Perspectives from United Kingdom and United States Policy Makers on Obesity Prevention: Workshop Summary

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PERSPECTIVES FROM UNITED KINGDOM AND UNITED STATES POLICY MAKERS ON OBESITY PREVENTION

WORKSHOP SUMMARY

Paula Tarnapol Whitacre and Annina Catherine Burns, *Rapporteurs*

Standing Committee on Childhood Obesity Prevention

Food and Nutrition Board

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Willing is not enough; we must do."
—Goethe

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Reviewers

This report has been reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise, in accordance with procedures approved by the National Research Council's Report Review Committee. The purpose of this independent review is to provide candid and critical comments that will assist the institution in making its published report as sound as possible and to ensure that the report meets institutional standards for objectivity, evidence, and responsiveness to the study charge. The review comments and draft manuscript remain confidential to protect the integrity of the process. We wish to thank the following individuals for their review of this report:

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Although the reviewers listed above have provided many constructive comments and suggestions, they were not asked to endorse the conclusions or recommendations nor did they see the final draft of this report before its release. The review of this report was overseen by **Melvin Worth.** Appointed

by the Institute of Medicine, he was responsible for making certain that an independent examination of this report was carried out in accordance with institutional procedures and that all review comments were carefully considered. Responsibility for the final content of this report rests entirely with the authoring committee and the institution.

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Summary

Obesity is a serious health problem in both the United States and the United Kingdom. As a chronic health condition, it contributes to diabetes, cardiovascular disease, and some cancers. Its prevalence is increasing among children and adults, in parallel with increased consumption of unhealthy foods and low physical activity levels (IOM, 2005). Although obesity has long been viewed principally as a matter of individual choice, recent research emphasizes the social, economic, and environmental determinants of what is, essentially, a nationwide epidemic in the two countries. Moreover, there is a disconnect in both countries between that awareness and how people perceive obesity in relation to themselves and their families.

Presenters from the United States and the United Kingdom discussed these challenges at a workshop held at the US Institute of Medicine (IOM) of the National Academies on October 22, 2009. They spoke about policies and programs that are addressing the obesity epidemic across sectors, developing partnerships to leverage limited resources, and drawing on available evidence to promote healthy behaviors. Presenters called for more research to determine the most effective interventions and for continued cooperation across sectors to integrate, as one speaker described it, "health in all policies."

From healthier lunches for school children, to mixed-use development that encourages walking over driving, to labeling and other means of giving consumers easy-to-understand information with which to make better health decisions, many actions are being taken to combat obesity in the United States and the United Kingdom. While far from an exhaustive

account, the workshop provided an opportunity to learn from these efforts and consider how they might be applied in different contexts.

OVERVIEW OF THE PROBLEM

To understand the current prevalence of obesity and project trends, epidemiologists Klim McPherson (UK National Heart Forum) and Cynthia Ogden (US Centers for Disease Control and Prevention [CDC]) presented data on obesity among children and adults in the two countries:

- Both countries have seen the percentages of the population that are overweight or obese increase in the last two decades, with sharp rises projected if current trends continue.
- United Kingdom averages are behind those of the United States by 7 to 10 years, but the prevalence of obesity in both countries is on the rise. In addition, the average body mass index (BMI) among the entire population is increasing in both.
- Both countries have seen a possible leveling off in the growth of obesity rates among children in the last year or two, but more data are needed to confirm any longer-term improvement.
- Disparities exist among children and adults in both countries. Examples were presented during the workshop not to compare or contrast, but to describe differences in the population. For instance, in the United Kingdom, data show some disparities in the prevalence of obesity by social class among women. In the United States, data show some disparities in children by ethnic group and education of the head of household.
- Over the past several decades, levels of physical activity have remained low in both countries, as has consumption of vegetables, milk, and other healthy foods, while consumption of sugar-sweetened beverages and other, less healthy food has increased. This is the same time span during which the numbers of overweight and obese children and adults have risen dramatically.

GOVERNMENT STRUCTURES TO ADDRESS OBESITY

As research points to the social, economic, and environmental determinants of obesity, recognition that the government must play a role is increasing. Yet this role also is subject to debate as many people, including policy makers, continue to perceive obesity as a matter of individual choices about food and physical activity. Throughout the workshop, presenters from both countries acknowledged the need to find the most appropriate and effective role for government. On the panel on this topic, Anne Jackson

(UK Department for Children, Schools, and Families) and William Dietz (CDC) offered the following observations:

- Government programs and policies to address obesity in both countries must come from a range of departments and agencies, including health, food assistance, transportation, and others.
- The national government in the United Kingdom, reflecting its more vertically integrated role relative to that in the United States, has developed a cross-government strategy called *Healthy Weight, Healthy Lives*. In the United States, many government entities are involved, but the efforts are more dispersed.
- State and local governments, in contrast, have been involved more directly in obesity interventions in the United States.
- Foundations and nonprofit organizations have also taken an active role, especially in the United States, in funding, research, and advocacy around obesity-related issues.

SCHOOL MEAL POLICIES

Judy Hargadon (UK School Food Trust) and Julie Paradis (US Department of Agriculture's [USDA's] Food and Nutrition Service) focused on school meals as a way to improve the diets of children. Although neither agency is involved in the direct day-to-day preparation of school meals for children, both play a large role in setting standards, providing funding (especially to feed lower-income children), and trying to influence food choices available to students at other points during the school day. Hargadon and Paradis made the following additional points:

- In the United Kingdom, changes to the school meal program resulted from a television program featuring celebrity chef Jamie Oliver, which drew public attention to what schools were feeding children. In the United States, there has been no comparable "disruptive innovation," as Hargadon termed it, but recommendations from a recent IOM report are expected to result in changes.
- Both agencies provide flexibility to schools within a set of guidelines. In the United Kingdom, newly revised guidelines for school food encompass both food- and nutrient-based standards. In the United States, food served to children through the National School Lunch Program must meet applicable recommendations of the Dietary Guidelines for Americans. Currently, schools have the option of choosing between food- and nutrient-based standards.
- Food available to students goes well beyond what is served for lunch. They can consume food for breakfast and snacks. They

can also choose from "competitive foods," which are foods sold outside of the reimbursable meal programs, such as products sold in vending machines, à la carte cafeterias items, snack bars, and fundraisers. Students also have access to food sold in nearby shops and restaurants, over which schools have no control.

PHYSICAL ACTIVITY AND THE BUILT ENVIRONMENT

Another workshop panel emphasized strategies to increase people's everyday physical activity by, for example, promoting walking, biking, and use of public transit for commuting and shopping. Harriet Tregoning (Washington, DC, Office of Planning), Ailsa McGinty (UK Cross-Government Obesity Team), and Peter Ashcroft (UK Department of Health Southwest) noted that implementing such strategies often requires changes to the built environment. Accomplishing such changes in turn requires working with a broad range of government entities and partners responsible for planning, transportation, and economic policies. The panel also noted that:

- The built environment can encourage or discourage physical activity through such factors as routes for walkers and cyclists; siting of houses, shops, and businesses; and availability and location of greenspaces.
- Clear, easy-to-interpret evidence on the effect of the built environment on physical activity and health is useful for communicating with professionals outside the health field.
- While it is often easier to incorporate health considerations into new designs, there are also opportunities, even if piecemeal, to do so within existing developments.
- Even small changes in people's physical activity make a difference, such as getting them out of their cars for short trips to offices and shops.

NATIONAL PROGRAMS AND POLICIES

Presenters in a third panel discussed a range of illustrative programs and policies aimed at addressing the obesity problem. Kevin Concannon (USDA) and Dana Carr (US Department of Education) described programs in their departments related to healthier eating and physical activity. From the UK side, Tim Smith (Food Standards Agency) discussed the agency's efforts, especially around nutrition labeling and other voluntary programs with the private sector, while Susan Jebb (Chair of the cross-government

Expert Advisory Group on Obesity) explained the consumer-oriented Change4Life campaign. Points made in these presentations included the following:

- Current economic conditions mean that programs to feed those in need are playing a larger part in the diet of many Americans. USDA runs 15 such programs, accounting for one-half its annual budget. The largest of these is the Supplemental Nutrition Assistance Program (SNAP, formerly Food Stamps), which serves 35 million people, including about one in four American children.
- School systems offer physical education classes and recesses/activity breaks during the school week, but few consider these an integral part of education, especially as students progress from elementary through high school.
- The UK Food Standards Agency efforts in salt reduction have resulted in reformulated products, improved messaging about nutrition to consumers at the point of purchase, and other changes that can promote better health.
- Campaigns to change behaviors, such as Change4Life, must be based on science, but their messages must be framed in a way that resonates with consumers. One insight used to develop Change4Life, for example, is that although people recognize obesity as a national problem, research shows people do not relate what they see or hear about obesity to their own situation.

LOCAL PROGRAMS AND POLICIES

As noted earlier, many US states and localities are at the forefront of obesity prevention efforts. Attendees heard from speakers representing three very different locales: Jonathan Fielding (Los Angeles County Department of Health), Lynn Silver (New York City Department of Health and Mental Hygiene), and Chip Johnson (Mayor of Hernando, Mississippi). Fielding spoke about the roles he sees for his department in working with others to improve health outcomes in his highly diverse county. Silver explained the background, implementation, and evaluation plans for New York City's menu labeling law, the first such law in the country. And Johnson shared how his small city (population 15,000) is taking advantage of many of the ideas, programs, and resources discussed throughout the day, especially those related to physical activity and the built environment. Using a range of case examples, the presenters also noted the need for local communities to:

- Develop a range of programs and services in recognition of the diversity of the population and the fact that different interventions will reach different people.
- Use data to target resources and stimulate further action (with the observation that more scientific evidence for the effectiveness of local interventions is needed).
- Model healthy practices, from the contents of vending machines in public buildings, to procurement of food for public institutions, to the mayor's setting an example for the community.
- Tap into resources from multiple sources, such as philanthropies, grants, and new commercial and residential development, especially in this era of declining public revenues.

CLOSING REMARKS

At the end of the day, Jackson and Dietz summarized some of the main messages of the workshop. They stressed that the only way to reach people in a way that causes them to change their behavior is to use language and a context that resonate with them. Identifying a person as "obese" and expecting that this tag will result in such changes is unrealistic and can even backfire. The presenters called for research that can help in determining the effectiveness of different interventions so that resources can be targeted to bring the most promising approaches to scale.

1

Introduction

Obesity affects the health and well-being of individuals in the United States and the United Kingdom and has a growing impact on the health care expenditures and overall economies of both countries. Over the past few years, researchers, health professionals, policy makers, and many others have tried to understand the underlying causes of the problem and to develop effective strategies for preventing and reducing obesity in children and adults. A recent leveling off in the prevalence of obesity in children may indicate that this focus on the problem is bearing results, although it is generally acknowledged that any significant change will take time.

SETTING THE STAGE

On October 22, 2009, policy makers, researchers, and program staff from the United States and the United Kingdom came together at the US Institute of Medicine (IOM) of the National Academies in Washington, DC, to share perspectives and experiences in addressing the obesity problem. The workshop provided insight into the similarities and differences in how the two countries are addressing obesity prevention and was a forum for a comparative understanding of obesity-related policies. The IOM Standing Committee on Childhood Obesity Prevention felt it would be informative to learn about challenges and promising approaches from both a British perspective and American perspective given the two countries similarity in obesity rates. (See Appendix A for the workshop agenda.) The workshop

was hosted by the Standing Committee and the UK Department of Health and planned by a committee appointed by the IOM.

Standing Committee Chair Jeffrey Koplan, Vice President for Global Health and Director of the Global Health Institute at Emory University, set as goals of the workshop to share current concerns and the status of interventions, address emerging issues, and discuss potential opportunities for collaboration.

To launch the workshop, Richard Gephardt, former Majority Leader of the US House of Representatives, highlighted some of the issues involved in what he described as a "crisis epidemic," yet one that research and innovative programs can successfully address. He cited several companies that support programs designed to reduce tobacco use and encourage healthier eating and physical activity. One tangible benefit for these companies is slower growth in their health insurance costs. Gephart suggested that, from a policy point of view, progress will occur, but it will take time. National recognition of the scale of the obesity problem, including its role in health care costs, will be necessary. Attacking the problem will also require policy and programmatic strategies to change behaviors and research to understand the physiological, psychosocial, societal, and environmental reasons for unhealthy eating and low levels of physical activity.

REPORT ORGANIZATION

This summary generally follows the organization of the workshop. After an overview of the scope of the problem in the two countries (Chapter 2), Chapter 3 highlights government efforts that touch, in various ways, people's diet and physical activity. The next two chapters describe policies and programs that relate to school meals (Chapter 4) and the built environment (Chapter 5). Chapter 6 provides case examples of national-level policies and programs related to nutrition and physical activity, while Chapter 7 offers several case examples of local-level policies and programs in the United States. Finally, Chapter 8 summarizes closing remarks that point to similarities and differences between the two countries in approaches to preventing obesity.

The aim of the workshop was not to present an exhaustive listing of all policies and programs related to obesity prevention. Rather, by focusing on promising approaches and identifying current gaps and challenges, the workshop was intended to give participants, as well as readers of this summary, useful ideas to consider in each country's context.

2

Scope of the Problem

In the first workshop panel, epidemiologists from the United Kingdom (Klim McPherson, Visiting Professor of Public Health Epidemiology, Oxford University, and Chair of the National Heart Forum) and the United States (Cynthia Ogden, Epidemiologist, National Center for Health Statistics, CDC) provided overviews of the obesity problem in the United Kingdom and the United States, respectively. Their remarks revealed that the increasing prevalence of obesity became apparent earlier in the United States than in the United Kingdom, but that the problem is serious in both countries:

- In the United Kingdom, the prevalence of obesity among boys was about 11 percent in 2000 and 16 percent in 2009, and is projected to be about 25 percent in 2020. Among girls, the prevalence was 11 percent in 2000 and 13 percent in 2009, and is projected to be about 20 percent in 2020.
- In the United States, the prevalence of obesity among boys was about 14 percent in 2000 and 18 percent in 2008, and is projected to be about 27 percent in 2020. Among girls, the prevalence was about 14 percent in 2000 and 16 percent in 2008, and is projected to be about 22 percent in 2020.
- Prevalence in adults in both countries has also increased. Overall, the median of body mass index (BMI) has shifted higher in both countries.
- Obesity affects people across demographics and income levels in both countries, but the data do reveal some disparities. Examples

were presented not to compare or contrast, but to describe differences in the population. For instance, the UK data show some disparity by social class for adult women, with a significant difference in prevalence between lower- and upper-income women being predicted by 2020. The US data for childhood obesity show some disparities by race, sex, ethnic group, and education of the head of the household.

- Low levels of physical activity and consumption of healthy foods and increases in the consumption of less healthy foods over the past few decades account for the worsening situation in both countries.
- A leveling off of obesity rates among children in both countries may offer some hope that the epidemic is abating. Whether this is the start of a positive trend is still not clear, however, and a dangerously high number of people remain at risk.

It should be noted that definitions of "overweight" and "obese" can differ slightly. Generally, in both countries, an adult who has a BMI between 25 and 29.9 is considered overweight, while an adult with a BMI at or above 30 is considered obese. The data for US children presented by Ogden use the CDC 2000 growth charts to define excess weight: an overweight child is defined as at or above the 85th percentile of BMI-for-age but less than the 95th percentile, and an obese child as at or above the 95th percentile.

OBESITY AS A GROWING EPIDEMIC IN THE UNITED KINGDOM

McPherson characterized obesity as a worldwide problem. The United Kingdom's obesity prevalence rates lag behind those of the United States by 7 to 10 years, but, as indicated by the statistics reported above, the UK numbers are on the rise. According to data from CDC and the Health Survey of England, the percentages of adults with BMI categorized as overweight and obese are roughly similar in the two countries, although the United States now has more people at the extremes, that is, more thin and morbidly obese individuals, especially women (Figure 2-1).

These prevalence rates have implications for future morbidity. For example, McPherson estimated that one-quarter of adult males in the United Kingdom will have Type 2 diabetes by 2040.

Reversing the Trend

The UK government commissioned *Foresight—Tackling Obesities: Future Choices*, a report to better understand the obesity epidemic and identify strategies for addressing it (Box 2-1). The findings in that report were

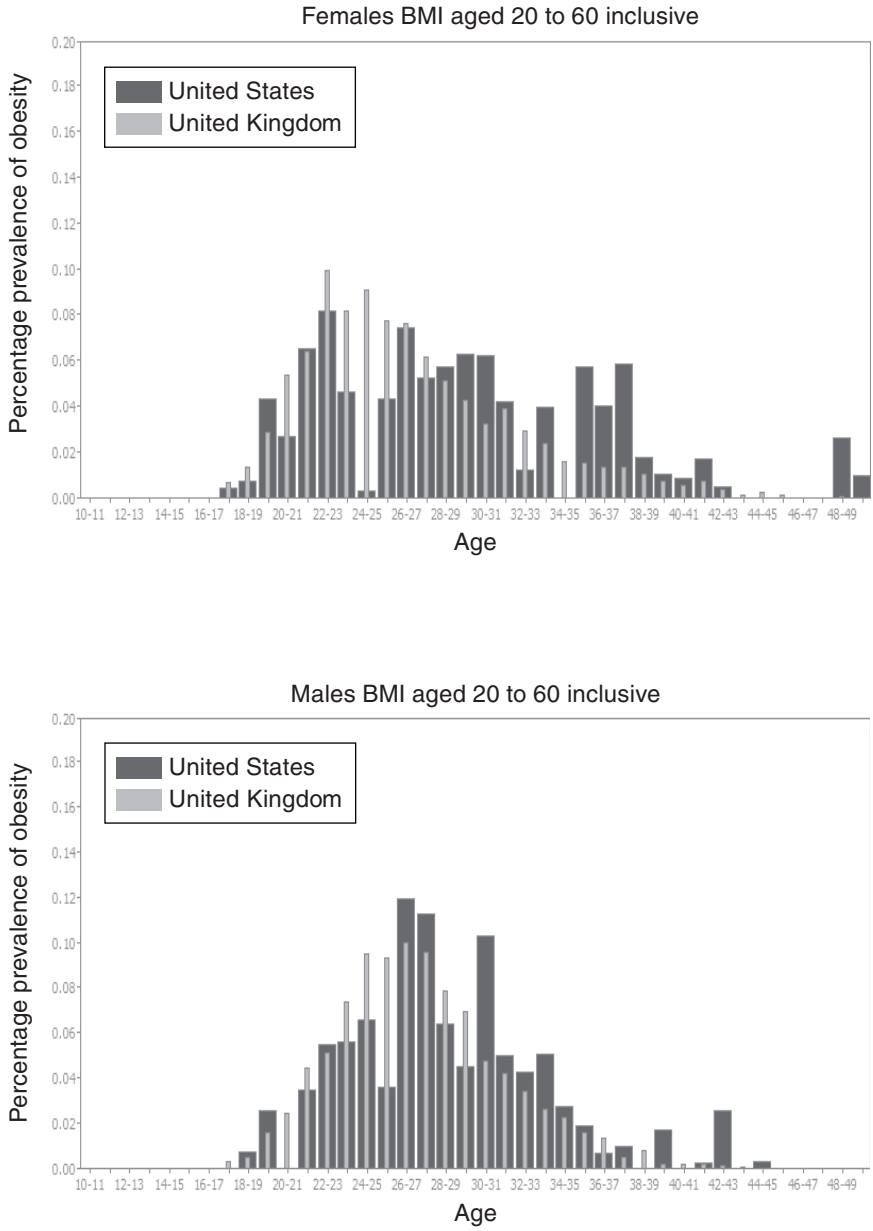


FIGURE 2-1 Weight distribution of adult women and men in the United States and United Kingdom, as presented by McPherson.

BOX 2-1
The United Kingdom's *Foresight—Tackling Obesities: Future Choices*

Commissioned and overseen by the government's Chief Scientist, who reports directly to the Prime Minister, the *Foresight* report was released in 2007 and has significantly influenced public debate and government policy in the United Kingdom. The report provides data on current conditions with respect to obesity, projections of an even more dire situation in the future, and concrete recommendations for ways to prevent these projections from being realized.

According to the report, by 2050, 60 percent of men and 50 percent of women will be obese, with a cost to society of almost £50 billion. The problem cannot be solved solely through a change in individuals' actions, but requires changes throughout society and involving government, civil society, and the private sector. Among the promising areas identified are:

- investment in early-life interventions;
- controls on the availability of and exposure to obesogenic food and drink;
- increased walkabilty/cyclability of the built environment;
- increased responsibility of organizations for the health of their employees; and
- targeting of health interventions to those at high risk.

The report came at an opportune time, providing scientifically sound information when concern was on the rise. As discussed throughout the workshop, the UK government drew heavily on the *Foresight* report to craft a cross-government strategy to combat obesity, backed up by resources and high-profile leadership.

SOURCE: UK Government Office for Science, 2007.

used in developing *Healthy Weight, Healthy Lives: A Cross-Government Strategy for England*. The strategy's initial focus is to reduce the proportion of overweight and obese children to 2000 levels by 2020. According to McPherson, the next few years of data should enable an understanding of the impact of the United Kingdom's concerted efforts and policies to reduce obesity.

In 2000, 22 percent of boys and 27 percent of girls were overweight or obese in the United Kingdom. Health Survey of England data for 1993 to 2007, as well as predictions in the *Foresight* report, indicate the difficulty of returning to these levels by 2020. As noted earlier, however, more recent data show a slight leveling off of prevalence among children, offering some basis for optimism that the *Healthy Weight, Healthy Lives* goal may be

achievable. To track progress toward that goal, researchers had to decide how far back to analyze the data. An 8-year retrospective was selected as yielding the most relevant and comprehensive information to allow more conclusive projections.

Social Class Effects

McPherson summarized data on BMI among adults in England and Wales delineated by social class, with Class I as the highest, professional class; Class V as unskilled, manual labor; and Classes II, III, and IV ranging between these two in income and occupation. (The "middle class"—Class III—is further divided into manual and nonmanual labor categories.) Among males, rates of obesity were between about 20 and 25 percent across these social classes in 2000 and are projected to increase to between 40 and 50 percent fairly evenly across class by 2020. Among women, obesity rates are also generally increasing across social classes (projected to be between about 38 and 48 percent by 2020), with the exception of women in Class I (projected to be about 15 percent in 2020). A further disparity is that rates of BMI greater than 40 are projected to be about 2 percent among Class I women by 2020, compared with 18 percent among Class V women. As discussed later in the workshop, this disparity could potentially lead to alienation among lower-income women striving for a healthier weight and lifestyle if their needs and perspectives are not addressed.

PREVALENCE, TRENDS, AND CONTRIBUTING FACTORS IN THE UNITED STATES

Ogden presented on obesity prevalence and trends and disparities in obesity rates in the United States, as well as factors contributing to the obesity problem. Estimates for children are not age-adjusted.

Obesity Among Children and Adults

In 2005–2006, using the definition based on the 2000 CDC BMI-for-age growth charts, 15.5 percent of US children and teens aged 2 to 19 (about 11.4 million) were obese, and 30.1 percent were overweight or obese (about 22.1 million in total). In the early 1970s, the rates were flat, with about 5 percent of children obese. However, from the mid-1970s to mid-2000s, the prevalence rates tripled for girls and boys nationwide (Figure 2-2).

As alarming as the figures are for children, the prevalence rates among adults are more than twice as high: just under 35 percent of men and just over 35 percent of women were obese in 2005–2006. As with children, the prevalence rates have spiked since the 1970s. In addition to the higher

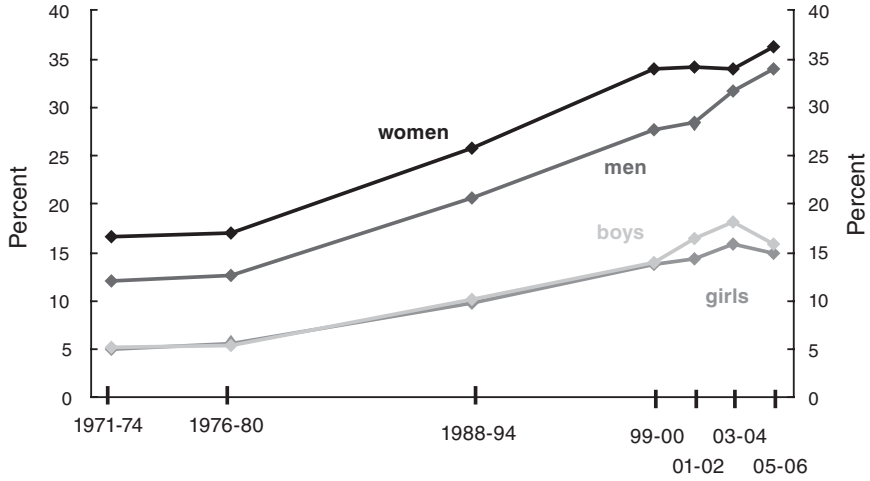


FIGURE 2-2 US trends in obesity by age and sex, 1971–1974 through 2005– 2006.

prevalence of obese people, a shift has occurred in these past few decades so that overall, the mean and median BMI of the overall US population have shifted higher.

Disparities in Obesity Rates

Ogden presented data showing some disparities in the prevalence of obesity among US girls and boys by demographics and income level in 2001–2006:

- *Race and ethnicity*—Mexican American school-aged boys (aged 6 to 11) have a higher prevalence of obesity than their non-Hispanic white and non-Hispanic black counterparts. Earlier data showed no discrepancy across ethnic groups for boys. African American girls (aged 6 to 19) have a higher prevalence of obesity than their non-Hispanic white and Mexican American counterparts.
- *Education of head of household*—Among non-Hispanic African American girls and non-Hispanic white boys, children (6–19 years of age) in families whose head of household had more education (for example, a college degree) had a lower prevalence of obesity than did those in families whose head of household had less education.

- *Income level*—Among non-Hispanic white boys, aged 6 to 19, there was an inverse relationship between income and obesity prevalence. Those with higher income were less likely to be obese compared to those in lower income groups; otherwise, there were no significant relationships between income and obesity for other sub-groups of children.

These numbers are certainly variable: they do not point to across-the-board effects of race, ethnicity, education, or income. However, they reveal some disparities that policy makers must consider in developing solutions.

Behind the Numbers

To help explain the possible reasons behind the increased prevalence of obesity and the shift toward higher median and mean BMI, Ogden presented information on changes in diet and physical activity in the United States. In short, Americans are eating larger amounts of less healthy foods, eating more frequently and in bigger portion sizes, and engaging in little physical activity.

Americans have increased their overall caloric consumption in the last 30 years. Among children, consumption of sugar-sweetened carbonated beverages, salted snacks, and pizza has increased, while consumption of milk and vegetables has decreased. Children also report eating more frequently, with 20 percent saying they eat seven or more times a day. Food eaten outside the home accounts for almost half of households' total food expenditures.

Meanwhile, physical activity levels are low. The number of children who engage in the recommended 60 minutes of physical activity a day is small: about 50 percent of those aged 6 to 11, dropping to less than 20 percent after age 12. Likewise, 35 percent of teens report that they watch more than 3 hours of television per day, and 25 percent report using a computer outside of school more than 3 hours per day. Few schools offer daily physical education to high school students, with the percentage dropping from 9th through 12th grade.

3

Government Structures to Address Obesity

People in both the United States and the United Kingdom debate the appropriate role for their governments in addressing obesity. This debate reflects growing recognition that social, economic, and environmental determinants, not just individuals' food and exercise choices, contribute to the obesity epidemic. Anne Jackson (Director for Child Wellbeing, UK Department for Children, Schools, and Families) and William Dietz (Director, Division of Nutrition, Physical Activity and Obesity, CDC), discussed how the national government in the United Kingdom generally has taken a more active role than that in the United States, although the latter also has many programs and policies addressing obesity.

A range of agencies and departments in both countries must deal with different aspects of the obesity problem, such as food assistance, public transportation, marketing, food access and quality, food labeling, and research. Subsequent panels explored some of these efforts in greater detail. The United Kingdom has attempted to bring these disparate activities and elements together under a national strategy, reflective of that country's more vertically integrated system compared with that of the United States. In the United States, state and local governments have assumed a larger role in obesity interventions, in keeping with the decentralized decision making that characterizes many US health, education, and other policies. Philanthropies and nonprofits are also major funders of obesity prevention efforts and play leading roles in research and advocacy.

THREE ROLES FOR THE BRITISH GOVERNMENT

Jackson highlighted three roles the British government plays in preventing obesity: exercising leadership, creating a coalition for change, and offering delivery and support programs. (Because health and social policy are dealt with in Scotland, Wales, and Northern Ireland separately, the discussion was focused on England.)

Exercising Leadership

The *Foresight* report (see Box 2-1 in Chapter 2) provides what Jackson termed "our platform" for action. It presents clear information that cannot be ignored about the severity of the problem at both the societal and individual levels if current trends continue. Based on these findings, in January 2008 the British government adopted the *Healthy Weight, Healthy Lives* strategy to reverse the rising tide of obesity and overweight in the population. Children are the initial focus, with an investment of £372 (approximately $600 million) being made over 3 years. Government leaders at all levels, from the Prime Minister down, have acknowledged obesity as a major national challenge, raising the profile of the problem, especially among children, as one that merits national attention.

The evidence is not conclusive on the best ways to fight obesity; many strategies, such as increased breastfeeding, increased physical activity, and more informative food labeling, may all play a role. Based on the *Foresight* report, the *Healthy Weight, Healthy Lives* strategy reflects the need to take a systematic and cross-cutting approach (see Box 3-1).

Creating a Coalition for Change

Jackson said the second broad role for the British government has involved creating a coalition for change to achieve society-wide improvements. A cross-government obesity unit—the Coalition for Better Health—reports jointly to the Department of Health and the Department for Children, Schools, and Families. It works not only with these departments but also with other agencies related to environment, planning, transport, and other salient areas. Childhood obesity is now a priority within the government's Public Service Agreements (a set of government-wide goals for a 3-year period).

Beyond the national government, a coalition to fight obesity should encompass businesses, the third sector (nonprofits and other civic organizations), and the wider public. The Coalition for Better Health works with these groups, most notably on a society-wide campaign called Change4Life (described more fully in Chapter 6). In addition, an expert working group

BOX 3-1
The United Kingdom's *Healthy Weight, Healthy Lives*

In introducing the Healthy Weight, Healthy Lives strategy, UK Health Secretary Alan Johnson stated, "It is not the Government's role to hector or lecture people, but we do have a duty to support them in leading healthier lifestyles." This philosophy is an underpinning of the strategy, which commits high-level leadership and resources to an initial goal of reducing childhood obesity to 2000 levels by 2020. The strategy recognizes the biological, cultural, and environmental factors that contribute to obesity and supports programs and policies in five broad areas:

- preventing weight problems early in childhood;
- promoting healthier food choices;
- building physical activity into everyday lives;
- creating incentives for better health; and
- providing personalized advice and support for those who already have a weight problem.

SOURCE: UK Department of Health, 2008.

includes representatives of the academic community, many of whom were involved in producing the *Foresight* report; a network of regional obesity leads has been established to support public health directors; and knowledge sharing takes place across localities within each region through regional obesity strategies.

Offering Delivery and Support Programs

The third broad role for the British government is to provide programs and services designed to implement *Healthy Weight, Healthy Lives*. These programs and services are aimed at early prevention, healthier eating, more physical activity, provision of incentives and workplace support, and personalized support. Local delivery of programs has been strengthened by the provision of data and other research findings, information on best practices, peer support, and other assistance.

Initial Signs of Improvement

While acknowledging that early signs of progress should not be overstated, Jackson noted some promising indicators in addition to the possible leveling off of childhood obesity rates discussed earlier. These indicators

include higher rates of breastfeeding, fewer ads for unhealthy foods seen by children and adults, increases in fruit and vegetable consumption, and increased physical activity among adults. In April 2009, the government issued a 1-year update to *Healthy Weight, Healthy Lives*. It affirmed a commitment to maintaining momentum by helping people make healthier choices, creating an environment to promote healthy weight, supporting people in need of weight management advice, and strengthening the delivery of these services.

Yet while the evidence shows movement in the right direction, obesity remains a critical issue, and adults are the next major challenge. Concern remains, however, about the appropriate role of the state so that it is not seen as overstepping its bounds, especially with respect to adults. Finally, Jackson suggested that the increasing globalization of the food industry, marketing, and the media means that the United Kingdom and the United States may have further areas of accord to explore.

FEDERAL AND LOCAL EFFORTS IN THE UNITED STATES

In his remarks, Dietz dated the beginning of the focus on obesity prevention in the United States to 1999, when an editorial in the *Journal of the American Medical Association*, coauthored by Koplan, pointed to the problem as an epidemic. CDC began to publicize a series of maps showing how levels of obesity have grown each year by state (see Box 3-2). These maps have had a profound impact on the obesity debate in the United States.

In 2001, former Surgeon General David Satcher issued *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*, the first governmental call to address the problem. Although few legislative or policy initiatives occurred at the federal level at first, community efforts grew. Congress appropriated funds to CDC for efforts in 5 states (since increased to 25 states) related to nutrition, physical activity, and other aspects of the problem.

Today a higher priority accorded to obesity prevention by the Obama Administration and pending legislation in Congress are generating an increase in obesity prevention activity. In Congress, reauthorization of child nutrition programs can have a major impact on the food consumed in the United States, particularly among children at lower income levels. Similarly, reauthorization of federal transportation legislation can affect levels of physical activity through changes that influence walking, biking, and the use of public transit.

The fact that the Obama Administration is focusing on obesity as a way to control medical costs is, according to Dietz, a "bright light." Obesity now accounts for 9 percent of the nation's total health care budget, and costs associated with obesity have doubled during the last 8–9 years. In

BOX 3-2
The CDC Obesity Maps: Raising Awareness Through Visuals

CDC has developed an effective tool for combating obesity in the United States: a series of maps that show the increase in the prevalence of obesity by state and by year. The maps are a simple but powerful way to depict data from CDC's Behavioral Risk Factor Surveillance System, which compiles information from state health departments. As the maps change color from year to year, the viewer can witness how obesity increasingly affects every state in the country. In 2008, 25 percent or more of the population in 32 states was obese; no state came close to this number in 1990.

SOURCE: Centers for Disease Control and Prevention (CDC). U.S. Obesity Trends. http://www.cdc.gov/obesity/data/trends.html.

recognition of the economic impact of the obesity problem, the American Recovery and Reinvestment Act funded obesity prevention efforts. The White House garden planted by the First Lady, her support for a farmers' market near the White House, and similar activities also reflect the Administration's commitment to addressing the problem.

A number of federal agencies and other entities have roles to play in addressing the epidemic. Within the US Department of Health and Human Services, the Administration for Children and Families oversees programs for preschool children in Headstart. The Centers for Medicare and Medicaid Services provides health funding for low-income families, another important opportunity for regulations that can contribute to obesity prevention and treatment. One of CDC's roles is to monitor the epidemic and identify effective strategies that can be implemented at the state and community levels, such as pricing strategies to reduce the consumption of sugar-sweetened beverages and strategies designed to encourage an increase in physical activity and a decrease in television viewing. The Food and Drug Administration is interested in point-of-purchase labeling standards. Another important development is a group called the National Collaborative on Childhood Obesity Research (NCCOR), which brings together researchers from the National Institutes of Health, CDC, USDA, and RWJF on issues of particular interest and potential research investment in the field. Other entities with the potential to address obesity include the US Department of Education, which sets standards for school performance (although physical education is not part of those standards), and the Federal Trade Commission, which Congress has mandated to consider voluntary standards for foods advertised to children.

Philanthropies also play a major role in obesity prevention in the United States. As a notable example, RWJF is allocating $500 million over 5 years to efforts to reduce childhood obesity by 2015.

Finally, as noted earlier, the United Kingdom has a more vertically integrated system than that of the United States, with more national-level programs, while the United States is characterized by more state and local control. This difference implies different structures for the development of policies and programs to combat obesity. In the United States, top-down policy is more difficult to implement, but the country's decentralized system also fosters innovation at the local level. At least 100 communities have initiated interventions directed at childhood obesity (three of these are discussed more fully in Chapter 7). However, good evaluation criteria are needed to determine what does and does not work.

4

School Meal Policies

School is the one place where virtually all children assemble on a regular basis. It not only provides opportunities to learn about healthier living and engage in physical activity with peers, but also is the place where millions of children eat as many as two meals a day. In addition to lunch and breakfast, food available during the school day encompasses snacks, vending machines, à la carte cafeteria items, snack bars, and the stores and restaurants located near school buildings, where the offerings may be less healthy. School meals that are healthy and appealing can play a big role in providing nutrients and reducing the intake of unhealthy food. They also serve as a way to model good nutrition, perhaps leading children to choose a healthier diet at other times during the day. Although the national governments of the United Kingdom and the United States are not directly involved in the day-to-day preparation of school meals, they set policies and provide financial and other support that have an impact on what schools offer to children.

Judy Hargadon (Director, UK School Food Trust) and Julie Paradis (Administrator, Food and Nutrition Service, US Department of Agriculture [USDA]), focused on the role of school meals in addressing childhood obesity. Both agencies have revised guidelines in recent years to make these meals healthier.

HEALTHIER MEALS THROUGH THE UK SCHOOL FOOD TRUST

Hargadon reported on what she called detailed, practical, and feasible changes made to school meal programs. All schools in England are now

required to ensure that the meals they provide support balanced nutritional intake. They are also encouraged to increase the number of children who are eating the food, as the impact of school meals on child health must be measured in terms of not only what schools offer, but also the number of children affected. While regulations govern what schools offer, no child is forced to eat school food. Thus, school meals are offered in a market environment and must also appeal to children's palates.

Schools in the United Kingdom choose how they provide food to students, from having small kitchen staffs to contracting with large catering companies and many variations in between. Food is offered as a commercial service: meals for those in need are covered by a government subsidy, but sales must cover most other costs.

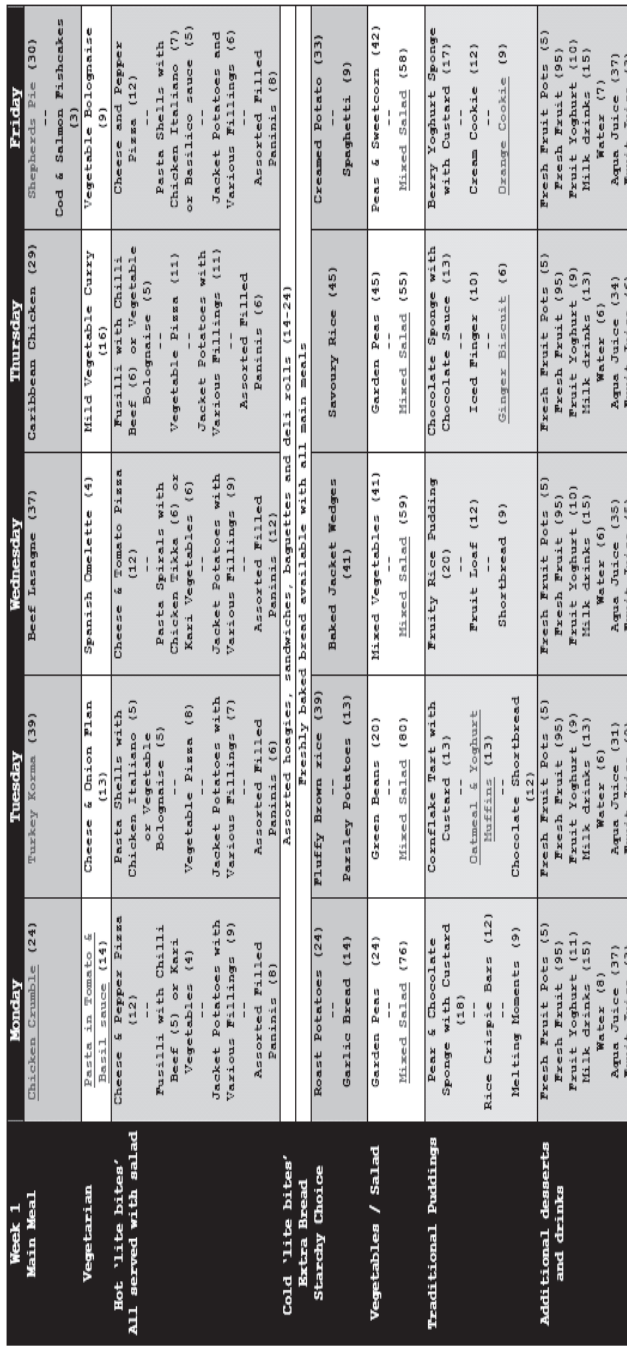
The School Food Trust was established in 2005 after Jamie Oliver, a noted celebrity chef in England, called attention to unhealthy school food in a popular television program. The Trust's mission is to "transform school food and food skills, promote the education and health of children and young people and improve the quality of food in schools," including that provided for lunch and breakfast, as well as that offered through vending machines, snacks, classes, and special events. The Trust works to dispel the myth that rules governing school food cannot result in food that appeals to children.

Food-Based and Nutrient-Based Standards

The School Food Trust revised the 1990s-era standards related to the provision of food in schools to include both food- and nutrient-based standards. The food-based standards specify foods to include, limit, or exclude across the school day, but do not specify portion size, food balance, or overall nutrient balance. The nutrient-based standards set upper limits for fat, sugar, and salt and lower limits for protein, carbohydrates, fiber, vitamins, and minerals. The time frame for issuing the new standards has been rapid: interim food-based standards were issued for lunches in September 2006 and for other meals and snacks in September 2007; final food- and nutrient-based standards were issued for primary schools in September 2008 and for all other schools in September 2009.

Schools are responsible for implementing the standards, and they have developed appealing menus that comply. Hargadon provided examples of these menus (see Figure 4-1), as well as the calculations used to develop the nutrient-based standards for primary and secondary students. The Trust publishes a number of guides and training materials to assist in compliance.

One concern regarding implementation of the new standards was their effect on the number of students eating the meals. Uptake of school lunch



Week 1 Main Meal	Monday	Tuesday	Wednesday	Thursday	Friday
Vegetarian	Chicken Crumble (24)	Turkey Korma (39)	Beef Lasagne (37)	Caribbean Chicken (29)	Shepherds Pie (30) -- Cod & Salmon Fishcakes (3)
	Pasta in Tomato & Basil sauce (14)	Cheese & Onion Flan (13)	Spanish Omelette (4)	Mild Vegetable Curry (16)	Vegetable Bolognaise (9)
Hot 'lite bites' All served with salad	Cheese & Pepper Pizza (12) -- Fusilli with Chilli Beef (5) or Kavi Vegetables (4) -- Jacket Potatoes with Various Fillings (9)	Pasta Shells with Chicken Italiano (5) or Vegetable Bolognaise (5) -- Vegetable Pizza (8) -- Jacket Potatoes with Various Fillings (7)	Cheese & Tomato Pizza (12) -- Pasta Spirals with Chicken Tikka (6) or Kavi Vegetables (6) -- Jacket Potatoes with Various Fillings (9)	Fusilli with Chilli Beef (6) or Vegetable Bolognaise (5) -- Vegetable Pizza (11) -- Jacket Potatoes with Various Fillings (11)	Cheese and Pepper Pizza (12) -- Pasta Shells with Chicken Italiano (7) or Basilico sauce (5) -- Jacket Potatoes and Various Fillings (6)
	Assorted Filled Paninis (8)	Assorted Filled Paninis (6)	Assorted Filled Paninis (12)	Assorted Filled Paninis (6)	Assorted Filled Paninis (8)
Cold 'lite bites' Extra Bread Starchy Choice	Assorted hoagies, sandwiches, baguettes and deli rolls (14-24)				
	Roast Potatoes (24) -- Garlic Bread (14)	Freshly baked bread available with all main meals -- Fluffy Brown rice (39) -- Parsley Potatoes (13)	Baked Jacket Wedges (41)	Savoury Rice (45)	Creamed Potato (33) -- Spaghetti (9)
Vegetables / Salad	Garden Peas (24) -- Mixed Salad (76)	Green Beans (20) -- Mixed Salad (80)	Mixed Vegetables (41) -- Mixed Salad (59)	Garden Peas (45) -- Mixed Salad (55)	Peas & Sweetcorn (42) -- Mixed Salad (58)
Traditional Puddings	Pear & Chocolate Sponge with Custard (18) -- Rice Crispie Bars (12) -- Melting Moments (9)	Cornflake Tart with Custard (13) -- Oatmeal & Yoghurt Muffins (13) -- Chocolate Shortbread (12)	Fruity Rice Pudding (20) -- Fruit Loaf (12) -- Shortbread (9)	Chocolate Sponge with Chocolate Sauce (13) -- Iced Finger (10) -- Ginger Biscuit (6)	Berry Yoghurt Sponge with Custard (17) -- Cream Cookie (12) -- Orange Cookie (9)
Additional desserts and drinks	Fresh Fruit Pots (5) Fresh Fruit (95) Fruit Yoghurt (11) Milk drinks (15) Water (8) Aqua Juice (37) Fruit Juice (3)	Fresh Fruit Pots (5) Fresh Fruit (95) Fruit Yoghurt (9) Milk drinks (13) Water (6) Aqua Juice (31) Fruit Juice (9)	Fresh Fruit Pots (5) Fresh Fruit (95) Fruit Yoghurt (10) Milk drinks (15) Water (6) Aqua Juice (35) Fruit Juice (5)	Fresh Fruit Pots (5) Fresh Fruit (95) Fruit Yoghurt (9) Milk drinks (13) Water (6) Aqua Juice (34) Fruit Juice (6)	Fresh Fruit Pots (5) Fresh Fruit (95) Fruit Yoghurt (10) Milk drinks (15) Water (7) Aqua Juice (37) Fruit Juice (3)

FIGURE 4-1 Menu in a secondary school using England's new school meal standards.

is now one of 200 national indicators used to monitor progress toward national goals related to health and other sectors, and is incorporated in local school inspections. Hargadon acknowledged, however, the need for a more consistent way to measure uptake, as well as for tools that would simplify data collection at the school level. Historically, school lunch uptake dipped in the 1980s, when school food was deregulated and schools started serving more fried and other unhealthy foods. An estimated 40 percent of children eat the meals in primary schools and 35 percent those in secondary schools, a slight increase since the standards were introduced.

Preventing Obesity

Hargadon discussed the challenges of preventing obesity in schools. When children are eating with their peers, schools can reinforce healthy eating and support parents in this regard. Challenges include restaurants near school that offer unhealthy food; a physical environment that discourages energy expenditure; and the appeal and relatively lower prices of high-fat, high-sugar foods. Many parents pack lunch for their children thinking they are providing them a healthier meal, but analysis of a typical bag lunch shows this may not be the case. While not wanting to be too heavy-handed, the Trust encourages more parents to have their children eat school meals rather than a potentially less healthy packed lunch.

FOOD AND NUTRITION SERVICE PROGRAMS IN US SCHOOLS

Paradis said ending child hunger by 2015 and reducing obesity are both high priorities of the Obama Administration. School meals are one way to help meet these goals as they are a significant source of nutrition for many children during the school day.

School meals must meet US Dietary Guidelines, which are currently being revised for release in late 2010 or early 2011. Lunches must provide one-third of nutrient needs and breakfast one-quarter. In response to a request from USDA, the IOM issued a report containing recommendations for improving school meals (IOM, 2009b; see Box 4-1). USDA's Food and Nutrition Service will use these recommendations to improve the National School Lunch Program and the School Breakfast Program.

The National School Lunch Program provides meals to more than 31 million children in 100,000 schools across the country every day. About half are children from low-income households, many of whom also eat breakfast at school. Regulations restrict the percentage of calories that can come from fat, as well as sodium and cholesterol content, and provide for a gradual increase in the amount of dietary fiber offered. Paradis said research shows that children who eat school lunches consume more milk,

meat, and vegetables than children who do not. Thus these meals are an important tool to help children consume a nutritious diet and achieve a healthy weight.

A number of strategies incorporated in the school meal programs address childhood overweight and obesity:

- modeling healthy food choices that children can bring home;
- prohibiting the sale of foods of minimal nutritional value in the school food service area during mealtimes, as well as discouraging their sale in vending machines on the school campus;
- supporting schools through Team Nutrition, which provides training and technical assistance for food service staff, nutrition education, and school and community support for healthy eating and physical activity;
- providing training to food service staff through the National Food Service Management Institute in Oxford, Mississippi; and
- changing the composition of foods provided to schools through the school meals programs (about 15 to 20 percent of what schools serve) so they are lower in sodium and sugar.

Paradis also described USDA's HealthierUS School Challenge, a voluntary initiative that encourages schools to excel in providing nutritious food choices, nutrition education, and opportunities for physical activity. Schools become certified when they meet six criteria and then are recognized for achievements above this level. More than 600 schools are participating to date.

Paradis ended by stressing that schools, parents, and communities share the responsibility for helping children develop healthy eating habits and active lifestyles. The obesity problem did not develop overnight and will not be solved overnight, but she is encouraged by the progress now under way.

DISCUSSION

During the question-and-answer session, Hargadon was asked about the role of Jamie Oliver's television program in generating improvements in the school meals program in England. She replied that the program, which took place before the release of the *Foresight* report, was what she termed a "disruptive innovation" that resulted in change. Although Oliver is now in West Virginia working on a similar effort in the United States, it was suggested that someone who is more recognizable in the United States may be needed to have a similar impact.

BOX 4-1
School Meals: Building Blocks for Healthy Children

At the request of the US Department of Agriculture, the IOM convened a committee to provide recommendations for revising standards and requirements so school meals would be more healthful. The committee's report was issued in October 2009 and included eight recommendations for school lunches and breakfast programs:

1. The Food and Nutrition Service of USDA should adopt the Nutrient Targets as the scientific basis for setting standards for menu planning for school meals but should not adopt a nutrient-based standard for school meal planning and monitoring.
2. To align school meals with the *Dietary Guidelines for Americans* and improve the healthfulness of school meals, the Food and Nutrition Service should adopt standards for menu planning that increase the amounts of fruits, vegetables, and whole grains; increase the focus on reducing the amounts of saturated fat and sodium provided; and set a minimum and maximum level of calories.
3. To achieve a reasonable balance between the goals of reducing waste and preserving the nutritional integrity of school meals, the Food and Nutrition Service, in conjunction with state and local educational agencies and students, should weigh the strengths and limitations of the committee's two options when setting standards for the meals *as selected* by the student (these two options deal with how many items may be declined by the student).
4. The Food and Nutrition Service, working together with state agencies, professional organizations, and industry, should provide extensive support to enable food service operators to adapt to the many changes required by revised Meal Requirements. The types of support required include the following:
    - Technical assistance for developing and continuously improving menus, ordering appropriate foods (including the writing of specifications), and controlling costs while maintaining quality.
    - New procedures for monitoring the quality of school meals that (1) focus on meeting relevant Dietary Guidelines and (2) provide information for

continuous quality improvement and for mentoring food service workers to assist in performance improvement.

5. USDA should work cooperatively with Health and Human Services, the food industry, professional organizations, state agencies, advocacy groups, and parents to develop strategies and incentives to reduce the sodium content of prepared foods and to increase the availability of whole grain-rich products while maintaining acceptable palatability, cost, and safety.
6. The Food and Drug Administration should take action to require labeling for the whole grain content of food products.
7. Relevant agencies in USDA and other federal departments should provide support for the conduct of studies to evaluate the revised Meal Requirements for the School Breakfast Program and the National School Lunch Program.
8. The committee recommends that agencies of USDA, of other federal departments, and relevant foundations fund research studies on topics related to the implementation of the new Meal Requirements, children's acceptance of and participation in school meals, and children's health—especially the following:

    - Effects of the recommended range of calorie levels on the adequacy of energy intakes for individual children within each of the age-grade categories.
    - Impacts of various approaches to reducing the sodium content of school meals and student acceptance of reduced-sodium foods.
    - Impacts of various approaches to increase the acceptance of whole grain-rich products.
    - Fruit and vegetable options and preparation methods that will increase consumption and decrease waste.
    - Effects on cost, waste, and food and nutrient intakes of various options to govern the number and types of foods students must accept for a reimbursable meal under the offer versus serve provision of the law.
    - Targeted approaches to decreasing the prevalence of nutrient inadequacy that do not require increasing the intakes of all children.
    - Changes in child health as a result of the new standards.

SOURCE: IOM, 2009b.

5

Physical Activity and the Built Environment

The built environment affects physical activity and energy expenditure, which in turn play a role in the prevalence of overweight and obesity in a community. Environments that facilitate walking, cycling, and use of public transit (which often involves walking, stair climbing, and other physical activity) give people opportunities for more physical activity as exercise or as part of their normal routine. Conversely, environments in which walking is unsafe, public transit is not available or convenient, or stores and other businesses are located far from residential areas encourage more automobile use and less physical activity.

Harriet Tregoning (Director, Office of Planning, Office of the Deputy Mayor for Planning and Economic Development, Washington, DC), Ailsa McGinty (Policy and Stakeholder Manager, UK Cross-Government Obesity Team), and Peter Ashcroft (Regional Physical Activity Lead, UK Department of Health Southwest) shared some of the ways they are working to make the built environment healthier. They noted that:

- Professionals and agencies with a role to play in obesity prevention extend beyond those in the areas of health and nutrition to include those in planning, economic development, transportation, public safety, and other areas.
- Clear, easy-to-interpret evidence on the impact of the environment on physical activity and ultimately on health is a useful way to communicate these concerns to nonhealth professionals.

- Opportunities to integrate health considerations into other policies and programs can increase physical activity, sometimes at little or no extra public cost.
- A shift away from the private automobile requires new planning tools, for example, a tool other than car counts for siting new businesses.

WASHINGTON, DC: "HEALTHY BY DESIGN"

Tregoning emphasized how the built environment affects the public health in general and physical activity in particular (see Box 5-1). She distinguished between physical exercise ("something I make an appointment to do") and physical activity (something incorporated into daily life), stressing that both have measurable benefits. As an example of the positive effects development can have on physical activity, Tregoning cited Atlantic Station, a mixed-use development in Atlanta built on the property of a former steel mill. People in Atlanta drive on average 33 miles a day; people who live and/or work in Atlantic Station drive on average only 8 to 10 miles a day.

Tregoning spoke about how planning can help combat obesity. Among a population of about 590,000, 54 percent of adults in Washington, DC, are overweight or obese, as are 22 percent of teens, the highest percentage

BOX 5-1
Impact of the Built Environment on Public Health

Harriet Tregoning, Director of Washington, DC, Office of Planning, cited five impacts that illustrate how the built environment affects public health:

- In low-income neighborhoods, the likelihood of a person meeting daily nutritional guidelines increases by one-third if the neighborhood has a grocery store that sells healthy food.
- Abundant fast food establishments, corner stores, and scarce grocery stores lead to more health problems than are seen in more balanced food environments.
- People living in walkable, mixed-use communities are twice as likely to get the recommended 30 or more minutes per day of physical activity.
- One-third of Americans who use public transit to get to work meet this recommendation.
- People living within one-quarter mile of a park are 25 percent more likely to meet this recommendation.

SOURCE: Public Health Law & Policy, http://www.phlpnet.org.

in the country. The problem is estimated to cost about $372 million annually. The DC Department of Health has a Childhood Health Action Plan whose goal is to reverse the trend in childhood obesity by 2010. A District Obesity Plan is also being prepared, with objectives for increasing physical activity and the intake of healthy foods. Washington, DC, already has many elements in place to encourage more physical activity, including the country's second-largest rail and fifth-largest bus networks; low car ownership (63 percent of households) and easy bus-stop access; 39 grocery stores and more than 19 farmers' markets; and parks, recreation facilities, and bike lanes. The city also has pioneered bike- and car-sharing programs.

For planners and other city officials, the question is how to make investments in and changes to the built environment to make communities "healthy by design." To this end, Washington has implemented a number of policies, such as:

- facilitating safe ways to do different types of walking, from rambling and strolling to utilitarian trips to work and errands, by installing countdown meters at intersections, creating wide sidewalks, and undertaking a Great Streets Initiative that uses planning to advance livability and walkable destinations;
- investing in alternative modes of transport, such as by constructing bike racks and lanes;
- encouraging healthy corner stores and sidewalk vending through tax incentives; developing a comprehensive plan to promote community gardens, mixed-use development, and other measures; and
- using technology to promote health, such as through an online directory of community gardens, healthy food stores, and nutrition classes, and to enable farmers' markets to accept Supplemental Nutrition Assistance Program (SNAP) electronic payment for fresh produce.

Looking ahead, Tregoning said future options for Washington include (1) studying the potential of a fresh food financing initiative, based on a Pennsylvania program that provides incentives to businesses that locate healthy food stores in underserved neighborhoods; (2) leveraging transit improvements to increase physical activity; (3) reforming land use and zoning regulations; and (4) engaging in more branding, outreach, and education to increase healthy eating and active living among all Washington residents.

INCREASING PHYSICAL ACTIVITY THROUGH THE BUILT ENVIRONMENT IN ENGLAND

National Context

McGinty gave an overview of national efforts to increase physical activity through the built environment before turning the podium over to Ashcroft, who discussed how these national efforts can play out on the regional level:

- The *Healthy Weight, Healthy Lives* strategy (see Box 3-1 in Chapter 3) calls for the creation of environments that promote healthy weight.
- Using the 2012 Olympics as a spur, the recently published *Be Active, Be Healthy* strategy establishes a framework within which local authorities and the National Health Service can create opportunities for sport and physical activity, with the goal of getting 2 million more people active by 2012 (UK Department of Health, 2009).
- Healthy Towns is a challenge-fund program that is investing £30 million in nine towns during the next 3 years to encourage holistic approaches to enhancing physical activity and food choices. Projects related to the built environment include improved signage for easier walking and cycling, urban gardens, and an awards scheme to improve the food offerings in the inner-city London community near Olympic Park.
- An expert working group convened by the UK Department of Health is looking at sedentary behavior and gathering evidence on the most effective ways to promote activity. The group is working with the World Health Organization, which is developing activity recommendations especially for young children.

Southwest England

Ashcroft spoke broadly about physical activity and the built environment, but then he also talked about strategies specific to Southwest England. He suggested that policies encouraging physical activity are important, but on their own are not enough. Policies must have strong political backing and resources, as well as advocates who can convince people to change their behavior. Influencing practice is as much an art as a science. It requires, among other things, good evidence as to what works best.

Policies related to the built environment—for example, where to locate new houses, how to encourage growth in a sustainable way, and how to

transport people to their destinations—affect people's lifestyles, the local community, the economy, and ultimately people's health. In this complex and interrelated environment, it is important to coordinate the efforts of national, regional, and local agencies, as well as to work across the different silos of transportation, waste services, health, and other areas. One "sales point" Ashcroft said he finds effective is evidence, published in the *Journal of the American Medical Association* (Blair et al., 1989), showing that people who are more physically fit have a longer life expectancy than those who are not.

About 10 percent of the UK population will live in purposefully built new developments in the next 10 years or so. Building sidewalks, linking greenspaces to each other, and encouraging mixed-use development are all ways to promote physical activity. Existing settlements can pose more of a challenge since retrofitting is tricky. Efforts to integrate physical activity options into these environments such as sidewalks and greenspaces must be more opportunistic and gradual.

An upcoming conference titled "Building Health: Planning and Designing for Health and Happiness," organized in part by Ashcroft's office, will bring together professionals to share ideas and best practices, using Freiburg, Germany, as an example. The agenda will encompass greenspaces, transport, the public realm, major development, incremental change, facilities and services, and rural communities. Ashcroft went into two of these topics—greenspaces and transport—in some detail.

Evidence shows that access to greenspaces reduces obesity by a small amount but has a large effect on physical activity levels (Ellaway et al., 2005). In the United Kingdom, the voluntary sector is very involved in the management of greenspaces, especially in urban areas, and the emphasis is on making these spaces enjoyable so people will want to return to them. New development patterns are needed in which greenspaces are set aside and linked together.

In terms of transport, the goal is to increase active travel as a way to contribute to healthy living. Promoting walking and cycling often requires traffic-calming measures, reallocation of road space, and improved public transport. Different agencies must be involved in changing transportation behaviors, especially for the short trips (1 to 2 miles) that account for much automobile use. The Department of Transport's strategic goals are supportive of change. Again, sharing evidence is effective. An example is a study that shows the link between transportation choices and not only road accidents (the traditional focus of transport planners), but also cancer, heart disease and stroke, and climate change effects (Cavill and Davis, 2007). A statement by England's Chief Medical Officer that active travel is critical to health also underscores the linkages.

In southwest England, strategies to inject health considerations into decisions about the built environment include

- adding health issues to the training of new planners;
- briefing obesity prevention leaders so they can better negotiate with planners;
- sponsoring health impact assessments as part of transport plans;
- seconding a health planner into the Bristol transport team;
- creating active-travel investment plans;
- challenging weak policies; and
- sharing evidence about what works.

Finally, communication is critical. Every planning and transport professional in the region receives on a weekly basis information that summarizes complex research and essential evidence in easy-to-read formats. Showing an impact motivates people to do more, and success breeds more success.

DISCUSSION

In the question-and-answer session, the discussion turned to the corporate sector and health care. Jackson noted that in the United Kingdom, unlike in the United States, the National Health Service shoulders most health-related costs of obesity. The appeal to employers is framed in terms of the effects of illness and absenteeism as a drain on the corporate environment, with good examples being highlighted. Large corporations are often more responsive than small and medium-sized enterprises, as small to medium-sized enterprises lack the same capacity to bear the costs involved. Jackson also pointed to the role of the state as an employer. As a workshop participant noted, the government lags behind the best of the private-sector employers in promoting employee wellness. The government also procures large amounts of food for public institutions. Overall, the government needs to set a good example if it is to be more effective in urging the private sector to take steps to promote physical activity.

Dietz said US employers have an incentive to invest in wellness because they are paying the medical costs of their employees. Many CEOs also recognize the effect of health on competitiveness. As in the United Kingdom, efforts to promote physical activity are most common among larger companies. The case must be made to small and medium-sized companies as to why obesity is a threat to their bottom line.

Because employer-provided fitness centers, walking clubs, and other such programs typically engage people who are already active, "push" strategies, such as exercise breaks and parking restrictions, can increase the numbers who engage in physical activity. Ashcroft noted that in

some programs he has tracked, already-active individuals were the first to engage in workplace activity programs, and less active people subsequently joined in.

The discussion then turned to the subject of evaluation. Ashcroft said his office uses evidence from other countries, such as Japan and Sweden. A main measure should be changes in behavior at the individual level, looking at how many people are becoming more active and how to influence their behavior.

Tregoning noted that travel behavior is measured in the United States through the Household Transportation Survey, a very laborious process conducted only once every 12 years or so. Finding a way to measure this behavior more efficiently and comprehensively would help with planning and economic development decisions. For example, as mentioned earlier, retailers use car counts to decide where to locate their stores. Cyclist, pedestrian, and public-transit counts could be used to market properties in different ways.

6

National Policies and Programs

Four presenters offered case examples of national-level policies and programs aimed at addressing the obesity problem. Kevin Concannon (Under Secretary for Food, Nutrition, and Consumer Services, Food and Nutrition Service, USDA) and Dana Carr (Director, Health, Mental Health, Environmental Health, and Physical Education Team, Office of Safe and Drug-Free Schools, US Department of Education) summarized some of their departments' efforts to fund and showcase programs, raise visibility, and promote healthier eating and physical activity. Tim Smith (CEO, UK Food Standards Agency) reported on how his agency relies on cooperation and partnerships to help consumers make healthier choices. Finally, Susan Jebb (UK, Chair of the cross-government Expert Advisory Group on Obesity) presented on Change4Life, a national campaign in which multiple partners have joined forces to translate the scientific evidence on the causes of obesity into eight achievable behaviors.

US DEPARTMENT OF AGRICULTURE: MEETING NUTRITION NEEDS

USDA's Food and Nutrition Service encompasses 15 nutrition programs (see Box 6-1) as well as the Center for Nutrition Policy and Promotion, which is responsible for nutrition guidance to the public. Concannon noted that current economic conditions make USDA's nutrition programs critical. The programs have a total budget of more than $80 billion, about one-half of the department's total budget. The largest is the Supplemental Nutrition Assistance Program (SNAP) (previously known as the Food Stamp Pro-

BOX 6-1
US Nutrition Programs That Can Promote Healthier Eating

USDA's Food and Nutrition Service oversees feeding programs with a collective annual budget of more than $80 billion. They include the following:

- The **Supplemental Nutrition Assistance Program** (formerly the Food Stamp Program) provides funds to about 35 million people each month via an EBT (electronic benefit transfer) card that can be used to purchase food at most grocery stores and some other food stores and markets.
- The **Special Supplemental Nutrition Program for Women, Infants, and Children**, better known as the WIC Program, provides assistance to low-income women, infants, and children up to age 5 who are at nutritional risk by supplying vouchers for the purchase of nutritious foods to supplement their diets, information on healthy eating, and referrals to health care.
- The **National School Lunch Program** provides cash subsidies and donated commodities to school districts and independent schools that choose to take part in the program. In return, they must serve lunches that meet federal requirements, and they must offer free or reduced-price lunches to eligible children.
- The **School Breakfast Program** operates in the same manner as the National School Lunch Program.
- The **Fresh Fruit and Vegetable Program** provides free fresh fruits and vegetables in selected low-income elementary schools nationwide.
- The **Summer Food Service Program** provides free, nutritious meals and snacks to help children in low-income areas get the nutrition they need throughout the summer months when they are out of school.
- The **Child and Adult Care Food Program** is a nutrition education and meal reimbursement program helping providers serve nutritious and safely prepared meals and snacks to children and adults in day care settings.
- The **Farmers' Market Nutrition Program** provides fresh fruits and vegetables from local, certified farmers' markets to WIC recipients.
- The **Senior Farmers' Market Nutrition Program** awards grants to states, US territories, and federally recognized Indian tribal governments to provide low-income seniors with coupons that can be exchanged for eligible foods at farmers' markets, at roadside stands, and from community-supported agriculture programs.
- The **Emergency Food Assistance Program** makes commodity foods available to states. States provide the food to local agencies, usually food banks, which in turn distribute it to soup kitchens and food pantries that directly serve the public.

SOURCE: USDA Food and Nutrition Service, Programs and Services. http://www.fns.usda.gov/fns/services.htm.

gram), which currently serves about 35 million people, half of whom are children. Forty percent of SNAP households have one or more members who are working but still have insufficient resources to purchase enough food for their households. SNAP and the Child Nutrition programs at schools provide essential food to millions of children.

As of October 1, 2009, 49 states had implemented a new food package for the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC Program) that increases the amounts of whole grains, fruits, and vegetables, and low-fat milk provided by the program, among other nutritional improvements, and promotes breastfeeding. The hope is that these changes will have secondary effects across families and communities, not just for women and children enrolled in the WIC program.

Likewise, nutritional quality is improving in USDA Foods, formerly known as the Commodities Program, which provides food in emergency feeding programs and to schools. As reported earlier by Ms. Paradis (see Chapter 4), improvements are being achieved by lowering the salt and sugar content of the foods provided.

Concannon also welcomed the IOM recommendations for revising school lunch and breakfast nutrition guidelines (see Box 4-1 in Chapter 4), which he said are consistent with the department's HealthierUS Schools criteria. However, only a small percentage of the country's more than 100,000 schools participating in the School Lunch Program are also participating in the HealthierUS Schools initiative. Concannon remarked that more needs to be done to expand this important initiative.

Concannon noted that awareness and use of the US Dietary Guidelines (MyPyramid, based on the Food Guide Pyramid) are low. More research is needed to understand why this is the case and what to do about it, perhaps tapping into how the private sector influences consumer behaviors. Partnerships with the Ad Council and soon with the National Football League also will bring more attention to the importance of physical activity and healthy eating.

Concannon said the current economic conditions have created more food-insecure households at the same time that state and local governments are challenged to implement programs with declining tax revenues. USDA is trying to simplify its requirements so states can provide better access to nutrition programs for those who need them.

US DEPARTMENT OF EDUCATION: PROMOTING PHYSICAL EDUCATION IN US SCHOOLS

Carr explained that the US education system is highly decentralized, with most decisions being made at the state and local levels. In fact, the Department of Education is prohibited from influencing policy, curricula, or

staffing decisions. Thus, the department's role in promoting physical education is to encourage and suggest rather than to regulate or require.

Status of Physical Education in US Schools

Carr said that, although school systems offer physical education classes and recesses/activity breaks during the school week, few consider physical education an integral part of education, especially as students progress from elementary through high school. All 50 states except Iowa and Minnesota have state physical education standards, although their quality and depth vary. Most state standards reflect or exceed the standards suggested by the National Association of Sport and Physical Education: 150 minutes per week for elementary school students and 225 minutes per week for middle and high school students. This standard is not often attained in schools, however. While almost all schools require some form of physical education, only 4 percent of elementary, 8 percent of middle, and 2 percent of high schools provide daily physical education or the equivalent for the entire school year for all students (see Box 6-2). Recess is offered in most elemen-

BOX 6-2
Physical Education Time in US Schools

Almost all schools in the United States require some physical education:

- 70 percent of elementary schools
- 84 percent of middle schools
- 95 percent of high schools

A small number of schools provide physical education or its equivalent at least 3 days a week:

- 14 percent of elementary schools
- 15 percent of middle schools
- 3 percent of high schools

Very few schools provide daily physical education or its equivalent for the entire school year for students in all grades:

- 4 percent of elementary schools
- 8 percent of middle schools
- 2 percent of high schools

SOURCE: Lee et al., 2007, as cited by D. Carr.

tary schools at least several times a week, and many middle and secondary schools have some sort of activity break during the school day. In addition, schools that participate in USDA's school meals programs must develop a wellness policy that includes a requirement for physical activity goals. Overall, however, most of the policies, according to an outside evaluation, are relatively weak (Chiquiri et al., 2009).

Carol M. White Physical Education Program

The Carol M. White Physical Education Program (PEP) is a federal competitive grant program first authorized as part of the No Child Left Behind legislation. Currently funded at $78 million annually, the grants go to local educational agencies or community organizations to "initiate, expand or improve physical education and nutrition education programs to help students improve fitness and eating habits as well as meet state standards for physical education." Taken together, the program's six elements represent a comprehensive physical education and nutrition education program:

- fitness education and assessment to help students understand, improve, or maintain their physical well-being;
- instruction in a variety of motor skills and physical activities designed to enhance the physical, mental, and social or emotional development of every student;
- development of, and instruction in, cognitive concepts about motor skills and physical fitness that support a lifelong healthy lifestyle;
- opportunities to develop positive social and cooperative skills through participation in physical activity;
- instruction in healthy eating habits and good nutrition; and
- opportunities for professional development for teachers of physical education so they can stay abreast of the latest research, issues, and trends in the field of physical education.

The principal PEP outcome measured is the number of students who engage in 150 (elementary) or 225 (secondary) minutes of moderate to vigorous physical activity per week. Some schools track body mass index (BMI) and obesity rates, although Carr noted that the grants' time period is too short to see large-scale changes. Looking ahead, the department is considering a restructuring of the program, with a greater emphasis on comprehensive, community-focused, integrated programming that covers all six of the program elements.

Carr also briefly discussed other Department of Education initiatives to support students' physical activity. Fueled and Fit: Ready to Learn is

a department-wide campaign to highlight the research-based connection between proper physical fitness/nutrition and student achievement. In addition, department officials are visiting schools to highlight the importance of wellness and fitness. Carr said White House leadership is also helpful in promoting child wellness efforts.

UK FOOD STANDARDS AGENCY: ENCOURAGING HEALTHIER EATING

The UK Food Standards Agency is a nonministerial government department responsible for ensuring food safety and dealing with other consumer-focused issues throughout the United Kingdom. Smith reported that about one-third of the agency's resources are spent on issues related to obesity and healthy eating. Much less regulation is involved in addressing these issues as compared with the agency's food safety responsibilities.

A Focus on Partnerships

Smith observed that working in partnerships, as the UK Food Standards Agency does, can result in reformulated products, better messaging about nutrition to consumers at the point of purchase, and other changes that can promote better health. The agency's focus in addressing obesity issues is on evidence-based, largely voluntary initiatives involving businesses, consumer groups, and public health and other organizations. To achieve "safe food and healthy eating for all," the agency provides consumer advice and conducts campaigns (to influence people), recommends reformulations and more sensible portion sizes (products), and suggests labeling and promotions (the environment). The goal is to provide consumers with the knowledge and skills to prepare and choose healthy meals—a goal Smith acknowledged is complex. One way in which this goal is being pursued is through partnerships with businesses and civil society centered on product reformulations and campaigns. The agency is developing voluntary standards for many products to make them healthier. As an example, companies agreed to lower the salt content in bread, a measure estimated to save 3,500 to 4,000 lives a year. Similar strategies in which companies take voluntary measures are being applied to fat, sugar, and calories.

In the United Kingdom, five companies account for 84 percent of the retail grocery business, which makes them a more concentrated bloc than the big food brand holders. They understand their customers and how to affect behaviors, and the agency also tries to tap into that understanding. The agency's awareness campaigns have a limited budget, which means it must use its funds wisely. It funds the provision of simple actionable tips

for consumers, efforts to improve labeling on food products, signage and other nutritional information within stores, and local projects.

Food Labeling

The Food Standards Agency is responsible for front-of-pack nutrition labeling and has actively worked to make the labels more informative for consumers. To that end, it developed several possible label formats that are prominent, easy to read, simple to use, and based on scientific evidence. They are coded with what the agency calls "traffic light colours" in the hope that consumers will minimize their purchases of food with "red" (unhealthier) ingredients and increase their purchases of food with "green" (healthier) ingredients. Moreover, retailers and manufacturers will receive an incentive to reformulate their products to avoid the "red" label. Through consumer testing, the agency learned that the most effective label (see Figure 6-1) has words that describe the nutrition content clearly; the "traffic light" colour scheme; and numbers that show how the food contributes to the EU Guideline Daily Amount of calories, fats, sugars, and salt.

Catering (e.g., take-out food, restaurants, fast food) is also a large market, only slightly smaller overall than the grocery industry. Unlike the grocery industry, the catering market is highly dispersed, encompassing about 250,000 casual dining establishments, many of them small businesses. Twenty-one companies, which Smith termed "trailblazers," have adopted a calorie labeling system to test consumer response and assess business impact. Those that have signed up have been publicly acknowledged. The

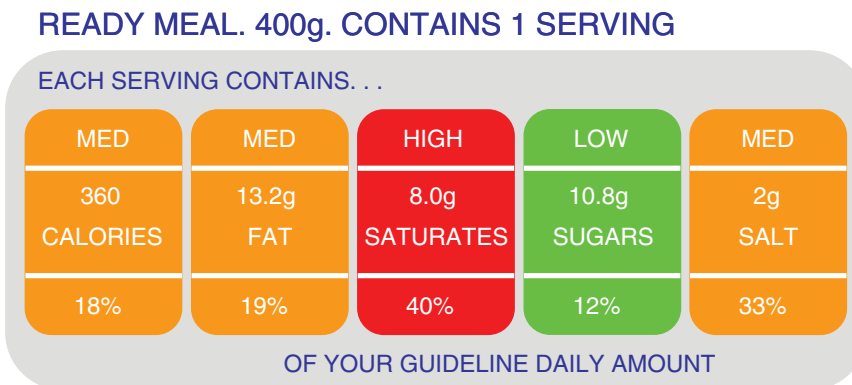


FIGURE 6-1 Most effective food label, as determined through UK consumer research.

labels have the greatest effect at the point of purchase, such as on a menu board or the shelf of a carry-out shop.

Smith concluded with some of the lessons the agency has learned about what works. It has found that disseminating and developing a clear and compelling message that does not get diluted is important. Also, evidence and measurements are necessary to show the impact of the changes that are made. Finally, collaboration and cooperation with the market have advanced the agency's agenda more quickly than simply relying on legislation, regulation, and mandates.

IMPLEMENTING CHANGE4LIFE

Change4Life is a campaign to change the behaviors that lead to childhood obesity. The disconnect that the campaign addresses is that while obesity has national implications for health and the economy, research shows that people do not relate what they see or hear about obesity to their own situation. Only 5 percent of parents believe their children are overweight or obese, despite data showing that the number is many times greater.

A large body of research—academic, consumer, and ethnographic—was consolidated to develop the campaign. Researchers lived and ate with families, installed cameras in kitchens, went on shopping trips, and looked at shopping receipts. They derived many insights, but according to Jebb, five in particular shaped the philosophy behind Change4Life:

- Parents acknowledge childhood obesity is a problem, but not for their family.
- Parents underestimate the amount they and their children eat and overestimate the amount of physical activity.
- Parents do not see the health risks in sedentary behavior, large portion sizes, snacking, and other behaviors.
- Parents perceive "healthy living" as a middle-class aspiration that, for many at-risk families, is unattainable or undesirable.
- Parents prioritize their children's immediate happiness over long-term health.

An advertising agency used these insights to develop the messages and branding for the campaign, along with eight consumer-friendly behaviors as an initial focus (see Figure 6-2). The guiding philosophy was that campaigns to change behaviors, such as Change4Life, must be based on science, but their messages must be framed in a way that resonates with consumers. "Change" was used to place an imperative in the brand name; "Life" implies a better life as well as a longer one. The characters in the logo are human but do not represent any particular age, gender, ethnicity, or even

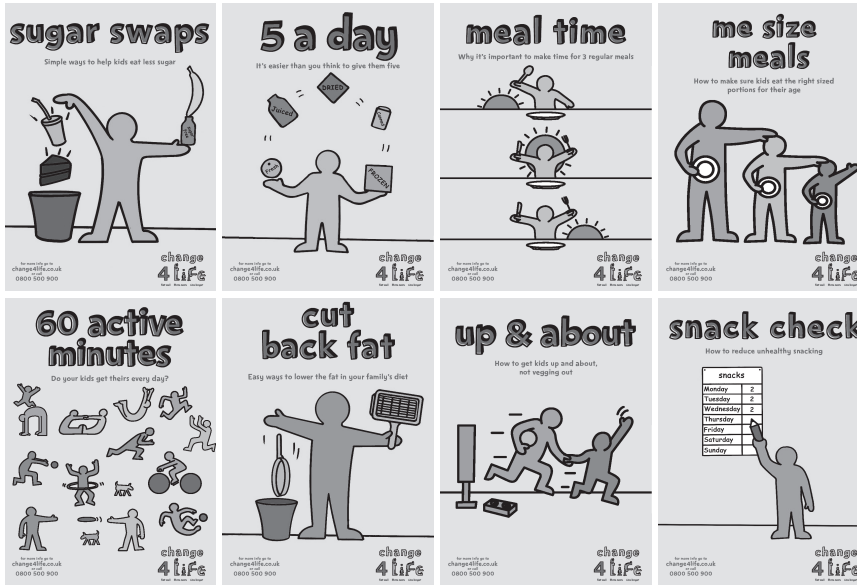


FIGURE 6-2 Change4Life's eight focus behaviors.

weight status. In fact, the word "obesity" is deliberately omitted. As Jebb observed, the word has strong health connotations and is a clinical diagnosis, but parents and families see it as an insult.

The campaign brings together a broad coalition of partners, in part because families say that health-related messages come to them from the supermarket, the media, schools, their doctor, and other sources. Another impetus behind a broad-based campaign, as called for in the *Foresight* report, is that systemwide change is needed, not just an advertising campaign. At the same time, Jebb stressed that the campaign is based on an academic and health foundation. Throughout, consumers receive a consistent message with a consistent tone that is empathetic, supportive, and focused on helping rather than lecturing.

Progress to Date

The campaign will take time to have an effect. It includes distinct phases to engage with the delivery chain, reframe the issue to emphasize health over personal appearance, and personalize the issue so parents realize their own children are at risk. Only then will people be ready for the specific knowledge they need to make changes and be receptive to environmental and policy changes.

Change4Life is designed to reach people in all aspects of their daily life. Other programs have adopted its message (e.g., Swim4Life, Dance4Life). People now recite the names of the eight key behaviors, referring to portion control, for example, as "me-size meals."

A complex, multilevel evaluation framework has been developed. The campaign has already achieved its targets of 370,000 families actively engaged, 750,000 people saying they have taken positive action as a result of the campaign, and 3 million saying the campaign has made them think about their child's long-term health.

In the next 12 months, a companion brand for pregnant women and parents of children under age 2 will be launched (Start4Life). Materials will also be created for ethnic minority communities in other languages, and the campaign will be extended to adults without children.

DISCUSSION

In the question-and-answer session, Concannon was asked whether the various USDA programs, which are often administered in different departments at the state level, could be brought together to achieve a more coordinated approach. Concannon replied that he and his staff are hosting listening sessions in different areas of the country and could consider this suggestion.

Another questioner asked about considering food and physical activity as part of education. Concannon said the HealthierUS Schools Program does just this, and he hopes this view will extend to more schools. Carr noted that her office is open to suggestions for how to change the Carol M. White Physical Education Program. For example, it is considering a requirement that grantees' projects encompass all six elements of the program so the projects address both nutrition and physical activity.

Asked to elaborate on private-sector partnerships in Change4Life, Jebb said such partnerships are essential to increase the investment and diffuse the message, but the message must be managed to maintain the credibility and reputation of the brand. Companies sign on to core terms of engagement through a partnership agreement. Guidelines are being developed for the use of Change4Life in retail food settings because consumers say they want the health information while shopping.

One participant observed that, from the presentations over the course of the day, an orderly sequence appeared to have occurred in the United Kingdom: from the *Foresight* report; to the *Healthy Weight, Healthy Lives* strategy; to action across sectors. In the United States, he said, there appears to have been a breakdown between a report and the government's following through with action, perhaps because industry and government have different roles in the United States than in the United Kingdom. Jebb said

the change over a relatively short period occurred in the United Kingdom in part because the *Foresight* report was issued at a time when there was an opportunity to invest. The evidence had existed for a while, but the report articulated a clear strategy and made the case that investing now would save money later; the cross-government agenda was also crucial. In addition, the report was developed in conjunction with policy makers, which helped in translating it from science to action. McPherson pointed out that the report came from the Office of the Chief Scientist, who reports directly to the Prime Minister rather than a cabinet department.

7

Local Policies and Programs

The actions and policies of local governments, in areas such as health services, land-use decisions, education, and recreational services, affect the prevalence of obesity for better or worse by making it easier or more difficult for people in local communities to eat better and increase their physical activity. Local governments also can spur or discourage community engagement in health issues (IOM, 2009a).

Jonathan Fielding (Director of Public Health and Health Officer, Los Angeles County Department of Health), Lynn Silver (Assistant Health Commissioner, New York City Department of Health and Mental Hygiene), and Chip Johnson (Mayor, Hernando, Mississippi) described some of the ways in which their localities are promoting the health of their populations. Collectively, they identified the need to:

- develop a range of programs and services in recognition of the diversity of the population and the fact that different interventions will reach different people;
- use data to target resources and stimulate further action (with the observation that scientific evidence on the effectiveness of local interventions is lacking);
- model healthy workplace practices, from what is sold in vending machines in public buildings, to procurement, to local officials setting an example; and
- tap into resources from multiple sources, such as philanthropies, grants, and new developments, especially in this era of declining revenues.

Fielding discussed five roles a health department can play in obesity efforts; Silver discussed New York City's menu labeling law, the first such law in the nation; and Johnson addressed the role of a mayor in championing and encouraging the leveraging of resources to move people along the path toward better health.

LOS ANGELES COUNTY: THE HEALTH DEPARTMENT AS A FOCAL POINT

Los Angeles County encompasses 10 million residents, with more than 100 different languages being spoken by significant numbers of people. There is no one majority racial or ethnic group. The ethnic breakdown is 47 percent Latino, 30 percent white, 13 percent Asian/Pacific Islander, 9 percent African American, and 0.3 percent American Indiana/Alaskan native. Sixteen percent live in poverty, including about one in four children.

Five Roles for the Health Department

Fielding described the health department's five roles related to preventing childhood obesity:

- surveillance, monitoring, and data collection;
- coordination and collaboration with a wide range of public and private partners;
- modeling of a healthy workplace;
- funding for pilot projects; and
- use of health impact assessments.

Surveillance, Monitoring, and Data Collection

Obesity among children and adults in the county, as elsewhere in the country, has become more prevalent in the last 10 years. Gestational diabetes, which has long-term effects on babies mothers are carrying, more than tripled in a 12-year period. Using a model developed for Healthy People 2020, Fielding described how the health department focuses on influencing better health outcomes across the life span for children and adults.

Communities in Los Angeles that face the greatest economic hardships are also those with higher rates of obesity. The average prevalence of obesity in the county's 10 wealthiest communities is 8 percent; in the poorest 10 communities, it is 31.5 percent. Some factors that contribute to the obesity epidemic are related to this disparity, such as the availability of safe places to play and access to healthy, affordable food, while others are more generalized.

Coordination and Collaboration with Public and Private Partners

The health department works across multiple sectors, including, among many others, local chambers of commerce and other employer groups, faith-based organizations, regional planners, social services agencies, and educational institutions. As an example, the department held conferences to bring together health officials, planners, and others in the built environment community. Public health staff have been trained so they can provide input to other sectors in a common language rather than in health jargon. Directors in the Departments of Public Health, Regional Planning, and Parks and Recreation will collaborate on an update to the county's General Plan and will develop guidelines for developers for building healthy communities that promote physical activity.

Modeling of a Healthy Workplace

The health department can set an example for other agencies in the public sector, as well as private employers. Recent efforts have included a countywide worksite wellness program encompassing key physical activity and nutrition components; organized workplace-related physical activity, such as lunchtime walking groups and activity breaks during meetings; and a 100 percent healthy foods policy in county vending machines.

Funding for Pilot Programs

The Policies for Livable and Active Communities and Environments (PLACE) program was established in 2006 within the Division of Chronic Disease and Injury Prevention. Five projects are being funded for three years to institute policies that promote physical activity. For example, Culver City is linking the downtown area to a public transit station with bicycle- and pedestrian-friendly routes, and Long Beach is creating bike boulevards.

Use of Health Impact Assessments

Health impact assessments examine the potential health effects of a project or policy. Fielding described a few such assessments under way in Los Angeles County. Looking at menu labeling and food selection, for example, the health department estimated that if at least 10 percent of patrons used menu labeling to select a meal with just 100 fewer calories, 41 percent of the 7 million pounds of annual weight gain in the county would be prevented. Such data are important to show policy makers how even a small percentage of people making slightly better decisions can have an impact.

Other local and statewide progress includes nutrition standards in schools; a trans fat ban in restaurants; and the California Complete Streets Act, aimed at reducing the number of cul-de-sacs in residential developments to increase walkability.

Local Challenges and Changes

Fielding identified some challenges faced in improving the food and physical activity environments. In terms of improving the food environment, he noted the limited base of evidence on effective community-level interventions; a lack of public support (to many, food is an individual choice); entrenched business interests that oppose change; and legal impediments, such as those who argue that the right of free speech protects food marketing. He suggested that environmental changes can improve conditions so that healthy choices become easy choices (see Table 7-1).

Similarly, improving physical activity environments requires working across sectors, overcoming legal barriers and resistance by some business interests, and determining how to increase resources to facilitate biking and walking within transportation funding streams that have not traditionally prioritized these forms of movement. Again, Fielding identified necessary environmental changes, such as increasing parks and greenspaces and making them safe and people-friendly, to make physical activity the easy choice.

Finally, Fielding commented on some additional challenges for his department and other local agencies seeking to address obesity:

- the need to influence non-health sector decisions so people will understand and take into account the health consequences of decisions made on transportation, taxation, and other issues;
- the need for changes in the organizational culture to address policies and systems, not just more services and programs;
- diminishing public health resources that require leveraging existing and seeking new funding, especially for prevention of chronic conditions such as obesity;
- competing demands, such as for emergency preparedness; and
- the need for a broader range of partnerships to develop a shared vision of the effects of health on all aspects of society.

As noted, Fielding stressed the inadequacy of the research base for determining which interventions are effective in addressing the obesity problem. He urged greater study, noting that the quality of evidence can be high even without randomized controlled trials. He also urged the creation of a national action plan, coordinated by the Domestic Policy Council, that

TABLE 7-1 Making Healthy Choices the Easy Choices in Los Angeles County

Condition	Environmental Change
Lack of access to fresh, nutritious, affordable foods	• Provide incentives for markets and other businesses that provide healthy food options. • Provide incentives for healthy food purchases among SNAP recipients. • Use zoning tools to reduce the concentration of fast food and convenience stores not offering healthy options. • Establish nutrition standards for food purchased in county-related programs and by vendors, and encourage outside agencies to do the same.
Increased marketing of junk food	• Place limits on the marketing of junk food to children (e.g., around schools and parks, on billboards).
Early childhood obesity	• Promote improved nutrition among preschool-aged children by establishing and enforcing nutrition guidelines in child care and preschool settings.
Lack of park space and recreational areas	• Work with cities to increase parks and greenspaces. • Encourage joint-use agreements between cities and schools.
Communities not pedestrian- and bicycle-friendly	• Work with cities to incorporate health into local planning decisions and general plans. • Promote the Safe Routes to School Program in disadvantaged communities. • Promote the use of public transportation.
Low levels of physical education in schools	• Work with schools to overcome barriers to physical education in schools, such as fiscal constraints and the perception that physical education will detract from academic success.

SOURCE: J. Fielding, Los Angeles County Department of Health.

would bring together the many policies and agencies with a role in addressing obesity and improving health.

NEW YORK CITY: MENU LABELING TO PROMOTE HEALTH

As mentioned earlier, New York City now has a menu labeling law mandating that the caloric content of foods in chain restaurants and carry-out establishments be prominently displayed. Silver discussed the law in the context of other city efforts to address obesity.

Approach to Obesity Prevention

The New York City health department focuses on what it can do to change the environmental default to make healthy choices easier for individuals, such as instituting seat belt laws or fluoridating the water. In the case of obesity prevention, the health department attempts to get New Yorkers moving, increase access to healthy foods, and reduce the consumption of unhealthy foods. Silver noted that many different interventions are needed to make an impact.

Getting New Yorkers Moving

These efforts include starting with children by creating environments in schools and day care centers that will increase physical activity. Almost 15,000 teachers and preschool workers have been trained and equipped to get kids moving. The health department is measuring BMI and assessing fitness levels (through an instrument called the NYC FITNESSGRAM) in over 750,000 children in the city's public schools, with plans to extend the initiative to the city's full public school population. It is also working with other departments on sustainable changes to the city's physical environment, including bike paths and implementation of a new street design manual, and the city's active design guidelines, an interagency policy aimed at promoting more pedestrian- and exercise-friendly designs, among other goals. Stair-use prompts encourage people to incorporate stair climbing, rather than riding elevators, into their daily activity.

Increasing Access to Healthy Foods

Citywide procurement and vending guidelines are serving as a model and resulting in the provision of healthier foods. The Healthy Bodegas Initiative encourages corner stores to stock, promote, and advertise fresh fruits and vegetables and other healthy foods (bodega is a term commonly used on the East Coast for a nonchain or corner food store, especially in the New York City region). Other interventions include Healthy Bucks, $2 vouchers that SNAP recipients can use to purchase produce more affordably at participating farmers' markets, and Green Carts, which license sidewalk vendors exclusively to sell produce in underserved neighborhoods with micro-loans and technical assistance for Green Cart operators, as well as branding, marketing, and outreach to encourage residents of the Green Cart areas to purchase fresh produce from the carts.

Decreasing the Consumption of Unhealthy Foods

To decrease the consumption of unhealthy foods, New York City has instituted its menu labeling law, described below, as well as a trans fat ban in restaurants, and coordinates the national salt reduction initiative that's working with food manufacturers to voluntarily reduce the amount of salt in their products, child care regulations covering meals and snacks for young children, and a media campaign on reducing the consumption of sugar-sweetened beverages.

Menu Labeling Law

Silver explained the origins, implementation, and preliminary results of the city's menu labeling law. Expenditures nationwide on food eaten away from home, especially at fast food restaurants, had steadily increased, from less than 30 percent of the food dollar in 1962 to about 45 percent in 2002. Menu labeling was proposed in the legislatures of Maine and New York State in 2002, but without success. National legislation was proposed in Congress but also did not progress. According to Silver, however, New York City has two "secret weapons" that resulted in success: the mayor, who is very involved in public health, and the New York City Board of Health. The board is made up of 11 public health and medical experts appointed by the city council for 6-year terms. Members cannot be dismissed without cause, which allows them considerable freedom of action.

The Board of Health had the authority to enact the menu labeling law. The department made several decisions related to how to formulate and implement the law. First, it decided to limit the labels to calories, excluding other nutrition information, since it believed that calories was the single most important piece of information and that people could be overwhelmed by too many numbers at once. A second decision was to require posting the information in a prominent place, what the industry calls the "prime real estate" on menu boards. The restaurant industry challenged the law in court twice, but the city won the second time after revising the first law. The law went into effect on March 31, 2008. Silver showed examples of menu boards and display shelves with calorie information clearly displayed. She reported that the change has been well received, and, anecdotally, New Yorkers have been talking about changes in their diet resulting from the calorie-labeling requirement.

Beyond anecdotes, however, evaluation was built into the effort from the beginning (see Box 7-1), starting with a baseline before the law went into effect and looking at change several months and then a year later. Changes in what is ordered by customers have been examined, as well as changes in menus to offer items with lower caloric content. Information

BOX 7-1
Calorie Labeling Results in New York City: Seeing and Using Information

The country's first calorie-posting regulation was enacted in New York City in December 2006 and, after several legal challenges, took effect in March 2008. An ambitious evaluation plan, which will provide information to the New York City Department of Health and Mental Hygiene, as well as others interested in the effects of menu labeling, is being carried out. An initial baseline study conducted before the law went into effect showed that only 4 percent of patrons reported seeing calorie information on menus (Subway restaurants were excluded). A study that took place in May to October 2008 showed that:

- The number of fast food customers who reported seeing calorie information increased from 38 percent to 72 percent.
- Among customers who saw the information, 27 percent reported using it.
- Based on the number of fast food meals served every day in New York City, these numbers translate to more than 1 million adults seeing the information every day and 280,000 using it to make food choices.

regarding the latter effect is expected soon. Silver cited lessons learned from menu labeling thus far:

- The labeling is feasible to implement.
- Labels must be prominent on menu boards to be seen.
- Most patrons will see them.
- Thirteen to 20 percent will use them and purchase fewer calories.

HERNANDO, MISSISSIPPI: CREATIVE LEADERSHIP ON A LIMITED BUDGET

Mississippi has one of the highest rates of childhood obesity in the country. In Hernando, Mississippi, a city of about 15,000, Mayor Johnson and the Board of Aldermen oversee everything from garbage pickup to police and fire services, with a total city budget of $17 million. The high obesity rate in his state led Johnson to take an active role in seeking partnerships and new ideas for promoting health. In his presentation, Johnson discussed how even small changes at the local level can benefit people's health. Over the past 4 years, he has used his position as mayor to seek creative and resourceful ways to create a healthier community, just the beginning, he said, of what he hopes the city can accomplish.

Johnson stressed how communities must be creative in pursuing grants, partnerships, and other opportunities to make systemic changes. For example, the city has a new park. According to Johnson, "If we'd had to buy it, we couldn't have afforded it." However, developers provided 20 acres for the park because of Hernando's open-space set-aside requirement. The city also has successfully applied for grants from The Robert Wood Johnson Foundation, Mississippi Fish and Wildlife, the National Center for Safe Routes to School, and many other public and private entities for trail and park improvements, greenways, and other measures to encourage physical activity.

One investment that was initiated before Johnson's term of office was the hiring of a full-time planner. Hernando is the smallest city in the state with this position, but it has been important as a way to work toward smart growth.

Hernando's achievements include partnerships that leverage dollars and human capital, state and national recognition that heightens local awareness, improvements in infrastructure without tax increases, and efforts in the local school district. At the same time, Johnson acknowledged many challenges. Mindsets and culture around food, exercise, and sharing the road with walkers and cyclists need to change. Johnson suggested that people who do not see obesity as an important issue need to be aware of its economic implications.

Johnson is working with other mayors in the state to diffuse the healthy living message. He and the mayor of Somerville, Massachusetts, also co-chair a new national steering committee of the National League of Cities on combating childhood obesity. According to Johnson, mayors can and should use their positions to champion the prevention of childhood obesity.

DISCUSSION

During the question-and-answer session, Fielding stressed that a healthier society is not achievable without efforts to address social, physical, and environmental determinants. At the national level, he urged Congress and the Administration to convey the message that improving health and reducing health disparities and inequities should be an explicit goal of every local government department. Otherwise, it will be difficult to achieve the necessary improvements.

Another observation made during the discussion was that Hernando is rural and thinly populated, while Somerville is one of the most densely populated areas in the country. This diversity is a strength of the National League of Cities committee. Regardless of the size of the community, as Johnson observed, it takes time for people to change. Education is essen-

tial, not just for mayors but also for other city officials and the general population.

Presenters were then asked whether they knew of any success stories of people working on the effect of violence and crime on physical activity as an obesity risk factor. Jebb said that in the United Kingdom, studies have found that children in more economically deprived areas are somewhat more physically active than those in more affluent neighborhoods. Jackson commented that in developing strategies, officials have heard parents say they want safe places for their children to play, as well as safe routes to get there. New York City, said Silver, has seen a decrease in urban violence and homicide, but public perception is that the level of danger is great. The health department is looking at street designs that will encourage more walking and cycling, which will also make the streets safer as they will be better populated. Providing lighting at night is a strategy to consider. Carr said CDC's Division of Analysis of School Health is working on strategies to make children feel safe and protected at school. Physical education and recess can be times when bullying behaviors increase. The President's budget includes $100 million for the Office of Safe and Drug-Free Schools and Communities to fund efforts to improve the school climate by fostering a safe, secure, drug-free learning environment, although the final appropriated amount may be less than that.

8

Concluding Remarks

The final session of the workshop provided an opportunity to comment on some of the similarities and differences between the United States and United Kingdom in the perspectives on and actions taken to address the obesity problem, including innovative approaches in each country that could be applied in the other.

FINAL THOUGHTS: A UK PERSPECTIVE

Jackson observed that although the two countries have different systems, their commonalities and areas of agreement on how to tackle the obesity problem were clear from the workshop presentations and discussions:

- **Working across sectors**—There was strong consensus among the presenters about the need to work across sectors and take the time to develop partnerships, however difficult they may be to create and maintain.
- **Top-down versus bottom-up approaches**—Jackson noted the creative tension that can emerge between top-down and bottom-up approaches. A great deal of power comes from people working in their communities. At the same time, national messages and programs must create a context that enables people to see that fighting obesity is in their common interest. This is especially important in the current economic environment, in which the obesity problem needs to be framed as an economic problem as well.

- **Reframing "obesity"**—Socioeconomic implications must be addressed proactively. In particular, the discussion of obesity prevention must not be confined to those with more education. At present, for example, the group least likely to be obese in the United Kingdom is affluent women. Therefore, in taking action to combat the problem, it is essential to involve women of all classes, as not to create a divide between classes. Those who work to combat obesity must find language that resonates across all classes of society.

Despite these challenges, Jackson said she wanted to close on a positive note. The level of activity taking place to fight obesity in both countries offers great cause for hope, and both have many promising areas to explore further.

FINAL THOUGHTS: A US PERSPECTIVE

Dietz summarized some of the issues the workshop had highlighted for him:

- **Role of philanthropies**—One difference between the two countries is the larger role of philanthropies in obesity prevention in the United States. In addition to national organizations, local foundations, some of which have resulted from nonprofit hospitals transitioning to for-profit institutions, fund many community initiatives.
- **Influence of national-level reports**—The *Foresight* report had a clear, direct impact on UK policy. Although an equivalent report has not emerged in the United States, the IOM has produced a number of influential publications, from its initial report on childhood obesity to its recently released publication on local government actions that can address obesity (IOM, 2005, 2009a).
- **National standards**—The United States is several years behind the United Kingdom in terms of setting national food and physical activity standards, although the US government is beginning to focus on voluntary efforts in such areas as food labeling and advertising.
- **Environmental changes**—Presenters from both countries agreed on the need for environmental changes. An area of particular commonality is initiatives related to transport.
- **Global evidence**—Whereas presenters said global evidence can be used effectively in the United Kingdom, Americans appear to demand US-based evidence. One reason may be the need to frame the issue according to the diversity of the US population. Issues play

out differently across ethnic groups and geographic locations—rural Texas, for example, versus New York City. In the United States, a great deal of energy and innovation in generating evidence is seen at the local level, as demonstrated by the case examples presented for Los Angeles County, New York, and Hernando (Chapter 7).

- **Impact data**—A challenge is to demonstrate the effectiveness of initiatives at the local level. One of the greatest deficits in the field is intervention and outcome studies that can be used to accumulate a database of what works. Also needed are studies of how to take local programs to scale.
- **Messages that resonate**—In line with the eight behaviors in Change4Life (Chapter 6), CDC is focusing on actions Americans can take to increase physical activity; promote breastfeeding; increase fruit and vegetable consumption; reduce TV time; and reduce the consumption of energy-dense, low-nutrient foods and sugar-sweetened beverages. As in the United Kingdom, the term "obesity" resonates poorly with most Americans. People do not recognize themselves or their children as obese in accordance with the clinical definition; furthermore, the term is pejorative in connotation. In a national campaign, as is occurring in the United Kingdom, a different frame of reference is necessary, such as health communities or health reform, that resonate with those the campaign is trying to reach.

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A

Workshop Agenda

Thursday, October 22, 2009

Keck Center of the National Academies

9:00 a.m. **Welcome**

Jeffrey Koplan, Chair, IOM Standing Committee on Childhood Obesity Prevention (Vice President for Global Health, Emory University)

Dick Gephardt, Former US House of Representatives Majority Leader

9:30 **The Scale of the Problem: Obesity in the UK and the US**

Moderator: *Jeffrey Koplan*

Klim McPherson, Visiting Professor of Public Health Epidemiology
Oxford University, United Kingdom
Chair of the National Heart Forum, United Kingdom

Cynthia Ogden, Epidemiologist
National Center for Health Statistics
Centers for Disease Control and Prevention

10:00 **Government Structure: US and UK**

Moderator: *William Dietz, Director*
Division of Nutrition, Physical Activity, and Obesity
Centers for Disease Control and Prevention
Workshop Planning Committee Chair

Anne Jackson, Director for Child Wellbeing
Department for Children, Schools, and Families, United Kingdom

Jeffrey Koplan

10:25 **Physical Activity Break**

10:30 **Obesity Prevention Policy Actions Initiated in the US and UK**

Moderator: *Tom Robinson, Professor of Pediatrics and Medicine*
Stanford University School of Medicine
Standing Committee member

Panel 1—School Meal Policy:

Judy Hargadon, Director
School Food Trust, United Kingdom

Julie Paradis, Administrator
Food and Nutrition Service
United States Department of Agriculture

Panel 2 —Physical Activity and the Built Environment:

Harriet Tregoning, Director, Planning Office
Office of the Deputy Mayor for Planning and Economic Development, Washington, DC

Peter Ashcroft, Regional Physical Activity Lead
Department of Health Southwest, United Kingdom

12:00 p.m. **Lunch**

1:00 **Obesity Prevention Policy Actions Initiated in the US and UK**

Moderator: *Shiriki Kumanyika, Associate Dean*
University of Pennsylvania School of Medicine
Standing Committee member

Panel 3—National Programs and Policies:

Kevin Concannon, Undersecretary for Food, Nutrition and Consumer Services
US Department of Agriculture

Tim Smith, CEO
Food Standards Agency, United Kingdom

Dana Carr, Director
Health, Mental Health, Environmental Health, & Physical Education Team
Office of Safe and Drug-Free Schools
US Department of Education

Susan Jebb, Head of Nutrition and Health Research
Medical Research Council
Collaborative Centre for Human Nutrition Research, Cambridge, UK

Panel 4—Local Policies and Perspectives:

Lynn Silver, Assistant Health Commissioner
New York City Department of Health & Mental Hygiene

Jonathan E. Fielding, Director of Public Health and Health Officer
Department of Health Services, Los Angeles County, CA

Chip Johnson, Mayor
City of Hernando, Mississippi

3:15 **Break**

3:30 **Open Discussion**
Policies and Gaps: Opportunities for Collaboration

Moderator: *Jeffrey Koplan*

William Dietz

Anne Jackson

Peter Ashcroft

Ailsa McGinty, Policy and Stakeholder Manager
Cross Government Obesity Team
Department of Health, United Kingdom

4:15 **Summary and Closing Remarks**

William Dietz

4:30 **Adjourn**

B

List of Participants

Nick Alexander, SR Strategy, LLC
Sarah Alligood, International Food Information Council
Thelma Baker, Howard University
Ona Balkus, Center for Science in the Public Interest
Donna Blum-Kemelor, USDA/CNPP
Marilyn Sue Bogner, Institute for the Study of Human Error, LLC
Caitlin Boon, IOM
Laurel Borowski, National Cancer Institute
Susan Borra, Edelman
Wendy Braund, HHS Office of Disease Prevention and Health Promotion
Julie Bromberg, National Research Center for Women & Families
Dwana Calhoun, Maryland Department of Health & Mental Hygiene
Amanda Cash, HRSA
Jasmine Chan, Virginia Tech Dietetic Internship
Nancy Chapman, NChapman Associates, Inc.
Kong Chen, Metabolic Research Unit NIDDK/NIH
Stacy Collins, National Association of Social Workers
Arianne Corbett, Center for Science in the Public Interest
Leslie Curtis, National Institutes of Health
Mary Dickie, Nutritionist
Lorelei DiSogra, United Fresh Produce Association
Karen Donato, Overweight and Obesity Research Applications, NHLBI/NIH
Paul Earhart, K Consulting
Debra Eisenbarth, US Department of Agriculture

Amanda Exner, Georgetown University
Brandel France de Bravo, National Research Center for Women & Families
Canar Girardeau, Summit Health Institute for Research and Education (SHIRE)
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Stephanie Goodwin, Mirzayan Science and Technology Policy Fellow, IOM
Mary Gorski, Pew Health Group Pew Charitable Trusts
Wayne Hale, Greater Washington Urban League
Daniel Hatcher, Alliance for a Healthier Generation
Paulette Helman, Nutritionist Consultant
Nora Howley, The National Education Association Health Information Network
Terry Huang, National Institute of Child Health and Human Development
Van Hubbard, NIH Division of Nutrition Research Coordination
Mark Humphrey, Johns Hopkins General Preventive Medicine Residency
Dawanna James-Holly, State Office of the Superintendent of Education
Jenne Johns, SHIRE
Laurie Johnson, Centers for Disease Control and Prevention's Division of Nutrition, Physical Activity, and Obesity
Mary Johnson, Federal Trade Commission
Meghan Johnson, Share Our Strength
Wendy Johnson-Askew, NIH/Division of Nutrition Research Coordination
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Sharon Kirkpatrick, National Cancer Institute
Brian Kit, CDC
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Margaret McDowell, NIH/NIDDK/DNRC
Kelly McGrath, Virginia Tech Dietetic Internship

Robin McKinnon, National Cancer Institute/NIH
Sophie Milam, Bread for the World
Kristen Mizzi, American Academy of Pediatrics
Karol Moen, Montgomery County Government
Meredith Morrissette, NIH/NHLBI
Melissa Musiker, Grocery Manufacturers Association
Sharon Natanblut, FDA
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Yvonne Njage, Fogarty International Center, NIH
Ann Nothwehr, Shady Grove Adventist Hospital
Deborah Olster, NIH
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Robert Post, Center for Nutrition Policy and Promotion, USDA
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Elizabeth Rahavi, IFIC
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Jill Reedy, National Cancer Institute
Christina Ricco, CNPP
Emily Rice, American Planning Association
Dana Roberts, Alliance for a Healthier Generation
Margie Saidel, Chartwells School Dining Services
Robin Satcher, Graduate Nutrition Student, Howard University
Stephanie Saullo, American Dietetic Association
Shirley Schantz, National Association of School Nurses
Sandra Schlicker, DC Office of the State Superintendent of Education
Gabrielle Serra, House Committee on Education and Labor
Bruce Silverglade, Center for Science in the Public Interest
Amelia Stoker, Office of the Surgeon General
Kathryn Strong, PCRM
Katey Swanson, Virginia Tech Dietetic Internship
Carmen Tamayo, Foresite Links
Tatiana Zenzano, ODPHP

C

Planning Committee Biosketches

William H. Dietz, M.D., Ph.D., is Director of the Division of Nutrition, Physical Activity, and Obesity in the National Center for Chronic Disease Prevention and Health Promotion at the Centers for Disease Control and Prevention (CDC). Prior to his appointment to the CDC, he was a professor of pediatrics at the Tufts University School of Medicine, and director of clinical nutrition at the Floating Hospital of New England Medical Center Hospitals. In addition to his academic responsibilities in Boston, Dr. Dietz was a principal research scientist at the Massachusetts Institute of Technology (MIT)/Harvard Division of Health Science and Technology, associate director of the Clinical Research Center at MIT, and director of the Boston Obesity/Nutrition Research Center funded by NIDDK. He has been a counselor of the American Society for Clinical Nutrition, and past president of the North American Association for the Study of Obesity. In 1995 he received the John Stalker Award from the American School Food Service Association for his efforts to improve school lunches. Dr. Dietz served on the 1995 Dietary Guidelines Advisory Committee, and was a past member of the NIDDK Task Force on Obesity and former president of the then American Society for Clinical Nutrition. In 1998, Dr. Dietz was elected to the Institute of Medicine. He received a B.A. from Wesleyan University, M.D. from the University of Pennsylvania, and Ph.D. in nutritional biochemistry from MIT. Dr. Dietz is a member of the Institute of Medicine.

Adam Drewnowski, Ph.D., is Director of the Nutritional Sciences Program and Professor of Epidemiology and Adjunct Professor of Medicine at the University of Washington (UW) in Seattle. He also serves as Director of the

Center for Public Health Nutrition and the UW Center for Obesity Research and is a joint member of the Fred Hutchinson Cancer Research Center. Dr. Drewnowski obtained his M.A. degree in biochemistry from Oxford University in the United Kingdom and his Ph.D. in psychology from The Rockefeller University in New York. Following post-doctoral training at the University of Toronto, he returned to Rockefeller as Assistant Professor. He later moved to the University of Michigan, where he became Professor of Public Health, Psychology and Psychiatry, and Director of the Program in Human Nutrition at the School of Public Health. Dr. Drewnowski joined the University of Washington in 1998. Dr. Drewnowski's current research is focused on the relationship between poverty and obesity and the links between inequitable access to healthy foods and disparities in the rates of obesity and diabetes by geographic area. Dr. Drewnowski is the author of over 150 research papers, numerous reviews and book chapters, and is a frequent invited speaker at scientific meetings, conferences, and symposia.

Russell R. Pate, Ph.D., is the Associate Vice President for Health Sciences and a Professor at the Norman J. Arnold School of Public Health, University of South Carolina in Columbia. He received a B.S. in physical education from Springfield College, and M.S. and Ph.D. in exercise physiology from the University of Oregon. Dr. Pate's research interest and expertise focuses on physical activity measurement, determinants, and promotion in children and youth. He also directs a national post-graduate course aimed at developing research competencies related to physical activity and public health. Dr. Pate is also involved in the CDC-funded Prevention Research Center at the University of South Carolina. His research includes studies on preschoolers' physical activity levels and how schools can influence these levels and multi-center trials on the promotion of physical activity among middle and high school-age girls. He is currently a member of the Physical Activity Guidelines Advisory Committee and served on the 2005 Dietary Guidelines Advisory Committee. He is a past-president of both the American College of Sports Medicine and the National Coalition on Promoting Physical Activity. Dr. Pate served as a member of the IOM Committee on Prevention of Obesity in Children and Youth, the Committee on Progress in Preventing Obesity in Children and Youth, and the Committee on Obesity Prevention Policies for Young Children.

John Edward Porter, J.D., is Partner at Hogan & Hartson, LLP, in Washington, DC. He previously served 21 years in Congress as a Representative from the 10th District in Illinois. In Congress, he served on the Appropriations Committee, as chair of the Subcommittee on Labor, Health and Human Services, and Education; as vice-chair of the Subcommittee on Foreign Operations; and as vice-chair of the Subcommittee on Military

Construction. Before his election to Congress, Porter served in the Illinois House of Representatives. He attended the Massachusetts Institute of Technology and received his undergraduate degree from Northwestern University, served in the US Army, and graduated with distinction from the University of Michigan Law School, where he was an editor of the *Michigan Law Review*. He served as an Honor Law Graduate attorney with the US Department of Justice in the Kennedy administration. He was founder and co-chairman of the Congressional Human Rights Caucus, a voluntary association of more than 250 members of Congress working to identify, monitor, and end human-rights violations worldwide. He wrote the legislation creating Radio Free Asia. He served as chair of the Global Legislators Organized for a Balanced Environment (GLOBE USA). Porter is a member of a number of boards, including Research!America (Chair), Public Broadcasting (Chair), the Foundation for the National Institutes of Health (Vice Chair), The Brookings Institution, J.S. Kemper Foundation, The Chicago Botanic Garden, the National Space Biomedical Research Institute, and the RAND Corporation (Emeritus). He is a member of the Council on Foreign Relations, the Bretton Woods Committee, a Trustee Emeritus of the John F. Kennedy Center for the Performing Arts, the Institute of Medicine, and a former director of the American Heart Association.

Joseph W. Thompson, M.D., M.P.H., is the Surgeon General for the State of Arkansas, the Director of the Arkansas Center for Health Improvement and an Associate Professor in the Department of Pediatrics at the University of Arkansas for Medical Sciences. Dr. Thompson has led efforts in planning and implementing health care financing reform, tobacco-and obesity-related health promotion, and disease prevention programs in Arkansas, including documenting the state's success in halting progress of the childhood obesity epidemic. He also helped to implement ARHealthNetWorks, Arkansas's health insurance waiver for low-income workers. Dr. Thompson earned his medical degree from the University of Arkansas for Medical Sciences and Master of Public Health from the University of North Carolina at Chapel Hill. He served as the RWJF Clinical Scholar at the University of North Carolina at Chapel Hill, the Luther Terry Fellow in Preventive Medicine in the office of the Assistant Secretary for Health in the Department of Health and Human Services, and the Assistant Vice President and Director of Research at the National Committee for Quality Assurance in Washington, DC. In 1997, he served as the First Child and Adolescent Health Scholar of the US Agency for Healthcare Research and Quality (then the US Agency for Health Care Policy and Research) before returning to Arkansas.

D

Speaker Biosketches

Dana Carr is the Director for the US Department of Education's Office of Safe and Drug Free Schools' Health, Mental Health, Environmental Health and Physical Education team, which oversees the Carol M. White Physical Education Program Grants. Ms. Carr has M.P.H. in Maternal and Child Health from Tulane University School of Public Health and Tropical Medicine. Prior to working at the Department of Education, Ms. Carr worked at the Centers for Disease Control and Prevention.

Kevin Concannon is the current Under Secretary for Food, Nutrition and Consumer Services in the US Department of Agriculture. Mr. Concannon was nominated by President Obama and Secretary Vilsack and confirmed by the US Senate in July 2009 to serve as Under Secretary. Over the past 25 years, he has served as Director of State Health and Human Services departments in Maine, Oregon, and Iowa. He has championed expanded services, improved access, alternatives to institutions, consumer choices, affordable health care, diversity in workplace and programs, and modernization of public information technology systems. He has served in a number of national organizations, including serving as President of the American Public Welfare Association, President of the National Association of State Mental Health Program Directors, trustee of the American Public Human Services Association, board member of the American Humane Association, and co-chair of the Milbank Memorial Fund state steering committee. Mr. Concannon has received a number of awards, including the Lifetime Human Services Award from the American Public Human Services Association in 2007. He is a graduate of Saint Francis Xavier University, Nova

Scotia with both B.A. and M.S.W. degrees. He continued his studies at the University of Southern Maine and the University of Connecticut Graduate School of Social Work.

Jonathan E. Fielding is the Director of Los Angeles County Department of Public Health and the County Health Officer, responsible for all public health functions including surveillance and control of both communicable and non-communicable diseases, and of health protection, including emergency preparedness, for the County's 10 million residents. He directs a staff of 4,000 with an annual budget exceeding $800 million. He is also a Commissioner of the Los Angeles First 5 Commission, which grants more than $100 million per year to improve the health and development of children 0–5. Dr. Fielding chairs the US Community Preventive Services Task Force and was a founding member of the US Clinical Preventive Services Task Force. He also chairs the Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020 and was appointed to the California Department of Public Health Advisory Board. Dr. Fielding is a Professor in the Schools of Medicine and Public Health at UCLA, and has authored over 175 peer reviewed publications, editorials, and book chapters on public health, health policy, health economics, emergency preparedness, and evidence-based public health practice issues. He is editor of the Annual Review of Public Health and Chairman of Partnership for Prevention. He also serves on the Board of the American Legacy Foundation and is an elected member in the National Academy of Sciences Institute of Medicine. He received his medical and public health degrees from Harvard University, and an M.B.A. in Finance from the Wharton School of Business. He formerly served as Massachusetts Commissioner of Public Health Massachusetts and Vice President of Johnson & Johnson. Dr. Fielding has received numerous awards, including the Sedgwick Memorial Medal from the American Public Health Association, the Distinguished Alumni Achievement award from the Harvard School of Public Health, and the UCLA Medal, that University's highest honor.

Richard A. Gephardt is President and CEO of Gephardt Government Affairs. He provides strategic advice to clients on issues before the House, Senate, and Executive Branch in the federal government. Mr. Gephardt has brought successful resolution for clients on issues related to negotiations, crisis management, and strategic communications. He represents a broad array of *Fortune 100* clients on Capitol Hill and before the Administration, in addition to serving as public spokesperson for clients on coalitions to bring about policy solutions to healthcare reform and climate change. Mr. Gephardt served for 28 years in the United States House of Representatives from 1976 to 2004, representing Missouri's third Congressional

District, home to his birthplace St. Louis. In his role as Leader, Mr. Gephardt emerged as one of the leading strategists of the Democratic Party's platform and chief architect to landmark reforms ranging from healthcare, pensions, education, energy independence, and trade policy. In his first year in Congress, he was appointed to both the House Ways & Means and Budget Committees. He was elected to serve as House Democratic Leader for more than 14 years, as House Majority Leader from 1989 to 1995 and Minority Leader from 1995 to 2003. Widely known for his advocacy for international human rights, Mr. Gephardt currently serves as Chairman of the National Endowment for Democracy, a private, nonprofit organization that endeavors to strengthen democratic institutions around the world through nongovernmental efforts. He is a member of The Council on Foreign Relations and an Advisory Board member to the International Conservation Caucus Foundation. He also serves as Advisory Board chairman at the Richard A. Gephardt Institute for Public Service at Washington University in St. Louis. The Library and Research Center of the Missouri History Museum in St. Louis recently opened The Richard A. Gephardt Collection to represent the life and career of his tenure in Congress. Mr. Gephardt began his career in public service in 1968 as a precinct captain to St. Louis' 14th ward. From 1971 to 1976, he served as Alderman for the city's 14th ward. In 1976, he was elected to the US Congress, succeeding 24-year incumbent Leonor Sullivan. Mr. Gephardt earned a bachelor's degree in Science from Northwestern University in 1962 and juris doctorate from the University of Michigan Law School in 1965.

Judy Hargadon joined the School Food Trust in April 2006 as its Chief Executive. Under Ms. Hargadon's leadership, the School Food Trust has built working relationships with the many parties who influence children's food, to give children better life chances. Prior to this post, she had a 30-year career in health care management, with a special focus on innovation, improvement, and workforce. She was a Harkness Fellow in 1992 to 1993 based at the Harvard School of Public Health. As well as working in hospitals, she was Chief Executive of an NHS Community Trust, which included managing school health and other preventive services. Ms. Hargadon was actively involved in the Take Our Daughters to Work scheme, and chaired the trustees for 5 years. She has been a governor for two schools. Her children, now young adults, inspired her to become involved in food issues. She is determined that parents nowadays are better supported to help their children eat healthily than she was, strongly believing that parents and schools should work together on this crucial change agenda.

Anne Jackson is Director for Child Wellbeing at the UK Department for Children, Schools and Families (DCSF). As Director for Child Wellbeing,

Ms. Jackson is responsible for the DCSF's joint work with other English government departments on improving child health, tackling child poverty and wider aspects of child wellbeing. She covers policy on children's rights and sponsorship of 11 Million, the office of the Children's Commissioner for England. She is the co-Director, with her counterpart at the Department of Health, of the Cross-Government Obesity Unit. Ms. Jackson spent her early career in the UK Diplomatic Service working on East-West relations and arms control with postings in the British Embassy Moscow in 1980 to 1982, the UK Delegation to NATO 1982 to 1985, and posts in the arms control and Eastern Departments of the Foreign and Commonwealth Office. Since joining the Department for Education in 1994, she has worked on a range of schools and children's policies including teachers' pay and performance management. A period as Head of the Department's Strategy and Innovation Unit led to her work as Bill Manager for the Children's Act 2004 and Director of Strategy for the "Every Child Matters" reforms. Ms. Jackson was born and educated in Northern Ireland and holds an M.A. in Modern Languages from Newnham College, Cambridge.

Sian Jarvis is Director General of Communications at the UK Department of Health. As Director, Ms. Jarvis has wide-ranging responsibilities for media relations, public health marketing, and NHS workforce communications. The Communications team at the Department has won acclaim for a number of their public health campaigns. Most recently the team launched the Government's new drive to tackle obesity, Change4Life. Over the past few months, the communications team has been heavily involved in handling the swine flu pandemic. Last month, Ms. Jarvis was recognized for her achievements winning the PR professional of the year, voted for by the industry. Ms. Jarvis joined the Department of Health in October 1999 from GMTV where she was the political correspondent and newsreader, reporting regularly from the United States. She trained as a journalist with the BBC working on programmes including *Today*, *World Tonight*, and *In Business*.

Susan Jebb is Head of Nutrition and Health Research at the Medical Research Council Human Nutrition Research Unit (HNR) in Cambridge. She trained in nutrition and dietetics prior to her Ph.D. at the MRC Dunn Nutrition Unit. Her research focuses on the role of dietary factors in the aetiology and treatment of obesity and its related metabolic diseases. Dr. Jebb also leads the HNR Communications team who focus on the translation of nutrition science into policy and practice, working with policy makers, industry, health professionals, nongovernmental organizations (NGOs), and the media across a broad range of activities. She is an advisor to government on issues related to obesity and to nutrition. Currently

she is Chair of the cross-government Expert Advisory Group on Obesity and a member of the Change4Life Board. She was an Expert Advisor to the Cabinet Office Strategy Unit Review on Food and now sits on the FSA Food Policy Strategy Advisory Group.

Chip Johnson is currently serving his second term as Mayor of the City of Hernando, Mississippi. Before being elected to his first term as Mayor, he served 4 years on the Board of Aldermen. Mayor Johnson served with distinction in the United States Submarine Service for 6 years. Prior to his honorary discharge in 1990, he received the Meritorious Unit Citation, the Expeditionary Medal, and the Navy Achievement Medal along with numerous other ribbons and letters of commendation. After his Navy service, he returned to Desoto County and purchased a franchise that he has owned for the last 19 years. Mayor Johnson has become a spokesperson for what local governments can do to improve the health of residents. His city has adopted policies and provided facilities and programs that improve accessibility to physical activity, among other initiatives. His speaking engagements have included: the Mississippi Governor's Health Summit, the RWJF's Annual Southern Obesity Summits in Birmingham and Austin, the "Weight of the Nation" obesity conference in Washington, DC, and the Missouri Obesity Summit. He attended, as a special guest, the RWJF's National Childhood Obesity Summit.

Tim Marsh is an Associate Director at the National Heart Forum (NHF) in England. Current roles include as a member of the NHF Modeling team, which was responsible for the quantitative modeling for the Foresight Report *Tackling Obesities*. He is currently on the board of the European Agriculture and Health Consortium and Food Matters, which supporting individuals and organizations working towards more sustainable, equitable food systems. A trained social scientist, his previous roles included Head of Policy at the UK Public Health Association and Child Poverty Action Group. Mr. Marsh is a Fellow of the UK Faculty of Public Health and member of Society of Social Medicine.

Ailsa McGinty is the Policy and Stakeholder Manager on the Cross Government Obesity Team at the UK Department of Health. Ms. McGinty is an experienced health policymaker and implementer, who has worked in the United Kingdom, Europe, and internationally for over 15 years. Professionally qualified as a public health microbiologist, she has a wide breadth of health policy experience including primary and secondary care services, as well as service management and improvement. Most recently she has joined the Cross Government Obesity Unit at the UK Department of Health as Policy and Stakeholder Manager to lead on policy development

on England's Obesity Strategy "Healthy Weight, Healthy Lives: A Cross Government Strategy for England."

Klim McPherson is the Chair of the National Heart Forum, an alliance of health related NGOs concerned to prevent premature mortality from cardiovascular disease and other chronic conditions. He has a Visiting Professorship in the Nuffield Department of Obstetrics and Gynaecology, and is a Fellow of New College, Oxford University. His research is in epidemiological methods and women's health. He runs an option in Health and Disease for final year undergraduates in Human Sciences, and teaches in Obstetrics and Gynaecology. His current commitments are: Chair of the NICE CVD Population Program Development Group reporting late in 2009; member Expert Advisory Group on Women's Heath of MHRA; and a past member of the Public Health Interventions Advisory Committee of NICE and their Heavy Menstrual Bleeding guideline development group. He has served as an expert advisor on the Advisory Council on the Misuse of Drugs. He was Co-Author of the recent Foresight Report *Tackling Obesities—Future Choices* with Government Office for Science, for which he was responsible for epidemiological modeling. He is currently on the expert working group advising the Cross Government Strategy on obesity prevention. With the National Heart Forum he has a research group examining the role of micro simulation in better understanding public health interventions. He is a member of the Legal and General's Longevity Science Advisory Panel chaired by Sir Derek Wanless. He has chaired the British Breast Group, the European Public Health Association and the Society for Social Medicine among other research bodies. Dr. McPherson's particular interests are coronary heart disease prevention and the causes of breast cancer, particularly the health implications of hormone replacement therapy (HRT). He has a longstanding research interest in the treatment of women with menstrual problems, particularly conservative methods of treating uterine fibroids in order to retain or enhance fertility. He has some 400 peer reviewed publications in academic journals. He is concerned with public health policy as it affects primary prevention of disease.

Cynthia Ogden is an epidemiologist in the NHANES group at the National Center for Health Statistics, Centers for Disease Control and Prevention (CDC). Her research interests relate to nutrition, and in particular, growth and obesity in children. She worked on the revision of the 2000 CDC growth charts for children that are used to define obesity in US children and has published extensively on both obesity and growth. She joined CDC as a member of the Epidemic Intelligence Service (EIS). Before joining CDC, she worked in the Nutrition Division at the New York State Department of Health where she researched obesity among school children in New York

counties. She has also worked on nutrition-related projects for the Food and Agriculture Organization of the United Nations and has recently been an instructor at the George Washington School of Public Health. She earned her Ph.D. and masters degrees from Cornell University where her research focused on malnutrition among young children in Kigali, Rwanda.

Julie Paradis is Administrator for the Food and Nutrition Service at the US Department of Agriculture (USDA). The Food and Nutrition Service administers the food and nutrition assistance programs in the USDA. The agency provides children and needy families with better access to food and a more healthful diet through its programs and nutrition education efforts. Between August of 2001 and October of 2006, she served as Senior Washington Counsel for America's Second Harvest (currently known as Feeding America), the nation's largest organization of emergency food providers, comprised of 215 regional food banks and food recovery organizations serving 50,000 local food pantries and soup kitchens. She was actively engaged in working with federal officials to formulate federal food assistance and human services policy, with an emphasis on federal policies necessary to help create a hunger free America. Ms. Paradis also previously served at USDA as Deputy Undersecretary for Food, Nutrition, and Consumer Services from December 1997 until January 2001. She was responsible for policy and program development for the 15 federal nutrition assistance programs, including Food Stamps, school meals, WIC, and commodity donations. Prior to this appointment, she held various staff positions with the US House of Representatives, Committee on Agriculture beginning in March of 1989. From 1995 until the end of 1997, she served as Deputy Democratic Counsel for the House Agriculture Committee, providing legal oversight for legislative issues including the Food Stamp provisions of both the welfare reform and balanced budget acts. Ms. Paradis also has served as Assistant Democratic Counsel for the House Agriculture Committee, providing legal support for the reauthorization of the National School Lunch Act and the Mickey Leland Childhood Hunger Relief Act; Staff Consultant to the House Agriculture Committee's Livestock, Dairy, and Poultry Subcommittee; and Staff Director for the Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition. Prior to her Capitol Hill experience, Ms. Paradis served for nine years as a staff attorney in USDA's Office of General Counsel.

Lynn Silver has been Assistant Commissioner of the New York City (NYC) Department of Health for Chronic Disease Prevention and Control since 2004. She coordinates the Department's response to obesity and chronic disease and in that capacity, led NYC policy initiatives such as the NYC trans fat ban, calorie labeling in chain restaurants, day care nutrition and

physical activity regulations, and helped develop the city's food procurement guidelines. The chronic disease team has recently launched a national initiative to reduce salt in processed and restaurant foods, created the NYC Bodega initiative and is supporting the roll-out of the NYC Green Carts program. Dr. Silver also initiated the joint Department-American Institute of Architects FIT-CITY built environment collaboration. Dr. Silver was previously Visiting Scholar of International Health at the Karolinska Institute in Stockholm and is Associate Professor and former Director of the School of Health Sciences of the University of Brasilia. She has worked widely internationally on health policy issues as well as food and drug regulation as a researcher and with the consumer movement. She received her M.D. and M.P.H. and pediatric training from the Johns Hopkins University and Hospital. Her work received the Rockefeller Foundation's International Award for Health Research for Development in 2000.

Tim J. Smith is Chief Executive at the Food Standards Agency in the United Kingdom. Mr. Smith took up post as Chief Executive of the Food Standards Agency on April 1, 2008. Mr. Smith is the former Chief Executive of Aria Foods UK plc. The company, which is responsible for a number of major food brands, is now part of Aria Foods amba, Europe's largest dairy manufacturer. He was appointed Chief Executive of Aria Foods in early 2005. Mr. Smith graduated from Leeds University with a degree in microbiology and zoology. He has spent his entire career in the food business: from 1979 to 1994 he was at Northern Foods, finishing his career there as a Divisional Director. After 5 years at Sara Lee Corporation, where he was President of UK operations, he joined Express Dairies plc as Executive Director. Express Dairies merged with Aria Foods in October 2003. He sits on the UK Government's Council of Food Policy Advisors.

Harriet Tregoning is the Director of the Washington, DC, Office of Planning, where she works to make Washington, DC, a walkable, bikeable, vibrant, eminently livable, globally competitive and sustainable city. Prior to this she was the director of the Governors' Institute on Community Design and co-founder, with former Maryland Governor Glendening, and executive director of the Smart Growth Leadership Institute. Ms. Tregoning developed her expertise in state level action in the State of Maryland where she served Governor Glendening as both Secretary of Planning and then as the nation's first state-level Cabinet Secretary for Smart Growth. Prior to her tenure in Maryland state government, Ms. Tregoning created the Smart Growth Office at the United States Environmental Protection Agency. Ms. Tregoning's academic training is in engineering and public policy. She was a Loeb Fellow at the Harvard University Graduate School of Design for 2003 to 2004.