Background and Rationale

In 1995, Shiriki Kumanyika, now associate dean of health promotion and disease prevention and professor of epidemiology at the University of Pennsylvania Perelman School of Medicine, began reading a report from the British Recreation Department about building a network of bicycle paths in the United Kingdom. The rationale for the network was that families needed to spend more time together. The report did not mention obesity, but Kumanyika immediately realized that such a network would have an incidental co-benefit for prevention of childhood obesity by getting children to engage in more physical activity. Thus a public policy intervention designed for one purpose could serve another.

This concept—that interventions not directly premised on health could have the beneficial side effect of supporting obesity prevention—was the motivation behind a workshop organized by a planning committee composed of Kumanyika and four other members of the Institute of Medicine’s Committee on Childhood Obesity Prevention. The workshop was funded by the Robert Wood Johnson Foundation, which has a major commitment to reversing the epidemic of childhood obesity by 2015. Held in Wash-

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1The planning committee’s role was limited to planning the workshop. This summary was prepared by the workshop rapporteurs and Institute of Medicine (IOM) staff as a factual summary of what occurred at the workshop. Statements, recommendations, and opinions expressed are those of individual presenters and participants, and are not necessarily endorsed or verified by the IOM or the National Research Council, and they should not be construed as reflecting any group consensus.

2For more information about the Robert Wood Johnson Foundation, see http://www.rwjf.org/.
The chair of the workshop planning committee, Thomas Robinson, Irving Schulman Endowed Professor in Child Health at the Stanford University School of Medicine, has worked extensively on alliances between organizations to prevent childhood obesity, and he elaborated on the rationale for the workshop. Robinson also observed that strategies for the prevention of obesity may encompass environmental-, policy-, interpersonal-, or individual-level interventions. The ultimate pathway for all of these
BACKGROUND AND RATIONALE

approaches is that they rely on changing behavior; if an intervention fails to change behavior, it does not produce the desired effects.

Behavioral change depends on two types of motivation. One is motivation to adopt the new behavior and achieve a particular outcome, which Robinson terms *outcome motivation*. The other is motivation to participate in the intervention itself, which Robinson calls *process motivation* (Robinson, 2010a). The medical and public health communities tend to focus on outcome motivation. They emphasize the risks of obesity, type 2 diabetes, hyperlipidemia, hypertension, cardiovascular disease, and cancer (Robinson, 2010a). “Those are the things that we try to persuade the public or patients to pay attention to as motivators to change behavior,” Robinson said.

However, research on motivation in children as well as in adults points to an entirely different set of powerful motivating forces. These include fun, choice, control, curiosity, challenge, cooperation, competition, social interaction, sense of accomplishment, peer approval or disapproval, and parental approval or disapproval. These factors, rather than the ultimate outcome of the behavior, are more likely to predict whether a child or an adult will persist at a task or participate in the process of behavioral change (Lepper et al., 2008; Robinson and Borzekowski, 2006). None of these factors is specific to health. Robinson’s question, then, is whether an intervention to change a health-related behavior needs to look, feel, sound, smell, or taste like health education. Does the intervention need to have anything to do with health, given that the things that motivate people to change their behaviors often have little or nothing to do with outcomes?

These questions have led Robinson to examine what he calls “stealth interventions.” Stealth does not imply deception or manipulation, he said. Rather, the intervention has an effect on physical activity or diet but is centered on a different aspect of motivation (Robinson, 2010a). In other words, although the intervention may target changing obesity, the participant is not motivated by an outcome such as losing weight or being more active but instead is focused on other motivating aspects of the process. Nonetheless, physical activity or dietary changes are beneficial side effects of the intervention.

The ideal situation is to target behaviors that are motivating in themselves. For example, Robinson and his colleagues have used ethnic dance to work with pre-adolescent girls (Robinson et al., 2010). “Physical activity and obesity never enter the lexicon,” he said. “It’s about the costumes, it’s about the music, it’s about learning about your cultural heritage, it’s about the importance of doing dances that your parents did when they were growing up in Mexico.” Another example involves overweight children on sports teams. These children tend not to join sports teams, but they may be much more likely to do so if they are joining a league that is just for overweight
kids. The attractions that accompany team sports—teamwork, competition, coaches, uniforms—are highly motivating, and weight loss can be an ancillary benefit. Thus one study of team sports for overweight children found that body mass index (BMI) declined in the intervention group compared with a control group even when the controls received nutrition and health education (Weintraub et al., 2008).

A prominent challenge is to produce effects of greater magnitude than are currently observed with such stealth interventions. In a search for motivations that cause more dramatic and sustained changes in behavior, Robinson has focused on social and ideological movements (Robinson, 2010b), loosely defined as groups of people or organizations that focus on specific common issues, often to effect change. The classic example is religious movements, in which people with strong religious beliefs can sustain behaviors that differ markedly from social norms. Other social and ideological movements that could have an effect on obesity include

- environmental sustainability/climate change;
- food justice/urban agriculture;
- food safety;
- community safety, beautification, and traffic reduction;
- human rights/social justice;
- anti-globalization/nationalism;
- animal protection;
- anti-consumerism;
- violence and crime prevention;
- cause-related fundraising;
- energy independence; and
- national security/anti-terrorism.

As an example, Robinson cited the adolescent girls he sees in his pediatric practice who are vegetarians, despite pressures from their parents or communities. They are able to sustain these behaviors over time because of their strong beliefs, which may be based on preventing animal cruelty or protecting the environment.

Robinson also highlighted cause-related fundraising, which often has an altruistic component. An example is Team in Training, through which people raise money for the Leukemia & Lymphoma Society by training to participate in half-marathons, 10-kilometer races, triathlons, and other sporting events. “There are people who [can’t] walk around a track when they start, who train over a series of months and end up being able to run a half marathon,” Robinson observed.

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3For more information about the Leukemia & Lymphoma Society, see http://www.lls.org/. 

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People have many reasons for joining a social movement. They may make a rational choice in that they see the benefits of joining the movement as greater than the risks. Joining a movement may help form or define an identity, whether a self-identity, a social or collective identity, or a public identity. People may be attracted by the possibilities for social interaction, which provides social support and, especially for stigmatized groups, can enhance feelings of efficacy and performance. Joining a social movement may help people avoid personal failure by exchanging personal responsibility for collective responsibility. Finally, emotional responses can be a powerful motivator.

As an example of this last factor, Robinson described an experiment he conducted at Stanford with a class called Food and Society. The course covers agricultural policies, labor issues, consumerism, animal rights, animal welfare, environmental issues, and other topics related to food and agriculture that are not necessarily directly related to nutrition and health. When the eating behaviors of students who took this class were compared with those of students who took classes on obesity or public health nutrition, the former students were found to have changed their eating behaviors significantly more than the latter students (Hekler et al., 2010).

Social movements have the potential to influence public policy through the mobilization of families, governments, markets, and civil society, Robinson observed. In turn, new norms, laws, or regulations can further promote individual change, creating a self-reinforcing feedback loop of change.

Piggybacking obesity prevention on existing social movements makes it possible to leapfrog the difficult process of starting a social movement from scratch, Robinson concluded. There are many examples of such movements, as illustrated by the workshop presentations, and they are already proving to be highly motivating to segments of the population (Robinson, 2010b). They have the potential to produce dramatic and sustained changes in behavior, and these behavioral changes can be magnified through changes in norms and public policy. Teaming with existing social movements can create many new allies, resources, and strategies for the obesity prevention movement.

ORGANIZATION OF THIS SUMMARY

Chapter 2 examines a particular alliance in more detail. Mission: Readiness is an initiative led by a group of retired military leaders to enhance military preparedness by reducing obesity and increasing fitness among potential recruits. This initiative has been part of an unexpected alliance,

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4For more information on Mission: Readiness, see http://www.missionreadiness.org/.
several workshop participants noted, that can attract attention to and generate change for obesity prevention.

Chapters 3 and 4 summarize the presentations and subsequent discussions of two panels. The first panel looked at groups and programs focused on food and nutrition; the second looked at groups and programs focused on physical activity and the built environment. Together, these two panels represented a sizable list of potential allies in the effort to prevent childhood obesity, and pointed toward a much larger list.

Chapter 5 examines the conditions necessary for alliances to form and endure, while Chapter 6 describes some of the more practical aspects of building and maintaining alliances.

Finally, Chapter 7 summarizes the closing observations about workshop themes made by a member of the Committee on Childhood Obesity Prevention.
ALLIANCES FOR OBESITY PREVENTION
FINDING COMMON GROUND

Workshop Summary

Lynn Parker, Emily Ann Miller, Elena Ovaitt, and Stephen Olson, Rapporteurs

Standing Committee on Childhood Obesity Prevention

Food and Nutrition Board

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—Goethe
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*Institute of Medicine planning committees are solely responsible for organizing the workshop, identifying topics, and choosing speakers. The responsibility for the published workshop summary rests with the workshop rapporteurs and the institution.
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 did not see the final draft of the 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 workshop rapporteurs and the institution.
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