHP programs and are considered a high-need yet “hard-to-reach” segment (Allen et al., 2011; Baron et al., 2014; Harris, Hannon, Beresford, Linnan, & McLellan, 2014; Linnan et al., 2008; Middlestadt, Sheats, Geshnizjani, Sullivan, & Arvin, 2011).

In addition to logistical considerations for program delivery to low-wage workers—due to their long hours, shiftwork, irregular schedules, informal and temporary work, and so on—program content remains a concern. There is a general mismatch between most commercially available WHP programs and the specific needs of low-wage workers (Hannon et al., 2012; Harris, Huang, Hannon, & Williams, 2011). These individuals are disproportionately employed in jobs with high risk of injury and stress (Landsbergis, Grzywacz, & LaMontagne, 2014). Low-wage jobs offer little or no decision-making opportunity (e.g., choice, timing, and sequence of work methods), or “job control.” They are also more likely to be physically demanding (e.g., heavy lifting, repetitive motions), which increases the likelihood of fatigue and injury. Many low-wage workers work multiple jobs, increasing the total time spent working (and hazard exposures) and decreasing nonwork hours available for rest, recuperation, and recreation. Workplace stressors such as job strain, work-family interference, and fear of assault have been linked to poor health behaviors, specifically including physical inactivity (Andersen, 2011; Roos, Sarlio-Lahteenkorva, Lallukka,

& Lahelma, 2007; Tsutsumi et al., 2003; Wempe & Rosvall, 2005).

Night or rotating shifts and other irregular schedules affect sleep quality and quantity, with important physiological and behavioral consequences: fatigue, chronic health problems, altered metabolism, increased risk of injury, and disruption of family and social routines. Insufficient sleep has been correlated with changes in appetite/satiety regulation, metabolism, and insulin sensitivity, as well as a reduction in available energy to engage in physical activity (Knutson, 2010). Epidemiologically, shiftwork has been linked to metabolic syndrome (Tucker, Marquié, Folkard, Ansiau, & Esquirol, 2012) and short sleep with overweight status (Gildner, Liebert, Kowal, Chatterji, & Snodgrass, 2014). Nurses working long shifts were more likely to be overweight or obese, with disrupted sleep patterns and less physical activity (Han, Trinkoff, Storr, & Geiger-Brown, 2011).

Unfortunately, most WHP programs ignore these upstream determinants of health behaviors. The influences of such occupational conditions are especially salient in light of the socioeconomic disparities in rates of obesity in the United States (Wang & Beydoun, 2007). With 3.3 million workers earning at or below the federal minimum wage and 19.4% of those workers spending 40 hours or more per week on the job (U.S. Bureau of Labor Statistics, 2014), often holding multiple jobs to make ends meet, working conditions that affect them disproportionately are of major public health importance.

The purpose of the present study, therefore, was to learn how low-wage working Latino/Latina and African American adults experienced their jobs in relation to leisure-time physical activity, eating patterns, and other behaviors related to body weight. Understanding workers’ perspectives could inform effective WHP program design, thereby increasing opportunities to improve health for low-wage workers.

## ► BACKGROUND

This investigation resulted from a community partnership between the Massachusetts Coalition for Occupational Safety and Health (MassCOSH), an advocacy organization dedicated to promoting safe and healthy working conditions, and the University of Massachusetts Lowell Center for the Promotion of Health in the New England Workplace (CPH-NEW; [www.uml.edu/cphnew](http://www.uml.edu/cphnew)), a research center with the mission to evaluate opportunities for integration of occupational health and workplace health promotion initiatives.

A community-based, participatory research team was formed consisting of faculty and staff from CPH-NEW and of staff and volunteer “worker leaders” from MassCOSH and Boston Workers Alliance. These are nonprofit membership organizations that represent primarily Latino and African American populations, respectively. Each organization provides training through Worker Centers for members who advocate for safe working conditions. Worker leaders were selected based on their prior involvement in workers’ rights training and on their access to and connections with the study population.

This study was initiated because several MassCOSH Worker Center volunteers and community members reported experiencing weight gain, even when working in physically demanding jobs. In parallel, CPH-NEW was studying the interplay between working conditions and health. Thus, both organizations found themselves facing parallel questions. The University provided expertise in research methods and content knowledge; MassCOSH’s strong relationship with low-income workers and its history of strong advocacy initiatives to promote worker health and safety created a productive community research partnership.

## ► **METHOD**

### **Data Collection**

A 90-minute focus group script was developed by the research team. Questions addressed the ways that working conditions might affect leisure-time exercise and eating patterns, and whether specific workplace incidents (injury/illness, assault, verbal abuse, etc.) had an impact on gaining weight or difficulty losing weight, eating patterns, and/or leisure-time physical activities. Participants were asked to suggest ways that employers could provide an environment conducive to achieving or maintaining a healthy weight, and what they thought were appropriate roles for local government and worker advocacy organizations in supporting employer-based health promotion.

The script and recruiting materials were translated and back-translated between English and Spanish. University personnel trained the worker leaders on selection criteria for participant recruitment, focus group facilitation skills, and general research protocol. Worker leaders completed human subjects’ protection training and were paid a modest stipend for recruiting research participants and, in some cases, coleading focus group sessions. The University of Massachusetts Lowell Institutional Review Board approved the study protocol.

Focus group participants were recruited from Boston, Lawrence, and Lynn, Massachusetts. The goal was to involve men and women of various ages holding low-income jobs in a variety of industries. A recruitment flyer in English and Spanish explicitly identified the planned topic; recruiters went to community meetings to discuss the project. Individuals who were 18 years and older and employed in hourly work at least 20 hours per week in the past 2 years were eligible. Participants were compensated \$20 each.

Each focus group was co-led by a worker leader and a University researcher. A University research assistant took notes and recorded the discussions. The focus groups were scheduled during evening hours and weekends to accommodate participants’ work schedules. Demographic data on gender, race, ethnicity, age, and industry sector were collected before the group started.

### **Coding and Analysis**

Focus group recordings were transcribed; facilitators and cofacilitators reviewed transcripts for accuracy. Responses to each question were compiled; line-by-line coding was conducted by the research assistant (supervised by faculty) to support formulation of common themes. Further analysis of the transcripts to determine sub-themes used the qualitative data analysis software package, QSR NVivo 9. The results were presented to the focus group cofacilitators to ensure that the findings coincided with their experiences and to determine if they had noted any other issues not included.

After preliminary analysis, the findings were compared across all groups to judge whether there were differences between the Spanish- and English-speaking groups, and whether new topics were still emerging. The first eight groups were judged sufficient as the findings appeared to have reached saturation.

## ► **RESULTS**

Eight semistructured, 90-minute focus groups were conducted between July and October 2011. Six focus groups were conducted in Spanish and two in English. A total of 63 workers participated from various industries, including food services, health care/human services, housekeeping, and construction. Sixty-five percent of participants were female and 83% were Latino/a (Table 1). Each focus group included both men and women. Three of the focus groups were predominantly women (one male in each); the remaining groups were more evenly mixed. All but one group (predominantly

**TABLE 1**  
**Demographic and Occupational Characteristics of 63**  
**Low-Income Workers Participating in Focus Groups on**  
**the Relationship Between Work and Exercise, Diet, and**  
**Body Weight**

Characteristic	% (n = 63)
Gender	
Male	35 (22)
Female	63 (41)
Unspecified	2 (1)
Race <sup>a</sup>	
American Indian, Native Alaskan	13 (8)
White, Caucasian	30 (19)
Black, African American	22 (14)
Not specified	35 (22)
Ethnicity	
Hispanic, Latino	83 (52)
Non-Hispanic	14 (9)
Not specified	3 (2)
Age (years)	
18-24	5 (3)
25-34	33 (21)
35-44	21 (13)
45-54	25 (16)
55-64	13 (8)
65-74	2 (1)
Industry sector	
Restaurant/food service	22 (14)
Health care/human services	21 (13)
Housekeeping/cleaning	17 (11)
Construction	13 (8)
Manufacturing	13 (8)
Other <sup>b</sup>	22 (14)

<sup>a</sup>All Caucasian and Native American participants self-identified as Hispanic or Latino, as did 20 of 22 with race unspecified and 5 of 14 Black respondents. <sup>b</sup>Business owner, community organizer, day care provider, delivery driver, educational advisor, office work, sales representative, and seamstress.

health care workers) had a range of occupations represented. Table 1.1 (available online at <http://hpp.sagepub.com/supplemental>) provides the gender, language, and industry composition of each focus group.

### Themes

Four primary themes were identified during the coding process. Table 2 summarizes the frequencies

with which topics were raised in each focus group. Selected quotes from the workers illustrate each overall theme and the component subthemes in Table 3.

*Physically Demanding Work.* The consequences of work involving substantial physical exertion were discussed frequently throughout all the focus groups. For some participants, physical hazards had caused illness or injury, resulting in pain and impeding ability to exercise. Fatigue after a long, physically demanding workday also made it challenging for many workers to engage in leisure-time physical activity. “I don’t have the desire to do exercise after standing for 15-16 hours. I just want to eat and sleep. The next day is the same thing all over again.”

*Psychosocial Stressors.* Workers described job stressors associated with the mental and social aspects of their work, including high and conflicting demands; low job control (decision autonomy), especially regarding the work schedule; and low levels of social support (poor relationship with coworkers or supervisor). Those with low control in the workplace often also felt anxious about job insecurity. High demands and low autonomy directly affected the time available to eat during the work day and hence the quantity of food and the pace at which it was consumed. “Working in factories, you have to eat fast or you get fired.” Many respondents described the consequences of stress and anxiety in terms of consuming more food overall or choosing energy-dense “comfort foods.” “The work that three people used to do is given to one person. That creates stress and eating more.”

Workers in six focus groups cited poor interpersonal treatment, such as verbal abuse by supervisors or clients, sexual harassment, coworker conflicts, assault, and wage theft (not being paid for hours worked). These workers described subsequently becoming depressed and/or anxious. “A lot of harassment . . . it was really stressful, so the depression really set in.” Some reported that depression or anxiety had affected their eating patterns, either by overeating for comfort or, in some cases, by undereating due to low appetite. “The supervisor started to talk strongly to us. It put me in a bad mood and made me eat more.” Other reported health impacts were sleep problems, high blood pressure, diabetes, and generally having no energy.

*Time Pressure and Work Schedules.* Workers expressed challenges related to time available for completing their job tasks. “You think about deadlines and what you have to get done. So I don’t utilize the lunch hours to eat the healthiest foods.” Holding multiple jobs, often in combination with arduous commuting times and/or

family responsibilities, also had a major impact on time available to prepare healthy meals and incorporate physical activity into the daily routine. “Rushing to the next job and wanting something quick, I buy a donut and coffee to help keep me awake.”

Night shift workers often lacked routine meal times and had to eat alone. Working on weekends also often interfered with the ability to socialize with friends around meals and leisure-time exercise (e.g., soccer or basketball games).

**TABLE 2**  
**Frequencies of Themes/Topics Discussed in Focus Groups**

<i>Themes/Topics</i>	<i>No. of Times Discussed</i>	<i>Focus Group(s) in Which Topic Was Discussed</i>
Time pressure		
Inadequate time on the job to eat	20	1, 2, 3, 4, 5, 6, 7, 8
No time to eat well off the job	16	1, 2, 3, 4, 5, 6, 8
Food environment at work		
Little access to healthier foods	14	1, 3, 4, 5, 6, 8
Inadequate equipment or space to eat healthy foods	5	3, 4, 5
Psychosocial work stressors		
Work stress and high demands leading to overeating	12	1, 2, 3, 4, 5, 6, 7, 8
Psychosocial stressors at work (e.g., coworker conflicts, assault, sexual harassment, verbal abuse, wage theft)	8	2, 4, 5, 6, 7, 8
Physical job demands and hazards		
Walking around/on feet all day—too tired for formal exercise	10	2, 3, 4, 5, 6, 8
Sedentary and inactive working style	6	1, 3
Injuries sustained at work	6	2, 6, 7, 8

**TABLE 3**  
**Quotes Illustrating the Primary Themes and Subthemes Derived From All Eight Focus Groups**

<i>Physically Demanding Work</i>		
Illness and Injury	“A friend of mine [construction] . . . a cinder block dropped on her foot. . . . It broke her foot. . . . She was very active. Now she can’t do the jobs that she would normally do . . . depression set in.”	
Impact on Leisure-Time Activity	“In housekeeping, we move way too much . . . my arm is sore and it hurts.”	
	“I don’t have the desire to do exercise after standing for 15-16 hours. I just want to eat and sleep. The next day is the same thing all over again.”	
	“You come home and you are so tired that you either don’t want to eat, or you want to eat a lot.”	
<i>Psychosocial Stressors: Job Stress</i>		
High Demands	“The work that three people used to do is given to one person. That creates more stress and eating more.”	
	“You think about deadlines and what you have to get done, so I don’t utilize the full lunch hour to eat the healthiest meal.”	

(continued)

**TABLE 3 (CONTINUED)**

Low Control	<p>“Working in factories, you have to eat fast or you get fired.”</p> <p>“We had too much work so we didn’t have time for lunch. I needed the job. . . . Sometimes I worked 10 or 12 hours. . . . When I got home I ate fast food.”</p>
Low Social Support	<p>“A lot of harassment . . . it was really stressful so the depression really set in.”</p> <p>“He [supervisor] yelled at me and it gave me anxiety and I would eat more.”</p>
<i>Psychosocial Stressors: Poor Treatment</i>	
Verbal Abuse/Harassment	<p>“[My supervisor] yelled at me and it gave me anxiety and I would eat more.”</p> <p>“The supervisor started to speak strongly to us. It put me in a bad mood and made me eat more.”</p> <p>“Clients abused their medication. . . . Then, we’d get verbally attacked to the point we might have to call the police or you must risk losing your job.”</p>
Coworker Conflict	<p>“[Male coworkers] talk in a very abusive manner. They talk about women all day long. . . . I feel like it’s kind of offensive to me sometimes because I’m a female. . . . There are no rules in [the construction] environment.”</p>
Wage Injustice	<p>“Certain coworkers don’t treat me well.”</p> <p>“The employers don’t treat employees the right way. I don’t like that they pay more money to the supervisors’ friends.”</p> <p>“They don’t always pay you for the hours you put in. Sometimes they take out more hours for lunch.”</p>
<i>Food Environment at Work</i>	
Available Food Choices	<p>“Food from vending machines, soda. When we don’t have time to eat, we eat crackers or chocolate.”</p> <p>“They only have chicken fingers, hamburgers, and potato chips . . . it’s all the same food every day.”</p>
Equipment	<p>“I don’t have a microwave to heat up my food. I have to eat my food cold.”</p> <p>“Many factories only have 1 or 2 microwaves, even though there are a lot of employees.”</p>
Space to Eat	<p>“You lose 15 minutes waiting in line for the microwave.”</p> <p>“I cannot even talk about the cafeteria because that ‘cafeteria’ is in a corner of a dirty and unsanitary room.”</p> <p>“I worked in a restaurant . . . there was no place to sit and eat . . . we would munch and move around.”</p>
<i>Time Pressure</i>	
Scheduling	<p>“At 10:00 a.m., they give me a 15-minute break. I don’t have time to eat healthy food, even if I bring homemade food. I don’t have time to do exercise.”</p> <p>“People that work the night shift don’t have a schedule for eating. . . . A woman from work would say, ‘I gained weight because I eat at night.’”</p>
Multiple Jobs and Responsibilities	<p>“Once you get home, you have to clean the house, do the laundry, get the kids ready. Your job is not done. By the time you get time for you, it’s time to take care of your jobs all over again.”</p> <p>“Rushing to the next job and wanting something quick . . . I buy a donut and coffee to help keep me awake.”</p>

**TABLE 4**  
**Worker Recommendations for Action in Support of Healthy Weight.<sup>a</sup>**

<i>Recommendations for Employers (E) and for Advocates (A)</i>	<i>No. of Focus Groups in Which Topic Was Discussed</i>
E: Assure adequate and consistent meal break time during work hours	7
E: Provide access to healthy food choices at work	5
E: Provide programs or incentives to exercise during work hours	3
E: Teach workers about healthy eating	3
E: Treat workers with more respect	3
A: Lead community organizing efforts to enforce employer compliance with meal and break schedule laws	6
A: Educate employers that respectful treatment, meal breaks, and healthy food access is in their business interest	5

<sup>a</sup>Two questions were asked: “What advice would you give to your employer about ways to make it easier to keep or achieve a healthy weight? What advice would you give the Workers Center to help workers advocate for changes?”

Participants commonly described that much of the allowed meal break was filled by clocking out and back in or waiting in line to purchase food. “Respect us. Give us a fair lunchtime.” More than one participant noted that although the legally required time for meal breaks was provided, it was sometimes chopped into multiple, very short breaks. This meant that people had to be ready to eat very quickly, precluding rewarming of pre-cooked food or sitting down to eat in a relaxed setting. “At 10 a.m. they give me a 15-minute break. I don’t have time to eat healthy food, even if I bring homemade food.” Others reported that breaks were timed unpredictably, so that they might become very hungry by the time they were able to eat, or be anxious during one break about how long it would be until the next. These situations created pressure to eat quickly and often to eat more than was desired.

*Food Environment at Work.* Many workers discussed the physical aspects of the workplace and the available food options. They described inadequate eating facilities in the workplace, such as no equipment (refrigerator, microwave, etc.) to store and reheat meals brought from home, or insufficient equipment to accommodate all who might wish to use it during a limited break period. “You lose 15 minutes waiting in line for the microwave. There needs to be more equipment.” Other workers stated that they had no space to eat their meals, or the designated break area was not clean, well maintained, or attractive. “I cannot even talk about the cafeteria because that ‘cafeteria’ is in a corner of a dirty and unsanitary room.”

Vending machines rarely offered healthy food choices. Several people employed in restaurants or other food services reported regularly being served the cheapest meals available. “They only have chicken fingers, hamburgers, and potato chips. It’s all the same food every day.”

#### ***Recommendations for Action by Employers and Advocacy Groups***

Workers’ most common recommendation (Table 4) focused on adequate and predictable break and meal times. Participants in nearly every focus group talked about meal breaks being overlooked or withheld by supervisors. They recommended that employers and supervisors be educated about the need for meal breaks, and that worker advocacy organizations organize community educational campaigns for workers and employers to enforce existing break laws. They also urged that employers not divide the break into two or more increments during the shift, or that they lengthen meal breaks beyond the mandated minimum (30 minutes) so that there would be adequate time for the meal itself.

Access to healthful food choices on the job site was the next most frequently endorsed recommendation for employers. This could be accomplished even without a cafeteria, as simply as allowing employees time to preorder healthy lunch foods at a nearby location. A related recommendation (from three groups) was that employers provide work time programs such as education or incentives to encourage healthy eating and exercise.

Participants in three groups cited respectful treatment by supervisors and employers as generally important for making the work environment conducive to health. They recommended that employers obey existing laws (e.g., mandated break schedules), that government enforce compliance, and that advocacy groups help workers understand their rights and organize for fair treatment on the job. “Respect our rights in general. Give us time to eat and take a break. Don’t charge us for it.”

Last, in five focus groups, workers talked about the important role of worker center advocates, researchers, and other institutions in influencing and educating employers. Workers repeatedly expressed that professionals should convince employers that poor treatment on the job and stressful working conditions are bad for their business. They did not see employers as motivated to improve working conditions without an external source of institutional leverage. “A lot of businesses would probably be more apt to listen to you [health professionals], with your suggestions of what to do in the workplace to help people have a more healthy environment.” “A lot of the places I worked at, they’re going to tell you that they’re not trying to support whether you lose weight. You’re here to do a job and that’s all we want you to do. That’s the outside issue. Go to the Y. Go to Weight Watchers.”

## ► DISCUSSION

This qualitative study elicited important insights about how low-income individuals perceive the influence of working conditions on diet and exercise opportunities. Latino and African American workers generally reported similar issues. As expected, working night or rotating shifts and working multiple jobs were cited as interfering with motivation for regular physical activity as well as healthful eating. Time pressure at work also had many negative consequences. Many respondents reported eating too much or too quickly because of uncertainty about when they would be able to eat again. This tendency was heightened by job insecurity, job inflexibility, and feelings of powerlessness, which combined to increase anxiety and depression. Fatigue, pain, and injury from strenuous work were also reported.

Many of the issues that these workers described were consistent with documented characteristics of low-wage work: high physical demands, little opportunity to influence how and when the work is carried out, and feeling disrespected by supervisors and others in higher positions (Lipscomb, Loomis, McDonald, Argue, & Wing, 2006; Punnett, Cherniack, Henning,

Morse, & Faghri, 2009). Job stress is well-known to influence risk of chronic conditions such as obesity (Au, Hauck, & Hollingsworth, 2013; Brunner, Chandola, & Marmot, 2007; Schulte et al., 2007), cardiovascular disease (Gilbert-Ouimet, Trudel, Brisson, Milot, & Vézina, 2014; Kivimaki et al., 2006), diabetes (Nyberg et al., 2014), anxiety, and depression (Griffin, Greiner, Stansfeld, & Marmot, 2007). The participants’ accounts in the present study illustrated eloquently how stressful working conditions can influence food choices and eating patterns and lead to low levels of leisure-time physical activity. These insights can inform WHP program design to make the content meaningful and relevant.

While some findings (e.g., work schedules) have already been recognized, others are novel. For example, physically demanding work is well-known to lead to physical fatigue and risk for injury (National Research Council & Institute of Medicine, 2001), but the direct impact of injury on exercise ability and motivation has apparently not been highlighted to date.

The inadequacy of the “food environment” at work was a remarkably common complaint (Table 3). Some large corporations have undertaken nutritional labeling of cafeteria dishes, but these measures are only useful where there is a cafeteria and employees have sufficient time to eat there. Many of these participants were employed in small workplaces, which, paradoxically, are least likely to implement workplace health promotion (Hannon et al., 2012; Harris et al., 2014).

The results have important implications for how to address socioeconomic inequities in health. Strenuous work (more common among Black and Hispanic workers; He & Baker, 2005) has been shown to increase cardiovascular risk in contrast to the benefit of leisure-time exercise (Holtermann, Hansen, Burr, Sogaard, & Sjøgaard, 2012). To the extent that heavy workload also reduces engagement in leisure-time exercise (itself a predictor of obesity; Choi et al., 2010; Church et al., 2011), this combined burden and its health consequences fall more heavily on individuals with lower education and income.

## ► CONCLUSIONS AND IMPLICATIONS FOR WHP PROGRAMS

Understanding and addressing workplace factors contributing to overweight and obesity are highly relevant to the design of effective WHP programs. Fatigue and injury from physically demanding work, anxiety from job stressors, inadequate and unpredictable meal breaks, and poor meal facilities were all cited by participants holding low-wage jobs in multiple industry

sectors. They are all preventable by good workplace and job design.

WHP programs need to be tailored to the conditions of work in order to be effective (Egerter, Dekker, An, Grossman-Kahn, & Braveman, 2008). Interventions targeting health-promoting environment and personal health behaviors are the basis for the current government emphasis on “integrated” programs such as the National Institute for Occupational Safety and Health’s Total Worker Health™ program. Examples of effective interventions that integrate workplace health protection and health promotion have been identified in the literature (Baron et al., 2014; Sorensen et al., 2005; Sorensen, Linnan, & Hunt, 2004). Involving low-wage workers in the program design and implementation process is a key starting point for effective program design.

There are positive roles for multiple stakeholders to advance health promotion practice for low-wage workers. Employers can provide clean, well-equipped eating/food preparation areas; predictable meal breaks of 30 minutes; and access to healthy foods (or a means of storing them safely). They can also engage employees in achieving good job design, assuring that job tasks are free from ergonomic and safety hazards, and insisting on respectful treatment of all employees and customers. Unions and worker centers can educate workers about the impact of working conditions on weight and teach them how to advocate for safer and healthier working conditions. Public health leaders can incorporate workplace and labor issues in community and public health wellness efforts. Occupational health experts can be included as members of obesity reduction and other wellness advisory councils. Researchers can engage in community-based participatory research, collaborating with key industries employing low-wage workers, to develop and test integrated health promotion program models that are viewed as desirable by employer management and workers alike. Government can improve surveillance by incorporating information about occupation and industry in surveys such as the Behavioral Risk Factor Surveillance Survey. Insurance companies could establish rate reduction programs for employers that improve workplace health and safety factors that affect obesity. Finally, program developers (vendors, insurers, internal program directors) can engage low-wage workers to help design appropriate and desirable health promotion program options that are relevant, accessible, and meaningful.

The health barriers discussed in this study and others need to be carefully considered in order to advance health promotion practice for underserved, low-wage workers.

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