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Addressing Diversity and Health Literacy at the Worksite

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The U.S. workforce is becoming increasingly diverse, primarily as a result of immigration and aging, particularly of ethnic minority populations. Ethnic minorities are projected to make up more than half of the U.S. population by the middle of this century; the largest growth is expected to occur among Latinos and Asians. Currently Whites make up the largest plurality but are no longer the majority of Californians. When developing or assessing health promotion policies and programs, it is important to consider the many definitions, connotations, and interpretations of diversity and to recognize that many distinct groups exist within each worksite. Thus, cultural proficiency and inclusiveness are critical components of worksite health promotion programs and policies.

In general, public health researchers and practitioners have focused on four types of diversity. First, *gender* diversity addresses the relative representations of women and men within the power structure of an organization and across organizations, industries, and sectors. Gender diversity is important to consider in workplace health promotion because research shows that work requirements can affect women and men differently in terms of physical and mental health. For example, working overtime is associated with increased risk for cardiovascular disease in women but not in men. *Racial and ethnic* diversity addresses the relative representations of Whites and individuals of minority status based on race, ethnicity, religion, or nationality. *Socioeconomic* diversity addresses the representations of persons from all economic and sociodemographic backgrounds, particularly marginalized groups, including social class. *Underserved populations* are minority groups that are or have been systematically denied full access to equality of opportunity because of discrimination, marginalization, or exclusion. *Underrepresented populations* are a subset of underserved populations in which a small fraction of their representation in the general population is found among physicians, health administration executives, university professors, research investigators, and other positions with power in the public health establishment. These are generally African Americans, American Indians and Alaska Natives, Latinos and Hispanics, and Pacific Islanders.

Effectively addressing issues surrounding diversity in worksite health promotion is critically important for a number of reasons. First, major health disparities currently exist in the United States, particularly in underserved populations. Members of underrepresented ethnic groups have substantially higher rates of morbidity, disability, and mortality. During the 20th century, life expectancy increased by 30 y overall, but (as an example) African American men still live 15 y less, on average, than Asian American women live (www.lapublichealth.org). Race and ethnicity and socioeconomic status, however, are highly confounded, with lower socioeconomic status explaining most but not all health disparities. In fact, poverty is the single most powerful determinant of health status.

Second, many studies have found that health promotion efforts are less successful in underserved populations. However, it is frequently not clear whether the intervention strategy itself is ineffective or whether the marketing or communications and messaging within the intervention are insufficiently culturally targeted. Therefore attention to implementation is particularly important in studies of these populations. For example, in a community intervention using stair prompts to promote taking the stairs, Whites significantly

increased their stair usage, whereas Blacks did not significantly increase their stair usage (2). However, in a subsequent study by the same investigators, signs that were culturally targeted to African Americans were effective in both ethnic groups (3).

Third, *health literacy,* or the ability to understand and act appropriately on health information, depends on multiple competencies, including language fluency in standard English, rudimentary scientific comprehension (e.g., anatomy, physiology), basic math skills, reading ability, manual dexterity, visual and auditory acuity, and familiarity and comfort with mainstream American culture. Health literacy is generally lower in underserved populations, and this poses potential problems for successful health promotion in the worksite. Health promotion materials provided to employees may be understood incorrectly or incompletely among employees with lower levels of health literacy, leading to poorer intervention outcomes.

Health literacy may also be an issue for a fourth type of diversity, *cultural* diversity, or the representation of persons who are from cultures other than the dominant or mainstream American culture. People who have language barriers, people who are in an ethnic or sexual minority (lesbian, gay, bisexual, or transgendered individuals), people with disability, or immigrants who are less acculturated may also have different cultural norms and values regarding health and health promotion. Even the simple definition of health and illness may differ across cultures. For example, some cultures do not view obesity as unhealthy, and so worksite health promotion programs that promote healthy nutrition and physical activity as strategies for weight loss may be less successful. Culturally salient interventions increase program recruitment and retention as well as adherence to programmatic goals.

This chapter examines issues pertinent to diversity in the workplace, in the context of efforts to improve the health of all workers. Health literacy is an important topic and is discussed in greater detail in the following section. The chapter then examines health disparities, focusing on obesity and physical activity. The economic, environmental, and sociocultural challenges associated with diverse and underserved populations with relevance to worksite health promotion are summarized, and the chapter concludes with an overview of potential solutions and case studies of physical activity and healthy eating interventions in the workplace.

Health Literacy

Health literacy is more formally defined as "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (18; p. 32). Health literacy is important because it strongly predicts the health status of an individual—the higher a person's health literacy, the better the person's health. While the majority of American adults have intermediate health literacy, there are disparities in health literacy that mirror health disparities in general. African Americans, Latinos, American Indians, Alaska Natives, and people identifying as multiracial on average have a lower health literacy than Whites, Asians, and Pacific Islanders have, and adults living below the poverty line have a lower health literacy than more affluent individuals have.

Health literacy may be conceptualized as a potential *barrier* to successful worksite health promotion or as a *goal* of worksite health promotion. As underserved populations begin with a smaller foundation of health literacy, programs can be less effective for them. Therefore, a useful main goal of a worksite health promotion program might be to increase health literacy. If, however, a program has identified other primary goals, health literacy is an important secondary factor to consider when implementing and evaluating such a program.

Health literacy usually is discussed in the context of health care, involving issues such as medication compliance, inappropriate use of emergency services, or inability to interpret test results. However, it certainly has applications to prevention, as the behaviors promoted generally require more frequent and sustained adherence. It is important to clarify that simple *knowledge* of health information generally does not translate into actual health improvement. For example, researchers have conducted smoking interventions that are designed to explain the adverse health effects of smoking in order to encourage quitting. While these types of interventions may have increased health literacy with respect to the unhealthy consequences of smoking, they did little to change actual smoking behavior. What was needed instead was a different kind of health literacy—knowledge of *how* to make and maintain changes in lifestyle and environment. In the case of smoking, such knowledge includes learning how to set a quit date and to ask for the support of coworkers, family, and friends.

Diverse worksites include employees with varying levels of health literacy—while all employees might understand that smoking is bad for health, they may differ in their knowledge on how to make effective behavioral changes resulting in staying quit. Furthermore, members of different types of worksites likely pose an equally varied set of challenges. For example, smoking rates are higher among certain ethnic minority groups, people living in poverty, and people with low levels of formal education. Turning to friends and family (a common source of health information) for support may not be as effective a strategy when the family and friends also smoke. Similarly, reliance on friends and family for advice on weight management may only reinforce less healthful norms, values, and practices, interfering with behavior change.

Health Disparities

The general health of Americans is improving, yet for cultural, behavioral, socioeconomic, biological, or historical reasons, most ethnic minority populations are not following this trend. Additionally, there is evidence that health disparities associated with socioeconomic status are increasing in the United States.

Overweight (BMI = 25-29.9 kg/m^2) and obesity (BMI ≥ 30 kg/m^2) are among the most significant risk factors for diabetes, cardiovascular disease, and other chronic disease morbidity and disability. Two-thirds of all U.S. adults are overweight or obese, with non-Hispanic Black women and Hispanics having the highest rates of overweight and obesity. These risk factors and conditions contribute substantially to health disparities, and the costs to society are staggering.

Worksite health promotion is often informed by population-based intervention in the broader community. For example, the CDC initiative to promote stair-climbing and others in the first large wave of such studies likely grew out of two earlier stair prompt studies set in shopping malls and mass transit stations (2,5,17). This intervention was one of the early environmental change approaches, resulting in its identification as a best practice. As is true for most such interventions, however, testing on ethnic minority samples was severely limited. The only stair prompt study available to the CDC at that time that analyzed subgroups by ethnicity found that the stair prompt did not work in African Americans (2). Not surprisingly, few of these worksite policy and environmental change interventions have included substantive ethnic minority samples, a clear opportunity for future research.

In a review of healthy eating and physical activity interventions that targeted or had sufficient representation of ethnic minorities for subgroup analyses, Yancey and colleagues identified just 23 studies from 1972 to 2003 (44). Fewer than one-half of the 23 studies presented outcomes, and 15 of the 23 used convenience samples. The authors noted that of the more than 100 million people from ethnic minorities living in the United States, less than 0.02% have been included in population-based studies to promote physical activity, improve diet, or reduce obesity.

Strategies common to the 23 studies included involving communities and coalitions from study inception, mobilizing social networks, and utilizing social marketing principles such as integrating culturally salient messages and messengers. Cultural targeting is nearly always reported, but it is also necessary to strike a balance between being responsive to the culture of a particular group and accommodating the tremendous individual heterogeneity within the group. The Resource Centers for Minority Aging Research similarly noted the need to engage trusted sources and build trusting relationships when developing and evaluating ethnically and socioeconomically inclusive health promotion programs and policies (4). The following section examines the contributors to obesity-related health disparities and highlights attributes of inclusive interventions with relevance to worksite health promotion.

Addressing Underserved Populations in Workplace Health Promotion: Obesity Prevention and Control

Obesity represents a major public health threat. Addressing obesity as a health concern for underserved populations in the worksite setting is a challenging objective. A discussion on this issue is presented here.

Challenges

American society, as is true of most developed nations, is obesogenic, or obesity producing, and substantial effort and resources are necessary to achieve and maintain a healthy lifestyle when living in the United States. However, obstacles to healthy eating and active living are concentrated

in underserved communities. Ethnic minority or lower-income populations experience monumental economic and cultural challenges to healthy eating, physical activity participation, and many other health protective behaviors. Such barriers are inherent in the physical, social, organizational, and political environments of underserved communities. These barriers are detailed in the following discussion.

Economic factors pose enormous challenges to engaging in healthy behaviors (table 25.1). Geographic proximity to healthy foods and physical activity opportunities is strikingly limited for poorer communities. For example, park space in Los Angeles African American, Asian, and Latino communities is less than 1/100 of that in White communities in the same city (39). Similarly, fewer stores stock fresh or frozen produce, and the selection and quality of produce are much poorer. Conversely, fast-food restaurants are more plentiful in low-income and ethnic minority communities. From the higher proportions of inexpensive refined carbohydrate and fat in the food supply to the ubiquitous availability of brand-name sodas and coffee drinks available from vendors and vending machines, dietary quality reflects the nutrition environment of low-income and ethnic minority communities.

Hazardous neighborhood conditions are common. For example, people in low-income neighborhoods are more likely to be located near pollutants (environmental justice issues), face higher levels of exposure to environmental tobacco smoke, and experience higher rates of both intentional injury (due to gunplay or gang infestation) and unintentional injury (due to fewer pedestrian accommodations such as bridges over streets with high traffic volume, speed bumps, sidewalks, and street lamps in good repair). In addition, commercial marketing (including advertising and promotion) undoubtedly influences consumption preferences and purchasing behaviors. Marketing of health-compromising goods and services is pervasive in the United States, but increased exposure to commercial advertising for tobacco, unhealthy foods and beverages, and sedentary entertainment and transportation—as well as decreased exposure to health-promoting goods and services—has been documented in ethnic minority and neighborhoods, ethnically

Table 25.1 Staying Healthy Is Easier for Some Than for Others

	Upper socioeconomic status	Lower socioeconomic status
Education	College+	GED or high school
Housing	Own, safe	Rent, questionably safe
Physical activity	Many gyms and parks, good physical education	Few gyms and parks, poor physical education
Commercial marketing	Little	Pervasive
Neighborhood stores	Fruits and vegetables, food secure	Drugs and alcohol, food insecure
Police	Helpful	Abusive
Health care	Private doctors	Emergency room, Veterans Administration, public clinic
Sick leave	Accrued	None
Leisure priority	Exercise	Rest
Work conditions	Safe, high decisional latitude, flex time	Hazardous, low decisional latitude, no flex time
Child care	Nanny, high-quality facility	Family or neighbor, low-quality facility
Elder or disabled care	Home health workers, high-quality facility	Family or neighbor, low-quality facility
Criminal justice system	Little contact	Much contact
Premature morbidity and mortality	Low	High

Adapted from M. Stolley, 2006, Integrating contextual factors into health disparity research: Examples from obesity, asthma and cancer. In *Society of behavioral medicine* (San Francisco, CA).

targeted publications, and Black audience primetime television. However, attacks on this predatory marketing are not always politically feasible. Minority media, long ignored by most industries, have literally survived financially on culturally targeted fast-food, soda, alcohol, tobacco, film, and automobile ads that present sociodemographically marginalized groups in a very positive light.

Employment characteristics of lower-income workers present obstacles as well. Those who are lower in the work hierarchy have little flexibility to integrate physical activity into their lifestyles. They have little decisional latitude, rigid schedules (time clocks), and highly structured and supervised (assembly line) work processes. Sites employing a majority of low-income workers, such as low-income residential areas, have fewer healthy food options in close proximity and short lunchtimes. Long commuting times and multiple jobs further constrain leisure, despite higher rates of mass transit use and active transportation.

Leisure-time physical activity and foods with high nutrient value and low energy density are costly for individuals from low-income and ethnic minority backgrounds, both in time and money. Home meal preparation may assume a lower priority than meeting basic needs such as earning sufficient income for household expenses, caring for children and elders, religious observance, and relaxing at home. Federal farm subsidies for corn, used in cattle feed and high-fructose corn syrup, depress the cost of burgers and sodas relative to healthier offerings; the latter are already more expensive because of their more perishable nature, shorter shelf lives, and lower sales volumes (also due, in part, to less aggressive marketing). Low levels of enjoyment of physical activity and suboptimal motor skills may result from exposure to poor-quality physical education as youths.

Sociocultural obstacles to healthy lifestyle adherence are no less—and perhaps even more—influential than economic barriers. Culturally grounded norms, perceptions, and values surrounding physical activity and eating, including gender roles and role modeling, govern the ease or difficulty of participating in healthy behaviors. Many negative perceptions of physical activity have cultural origins with historical underpinnings. Commercially or socially marketed exercise fads and trends have traditionally emphasized sports, structured aerobics, or calisthenics that are consistent with the values of affluent Whites, especially males. Consequently, these exercise traditions have often been dismissed as incongruous by nonmainstream cultures. Sometimes these exercise traditions are even ridiculed—for example, jogging is perceived as a bourgeois waste of time and energy in less affluent or ethnic minority communities. In part, this may be attributed to the traditionally arduous lives of people from socioeconomically marginalized groups. The manual labor of the past has perhaps historically programmed an overestimation of daily work-related exertion and ingrained the need for rest after work to manage stress. A corollary misperception is that sweating reflects moderate to vigorous physical activity (when in fact sweating can accompany minimal exertion depending upon fitness level and ambient temperature).

Similarly, perceptions of healthful foods and healthy eating are culturally rooted. Certain foods, recipes, and food preparation techniques have been associated with particular ethnic identities. One example is the popularity of soul food, typified by fried catfish, fatback-seasoned collard greens, and corn bread, among African Americans. These tastes and smells produce positive affective responses summoning connection to family and nationality or culture of origin. The stressful lives of many individuals from socioeconomically marginalized groups also precipitate the use of nutrient-poor foods (comfort foods) as stress management. Job and residential segregation by income and ethnicity, magnified by the concentration of fast-food restaurants and paucity of dining options with a broader range of cuisines, preclude the usual sampling of a variety of foods as youths become more independent. Since most learning optimally incorporates an experiential component, there is little opportunity for multiple exposures associated with developing preferences for certain foods such as fruits and vegetables, whole grains, and low-fat dairy products (8). This may be compounded by the lack of vigorous exercise, which increases consumption of water and water-bearing foods and decreases preferences for highly sweetened beverages. Even the definition of what constitutes healthy foods varies among groups.

Social roles are key elements of identity influenced by culture of origin. Gender roles reflect culturally grounded notions of femininity and appropriate role behaviors. For example, concerns about maintaining a professional appearance (hair and makeup, skirts, high-heeled shoes) may deter women from exercising during the workday. In very traditional societies, vigorous exercise may even be seen as compromising a girl's virginity and negatively affecting her marriageability. Women are less frequently in positions of authority, and

even when they are, expectations of acquiescence may decrease their influence on corporate policy. For women and people from ethnic minority groups, few culturally relevant role models may be available. At the same time, substantial social distance between line staff (who are more likely to be overweight or unfit) and management (who are more likely to be active) may persuade the former to reject healthier behaviors as pretentious or irrelevant.

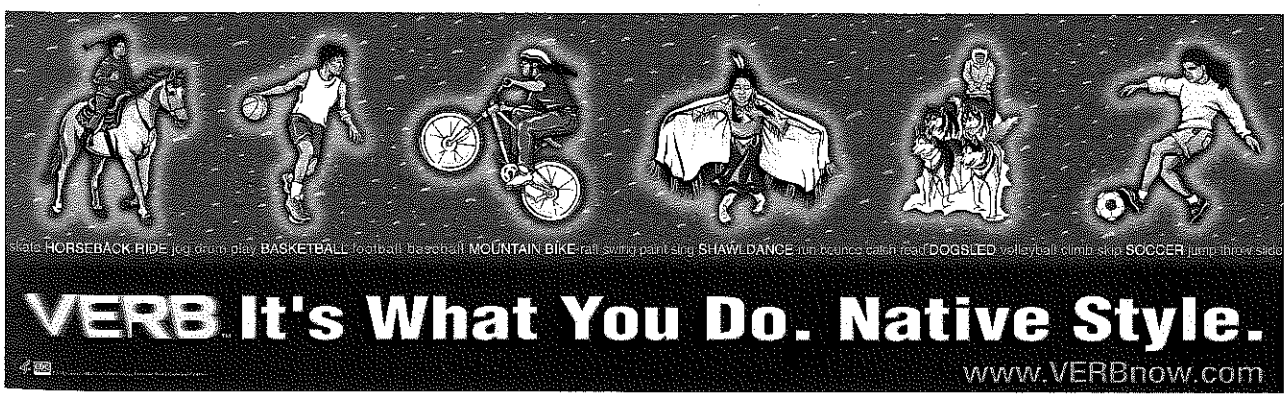
Potential Solutions

Worksites are captive audiences of adults representing the entire demographic spectrum of a society. They present unparalleled opportunities to leverage organizational policy and practice change to improve the overall health of the workforce and, perhaps, to spur widespread social norm change. However, the promise of worksite health promotion beyond tobacco control has largely been squandered by the differential engagement of younger employees of higher socioeconomic status. The voluntary nature of these interventions, targeted at the individual level, engages primarily the motivated and fit—often fewer than 1 in 20 workers.

Workplace environmental change approaches may be designed to preferentially target ethnic minority and lower-income employees. Particularly, these approaches include *push* strategies that make physical activity and healthy food choices hard to avoid (23). These approaches tend to reduce health disparities, increasing the likelihood of delivering substantial ROI to employers (and to local governments that bear many of the costs of sedentariness) by engaging the more sedentary and overweight population segments less successfully reached by traditional worksite programs. Push strategies include exercise breaks on nondiscretionary time, healthy food services and procurement, walking meetings, vending and vendor restrictions, nearby parking restrictions, and substantive fiscal incentives for mass transit use. They are potentially more sustainable, as they rely less on individual motivation and initiation—the daunting myriad daily decisions and actions that must be undertaken to acquire and prepare healthy foods, to resist the temptations of highly palatable, widely marketed, and nutrient-poor foods and of sedentary entertainment, and to seek out and take advantage of ways to expend energy.

Changing the workplace-driven sociocultural and organizational environment is much more feasible than changing the built environment in these communities. The former changes obviate barriers such as unsafe or unappealing outdoor surroundings, lack of residential access to high-quality produce and recreational facilities, and copious perspiration and lack of enjoyment associated with longer bouts of strenuous exercise. Innovative indoor architectural design (e.g., skip-stop elevators, nested well-lit stairwells, standing workstations), private development of mixed-use neighborhoods, public construction of walking trails, and commercial location of fitness facilities are unlikely to garner a high priority in areas that cannot even regularly secure such basic services as streetlight maintenance, foliage trimming, and sidewalk repair.

Successful health promotion innovations in diverse work settings may share certain fundamental principles, or ingredients. Many, for example, build on cultural assets such as the normative nature of structural integration of group physical activity, in the form of dance or movement to music in social gatherings throughout the life span; the cultural salience of many plant-based foods; and the collectivist versus individualist values. Key ingredients of culturally proficient approaches are outlined in table 25.2.



Reprinted from the CDC.

Table 25.2 Key Ingredients of Culturally Proficient and Inclusive Health Promotion Approaches

Ingredient	Sample citations
Building on cultural assets and de-emphasizing cultural deficits and stereotypes	32, 38, 48
Linking to the organization's mission, to outcomes important to regulatory oversight (e.g., occupational safety or injury prevention), or to the bottom line (e.g., employee productivity, to aid in sustainability and institutionalization)	6, 30, 31, 33, 35
Striking a balance between cultural adaptation of a health promotion program or policy to a particular work setting and close adherence or fidelity to program implementation protocols often developed in research settings with affluent White volunteers	9, 22, 48
Compromising on nonessential issues and horse-trading to dodge political minefields and to exercise diplomacy and political savvy	11, 16, 34, 41, 43
Cultivating a participatory process involving employees at all levels of the organizational hierarchy from the outset (cultural insiders), akin to community-based participatory research, in order to build ownership, trust, investment, and visibility	4, 7, 30, 40, 42
Soliciting and utilizing multidisciplinary expertise to assist in innovation development or selection and in implementation (e.g., soliciting help from marketing, human resources, and communications or public relations)	15, 25, 32, 43, 47
Attending to critical intervention targeting elements: *peripheral elements,* such as packaging colors, graphics, and images; *evidential elements,* such as statistics relevant to the target group; *linguistic elements,* such as language, dialect, and reading level; *constituent-involving elements,* such as direct experience or decision making; and *sociocultural elements,* such as integrating group norms, values, and practices into messages and strategies	1, 3, 12, 14, 21, 37
Recognizing that resources are generally insufficient to address the greater challenges of health promotion in diverse settings and that this reality necessitates creativity and flexibility for success	10, 19, 38
Continuously garnering process input from stakeholders and making midcourse corrections to optimize implementation and evaluation	26, 28, 30, 45
Responding rapidly and decisively to difficulties that arise, because information reflecting negatively on the program or policy travels quickly through word-of-mouth dissemination	13, 20, 22, 41

Case Study 1: Integrating Group Exercise Breaks Into Organizational Routine

Incorporating brief, structured exercise bouts into organizational routine in public agency worksites, community-based organizations, private social services agencies (29), corporate worksites, and elementary schools provides a case study of a strategy emerging from predominantly ethnic minority and low-resource practice settings rather than a strategy adapted from research trials with affluent White samples. Yancey and colleagues (45,46) have demonstrated organizational and individual receptivity to integrating 10 min group exercise breaks into daily routines (of staff and clients or members) in health and social services agencies serving Latinos and African Americans in Los Angeles.

The Los Angeles strategy (www.ph.ucla.edu/cehd/activity_breaks.htm [Accessed September 28, 2008]) has been readily disseminated in other settings, providing further evidence of its feasibility and cultural salience (48). These settings include churches, public social services agencies (9), and elementary schools (www.athletescouncil.com). Qualitative data from teachers and administrators implementing the latter adaptation of this strategy, Instant Recess (www.cachampionsforchange.net), underscore the importance of a newly adopted innovation furthering the organizational mission (35).

(continued) ▶

▶ Case Study 1: Integrating Group Exercise Breaks Into Organizational Routine *(continued)*

They report that students' enthusiastic embrace of the opportunity to dance to hip-hop music during the school day carries over to their class work and energizes them as well as decreases fidgeting and inattention, outcomes which are similar to those of Take 10! and other comparable interventions (24). Improved self-efficacy or confidence in movement has also been noted during physical education classes, particularly in girls.

While most interventions operate psychologically to motivate behavior change, exercise participation instigated by desire for social conformity adds physiological synergy to the psychological inclination. Enjoyment and enhanced feelings of well-being accompany participation in short bouts of physical activity in a social setting with peers. This positive effect is complemented by a reminder of being a bit out of shape among sedentary, overweight individuals who are surprised by their higher-than-expected perceived levels of exertion at such modest exercise intensity. Evidence also suggests that physical activity initiated in the workplace may generalize from one setting to another and from one type of activity to another.

Case Study 2: Web-Based Promotion of Culturally Salient Healthy Food Choices

Another case study of a worksite health promotion intervention building on cultural assets is provided by the Medical University of South Carolina's and the University of South Carolina's Health-e-AME interactive Web site (22). This intervention was developed from the outset as a community-based participatory research (CPBR) project in collaboration with ministers and the church establishment. It was built on extensive formative research to embed its components in the culture of the Black church and community. Mobilizing mainly church health ministers (usually registered nurses who were members of the congregations) to serve as program champions (www.health-e-ame.com), the Health-e-AME Web site is aimed at providing practical and culturally salient nutrition education and stimulating organizational and sociocultural environmental changes in African American churches, targeting staff and members at high risk for cardiovascular disease.

The central intervention strategy is improving the nutrient value of commonly consumed foods through submission and posting of favorite recipes that the project nutritionists then adapt to lower the fat and increase the fruit, vegetable, and fiber content. These are Web-based recipe upgrades emphasizing soul foods such as collard and turnip greens, cabbage, yams, and black-eyed peas. These healthier food preparations are then integrated into church organizational routine through their inclusion in the food catered at regional church conferences and administrative meetings, meals served after church, potlucks, and refreshments served during church functions. All of these events provide tasting opportunities. Exchange of information across church sites facilitates diffusion of innovative practices.

Other elements of the Web site include a library of downloadable resource materials (e.g., promotional flyers, coupons for healthy food choices at cooperating restaurants and groceries, exercise CDs and DVDs), a technical assistance request function, and a testimonials column. The home page highlights new content, promotes contests and competitions, and invites users to revisit the site. Project staff track usage of the site, solicit enrollment of sites in contests and competitions, and provide feedback. In particular, the home page showcases church activities, success testimonials, digital photos of tasty foods, and active church staff and members.

The Web site has achieved widespread usage, averaging 61,127 successful requests a month and 2,109 requests a day after 3 y. These numbers represent a gradual increase in volume from ≤ 100 requests a day during the first 3 mo. The success of this intervention mirrors a growing body of evidence that Web-based programming is accessible by minority populations and can assist in addressing the particular challenges presented by transportation issues and travel times in low-population density and rural settings.

Conclusion

Embracing diversity in the context of worksite health promotion may be challenging. Diversity is a multifaceted construct that encompasses cultural differences arising from race and ethnicity, nationality, religious affiliation, gender, socioeconomic status, sexual orientation, and many other attributes. The existence of striking health disparities between groups is a major driver of the recent focus on diversity.

In the workplace, the long-term viability and sustainability of health and wellness interventions may depend on the abilities of those implementing the programs or policies to engage the least-empowered segments of the workforce, usually individuals of ethnic minority, women, older people, people who are overweight and sedentary, and people with disabilities. In fact, interventions incorporating policy and environmental changes that rely less on individual motivation and initiative are the current and future direction of health promotion across many content areas.

Tobacco control is an excellent example of this shift. When public health messages emphasized quitting in adults and not starting in adolescents, little change occurred. The advent of better framing of tobacco control as protecting nonsmokers (especially children) from secondhand smoke, taxes on tobacco products, and smoking bans in a range of venues precipitated today's erosion of the social acceptability of smoking, smoking rates, and tobacco-related morbidity and mortality. Organizational practice and policy change, primarily smoking bans in the workplace, drove the legislative policy change that acted in concert to produce current successes.

In order for employers to derive the full benefits from worksite wellness efforts, some may change a lot, but all must change some. Cherry picking healthy and fit volunteers will not generate a substantial ROI. Instead, modest changes to organizational routine that influence the behavior of most, if not all, workers can in turn produce modest but significant outcomes. For example, Lara and colleagues demonstrated an overall 0.32 kg/m^2 or 1 kg decrease in BMI (p = .05) and a 0.6 in. (1.6 cm) decrease in waist circumference (p = .0009) as a result of implementing a single daily 10 min group exercise break for all staff working in the central administrative building of the Mexican Ministry of Health in Mexico City (23). Had this demonstration project employed a control group, the results likely would have been even more significant, as the secular trends in Mexico, as in the United States, are for annual *increments* in weight and waistlines of similar magnitude. And recent evidence suggests that the accrual of at least some health benefits is the same for 10 3 min bouts of exercise as that conferred by one continuous 30 min bout (27).

Arresting the societal epidemic of obesity-related chronic disease may also be spurred by workplace policy and environmental change innovation. Certain types of worksites may serve as catalysts for social change and elimination of health disparities. In particular, these include organizations serving patients, clients, members, or students that are charged with protecting and improving community health and well-being, including government agencies, health and social services organizations (including health care providers), schools and child care facilities, and religious institutions. Mobilizing these staff members to address their own food and physical activity environments may be a critical step in driving broader social norm change (9). This may also influence client behavior through changes in priorities in their providers' (agency staff's) decision making and through physical (e.g., vending machine selections) and social (conformity with norms, such as others taking the stairs) environmental changes that make healthy choices more available, affordable, and accessible—that in fact make such choices nearly *unavoidable*.

However, the power of commercial enterprise in making health-promoting products highly coveted and widely available should not be underestimated. Pedometers could become as commonly worn as watches, from Timex to Rolex, if corporations became convinced of their marketability and a few early adopter and highly visible icons of popular culture embraced them. These icons, including athletes, entertainers, writers, and politicians, are disproportionately likely to be African American or multiracial and also disproportionately likely to be selected as role models for youths, compared with their population representation (49).

Health promotion in diverse worksites holds much promise for advancing health of the entire country. Prolonged sitting could become as socially distasteful as smoking or drinking and driving, and soda vending machines could become as scarce as those for cigarettes. Workers' sense of entitlement to exercise breaks could rival that

for coffee breaks. The extent to which health promotion interventions in the workplace truly embrace and celebrate diversity is a major factor in the fulfillment of that promise.

Chapter Review Questions

1. Name and discuss four types of diversity.
2. Define health literacy and discuss how it applies to worksite health management.
3. Identify and discuss five challenges in addressing underserved populations at the workplace in the context of overweight and obesity. Include potential solutions for each.
4. In a short essay, present a profile of a culturally proficient and inclusive workplace health management program.