

Building Public–Private
Partnerships
in Food and Nutrition

Workshop Summary

Leslie Pray and Laura Pillsbury, *Rapporteurs*

Food Forum

Food and Nutrition Board

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Willing is not enough; we must do.”*
—Goethe



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IOM Staff

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GERALDINE KENNEDO, Administrative Assistant

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Food Forum Staff

LAURA PILLSBURY, Director

GERALDINE KENNEDO, Administrative Assistant

ANTON L. BANDY, Financial Associate

LINDA D. MEYERS, Senior Director, Food and Nutrition Board

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:

WENDY L. JOHNSON-ASKEW, Nestlé Nutrition
VIVICA KRAAK, Deakin University
JOANNE R. LUPTON, Texas A&M University
BARBARA O. SCHNEEMAN, Food and Drug Administration

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 authors and the institution.

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Introduction¹

If you bring the appropriate people together in constructive ways with credible information, they will create authentic visions and strategies for addressing the shared concerns of the organization or community.

—*The Collaborative Premise* (Chrislip and Larson, 1994)

The collaborative premise . . . is a wonderful statement. But it falls short of what's really necessary, and that's action.

—Michael McGinnis, Institute of Medicine, November 2, 2011

From rising obesity rates² to the fast-growing population of older adults,³ the complex public health challenges of today call for novel approaches and new structures, including collaborative partnerships between the public and private sectors. The Institute of Medicine's (IOM's) Food Forum held a workshop on November 1-2, 2011, in Washington, DC, to better understand how to build multisectoral food and nutrition partnerships that achieve meaningful public health results.⁴

¹ This chapter is based partly on information presented by Cheryl Toner, Sylvia Rowe, and Eric Hentges.

² More than one-third of the U.S. adult population is considered obese, a figure that has more than doubled since the mid-1970s; among children, obesity rates have more than tripled over the same period (Flegal et al., 2010; NCHS, 2011).

³ The growth rate of the U.S. population age 65 years and older is expected to double over the next 20 years, placing new demands on the food supply and creating new challenges to providing healthy and safe foods to aging populations (IOM, 2010b).

⁴ This workshop was organized by an independent planning committee whose role was limited to designing the workshop program and identifying goals, topics, and speakers. This workshop summary has been prepared by the rapporteurs as a factual summary of the presentations and discussions that took place at the workshop. Statements, recommendations, and opinions expressed are those of individual presenters and participants and are not necessarily endorsed or verified by the Food Forum or the National Academies; they should not be construed as reflecting any group consensus.

The purpose of the workshop was

- to allow participants representing the private sector, academia, government, and public-interest nongovernmental organizations (NGOs) to openly explore the merits of public-private partnerships in promoting public health;
- to foster communication and cooperation between participants from different sectors around the fundamental characteristics and considerations that help build healthy, sustainable partnerships; and
- to engender dialogue on opportunities of mutual interest in the food arena, such as research, that are most conducive for partnerships.

The goals of the meeting were to develop an understanding of

- the paradigms and goals from which each sector operates;
- the range of collaborative relationships possible, how constructive interactions can be developed, and how communication and dialogue on partnership formation can be initiated in a way that builds trust; and
- the process and actions necessary to facilitate partnership development.

As Michael McGinnis, senior scholar and director of the IOM's Roundtable on Value & Science-Driven Health Care, observed in his concluding remarks and as demonstrated in this summary, the workshop achieved its stated goals. Through extensive discussion of the risks and benefits of public-private collaboration and the identification of best practices and models for constructive partnering, including how to manage some of the key ethical challenges of public-private interaction, many workshop participants identified not only common ground for moving forward but also direction for action.

The workshop built upon and complemented several other recent workshops. For example, the National Cancer Institute (NCI) of the National Institutes of Health (NIH) and the Research, Education, and Economics (REE) mission area of the U.S. Department of Agriculture (USDA) co-hosted a meeting on September 30, 2011, with the goal of starting a conversation among government, academic, and industry scientists on gaps in food and nutrition knowledge and identifying research areas of mutual interest. According to Cheryl Toner, fellow to the Nutritional Science Research Group at NCI, the conversation focused on two key questions. First, what broad areas of nutrition research that are of mutual interest to the food industry, government, and academia have the greatest potential for a positive impact on public health in the medium to long term? Second, what

are the existing and potential mechanisms for public–private collaboration in these research areas? Participating scientists identified four research areas with significant gaps in knowledge: (1) the microbiome; (2) biomarkers (in all forms); (3) food composition and dietary intake surveillance data; and (4) consumer behavior. Most of the dialogue focused on the process of generating knowledge (e.g., how to design a research study). There was very little discussion around particular disease conditions, except obesity. With respect to mechanisms for collaboration, Toner remarked that the workshop “really just scratched the surface” on barriers to collaboration and other factors that must be considered to maximize the potential for success. Some of the barriers to collaboration identified by participants as being important were lack of trust, divergent goals, and difficulties in detecting and interpreting subtle and complex effects. NCI and USDA are currently convening working groups around the four research areas as well as an additional working group on the collaborative process. The groups are being asked to develop reports to share at a follow-up meeting in 2012.

At another recent meeting, the Building Bridges Dialogue, participants from academia, industry, government, and public-interest NGOs were brought together, as Sylvia Rowe, president of SR Strategy, LLC, put it, to “move from conflict to convergence” around the issue of obesity. The meeting was organized in response to a series of previous meetings that were, according to Rowe, “quite negative in their tonality” and “lacking in a constructive dialogue.” In Rowe’s opinion, obesity is an especially contentious issue because of the lack of a common understanding of both its causes and its solutions, including the roles of key player groups. The goal of the Building Bridges Dialogue was to achieve a greater mutual understanding of the different sectors’ perspectives and priorities. The entire first half of the day was spent on discussing barriers to trust, including differences in opinion about consumer and market realities, cynicism about corporate motives, lack of candor at public meetings, and resistance to the use of new food technologies. The key outcomes of the meeting were suggestions for capitalizing on the momentum from the discussion and pursuing next steps toward collaboration and future coalition development. Meeting participants identified areas for potential collaboration, such as the use of calories as a common agenda that may allow for multiple partners in multiple sectors to employ a variety of complementary actions consistent with each partner’s individual goals, and discussed needs, such as openly addressing the role of friction in the debate, building mutual trust, and defining achievable goals. However, no specific action steps were identified.

As a final example of other work on which this IOM workshop built, Eric Hentges, executive director of the International Life Sciences Institute (ILSI), described ILSI’s public–private partnership initiative. The initiative has three phases: (1) produce a scholarly paper on good partnership prac-

tice; (2) overlay good partnership practices on the common top-10 research gaps among existing dietary guidelines, and identify gaps with the greatest potential to be addressed successfully through a public-private partnership; and (3) establish proof of principle by forming such a partnership. The initiative is currently in the first phase, with a working group putting together the scholarly paper.

The growing number of workshops and initiatives on this topic reflects a surge of interest in public-private partnering in food and nutrition research. Together, they are also building a foundation for future action. Toner remarked, "Over time, we're hopeful that these different threads of conversation will come together and start to tell a story that can help to inform and advance research . . . a story about the positive impact that these partnerships have had on public health."

Additionally, there are several references throughout this report to the Building Trust Initiative, an innovative series of workshops with public and private actors started by Diane Finegood during her tenure as scientific director of the Institute of Nutrition, Metabolism, and Diabetes at the Canadian Institutes of Health Research. The first workshop was held in 2008, the second in 2009, and the third in 2011.⁵ The initiative has been supported by a total of \$350,000 cash and in-kind contributions from a number of government, private, and nongovernmental organizations.

WORKSHOP FORMAT: AN EMPHASIS ON SMALL-GROUP DISCUSSION

The format of the November 1-2, 2011, IOM workshop was different from other recent Food Forum workshops, with a greater proportion of time spent on discussion, as opposed to presentation, and with much of the discussion occurring during small breakout sessions, which were designed to allow both within-sector and across-sector dialogue. Diane Finegood, professor at Simon Fraser University, and David Castle, professor and chair of Innovation in the Life Sciences at the University of Edinburgh, facilitated the large-group discussions among all workshop participants following the breakout sessions. Additionally, some of the discussion was based on results of a pre-workshop survey designed to gather information about deeply held beliefs and expectations for public-private partnerships in food and nutrition (Box 1-1).

There were three breakout sessions over the 2 days. At the beginning of the first two breakout sessions, participants anonymously recorded on note cards their individual reflections on the topic at hand. The note cards served as prompts for discussion. At the end of all three sessions, a spokesperson

⁵ See www.buildingtrust.ca for information on the initiative and links to workshop reports.

BOX 1-1
Pre-Meeting Survey Questions

1. Indicate the sector you feel you most represent when answering the questions below (e.g., industry, government, nongovernmental organization [NGO], and academia).
2. Please indicate any other sectors you feel your perspective represents and estimate the relative percentage for each sector (e.g., health care, 80 percent; NGO, 20 percent).
3. What is (are) your paradigm(s) (deeply held set of assumptions, values, and beliefs about the way things are or should be that established boundaries or a framework to solve problems) about multisectoral partnerships in food and nutrition?
4. What is (are) your sector's paradigm(s) about multisectoral partnerships in food and nutrition?
5. What are the goals of your sector with regard to multisectoral partnerships in food and nutrition?
6. Describe a problem you are trying to solve that would benefit from cross-sector collaboration.
7. What expertise could other sectors bring to help solve your problems?

for each breakout group reported back to the group at large key points that emerged from the discussions. The names of individuals within each group were not recorded; thus, the reflections, discussions, and report-back findings were recorded without attribution. The anonymity may have fostered more frank discussions than would have occurred otherwise, with a wider range of voices heard and more diverse sets of opinions expressed.

The goal of the first breakout session was to continue reflecting on questions asked during the pre-workshop survey and to establish mutual understanding of the different sectors' deeply held beliefs and expectations. Specifically, participants were asked to organize themselves by groups, with industry, government, academia, and public-interest NGO representatives meeting at separate tables.⁶ Business-interest NGO representatives were invited to join any table.⁷ There were a total of two industry tables, two government tables, one academic table, and one public-interest NGO table. The groups were asked to reflect on and discuss goals for building cross-

⁶ Public-interest NGOs include consumer and public health advocacy organizations.

⁷ Business-interest NGOs are those funded to service or advocate the interests of for-profit enterprises. As Jonathan Marks emphasized, not all private-industry partners are companies that manufacture or process foods. There are multiple types of entities even within the private sector.

sector collaboration in food and nutrition and to identify their sectors' three top goals to report back to the group at large.

The second breakout session was aimed at developing a mutual understanding of how potential partners think about whether to engage in cross-sector partnerships. Participants were asked to distribute themselves by sector among six different tables such that each table had representatives from all four key sectors (i.e., industry, academia, government, public-interest NGO). The small groups were asked to reflect on and discuss the basis for acceptability of any proposed cross-sector partnership. At the end of the session, each table reported back to the group at large the key “metrics of acceptability” identified by its individual participants—that is, factors to consider when assessing whether to engage in a partnership.

After having discussed in general terms what the different sectors hope to gain from multisectoral partnering and how potential partners from each sector make decisions about whether to join a partnership, participants were asked in the third breakout session to think about specific topics for potential cross-sector collaboration. Based on participant interest, three topics were chosen for discussion: obesity, food labeling, and calorie reduction. Participants distributed themselves among the three tables, based on interest. For food labeling and calorie reduction, participants were asked to consider the goals and metrics of acceptability for cross-sector partnering. For obesity, participants were asked to discuss the unique challenges of obesity compared to other public health challenges and to identify goals for partnering based on their discussion. Unlike the other two breakout sessions, participants were not asked to prepare note cards of individual reflections before beginning their small-group discussions.

Yet another unique feature of the workshop, as David Castle pointed out, was its focus on strategies for moving forward. He reflected that 5 years ago, a workshop on this topic would have focused on the importance of partnering and examples of successful partnerships, without delving into the “real strategic value” of such partnerships and how actually to make decisions about initiating new multisectoral collaborations. While this workshop did spend some time addressing the “why” of partnering, with several presenters drawing from examples of successful cross-sector collaboration in food and nutrition research, the greater thrust of the discussion was on how actually to initiate and engage in cross-sector collaboration.

REPORT ORGANIZATION AND MAJOR THEMES OF DISCUSSION

This report is based partly on small-group discussions, individual anonymous reflections recorded on note cards, and results of the pre-workshop survey and partly on the workshop transcripts and presentations (see Appendix A for the workshop agenda). Many of the views expressed

in this summary are those of the facilitators, speakers, and panelists, as attributed to them, and are not the consensus views of the organizations they represent, the workshop participants, or members of the Food Forum. Further, the examples provided by the facilitators, speakers, and panelists throughout this report are not exhaustive, but rather only suggestions for consideration. The remainder of this report is organized into three chapters.

Chapter 2 (“Why Partner?”) summarizes the discussion and presentations that addressed the benefits and risks of engaging in public–private collaboration. Throughout the workshop, individual participants across sectors identified possible risks of cross-sector engagement, including competitive advantages or disadvantages for one partner, actual or potential conflicts of interest that can undermine public trust, a product or activity of one partner casting a “shadow” or undermining the value of the partnership, unequal levels of commitment or ineffective partners, the lack of control over results that are generated through the partnership, the lack of a clear return on investment when investing in research to generate knowledge, and a negative impact on individual or institutional integrity. A variety of possible risk mitigation strategies were consequently suggested by several workshop participants, including establishing clear rules of engagement, ensuring broad participation that includes the public-interest NGO sector, balancing public and private interests, checking brand complementarity, maintaining financial transparency and legal accountability, creating an option to opt out, and conducting ongoing monitoring and evaluation of partnership outcomes. The relevance of risk and the need to consider risk mitigation when deciding whether to enter into a new partnership emerged as major overarching themes of the workshop dialogue.

Chapter 3 (“How to Partner”) summarizes the discussion and presentations on the wide range of existing public–private partnerships in food and nutrition, with a focus on key features of success. While it is important to reflect on and understand the lessons learned from unsuccessful public–private partnerships, the workshop presenters emphasized the positive aspects of enabling partnerships given the limitations of time and scope. Participants identified several features of successful public–private partnerships, including authentic trust, mutuality, feasibility, joint planning, having clear procedural steps in place for risk mitigation and other operations, and complementarity. Several participants also emphasized *intrasectoral* trust can be more challenging to establish than *intersectoral* trust if competitors within one sector are asked to collaborate and compete simultaneously.

Chapter 4 (“What Next?”) summarizes the discussion and presentations aimed at providing guidance for moving forward. Participants identified and tested a draft tool for assessing whether to enter into a new partnership; discussed ways to navigate the ethics of public–private partnerships (i.e., primarily how to manage conflict of interest); and identified

some specific subjects and subject areas for potential multisectoral collaboration. Regardless of the specific subject, the mutual desire for more data and knowledge makes research and assessment especially conducive areas for public-private collaboration.

The reader should be aware that the materials presented here express the views and opinions of individuals participating in the workshop either as presenters, panelists, or breakout group discussants, and not the deliberations or conclusions of the workshop participants as a whole, the breakout groups, or a formally constituted IOM committee. The objective of the workshop was not to address comprehensively all issues of relevance to building public-private partnerships in food and nutrition. Nor was the objective to come to consensus on any particular issue or formulate recommendations for future action. Rather, the goal was to serve as a mechanism for individuals from a variety of government, academic, industry, and NGO groups to openly discuss and reach a shared understanding of the different sectors' paradigms and goals for cross-sector collaboration and a shared understanding of how to facilitate partnership development.

Why Partner?

Successful partnerships are typically dedicated to achieving common goals, that is, with all members of a partnership working toward the same end. However, agreeing on a common goal does not necessarily mean that everyone expects to benefit from that goal in the same way. Different entities have different expectations, or hopes, for what they will gain. Reaching a shared understanding of those different expectations is a first step toward finding the common ground necessary for collaboration. As Diane Finegood said, “I think we need to understand each other’s paradigms and goals before we can embark on really serious cross-sector collaboration.” So what are those paradigms and goals? What do entities from industry, government, academia, and NGO sectors in food and nutrition expect, or hope, to gain by collaborating with each other? In other words, why partner?

This chapter summarizes the discussion and presentations that addressed the “why” of partnering. It includes results from the pre-workshop survey on “deeply held beliefs” around public–private partnerships and report-back results from the first breakout session on sector goals for multi-sectoral collaboration. While many participants from each sector noted the value of partnerships in food and nutrition from a public health perspective, their reasons for pursuing partnership vary. Yet, there are some important commonalities, such as the desire for more data and knowledge, where collaboration can and should be sought.

However, with benefits come risks. Most partnerships aimed at producing meaningful change involve some degree of risk taking. Also included in this chapter is a summary of the extensive discussion that took place on the

risks of public-private partnership in food and nutrition research, with a focus on integrity and public trust. The chapter concludes with a summary of the very brief discussion that took place during the workshop about the importance of including citizen and other public groups in the dialogue.

THE PUBLIC HEALTH VALUE OF PUBLIC-PRIVATE PARTNERSHIP¹

Many of today's public health challenges would be well served by public-private partnership approaches, with all stakeholders engaged. Moreover, the complexity of some of today's public health challenges, such as obesity, *demand*s collaboration (Figure 2-1). As McGinnis said, "If there was ever a problem for which there is no easy, simple solution, it is the problem of obesity, and it requires, therefore, the committed, determined, and collaborative activity of every one of the stakeholders involved." Finegood observed that people often respond to obesity and other complex problems by retreating, believing that the problem is beyond hope, assigning blame, and searching for simple solutions (Bar-Yam, 2004). "Clearly we need to go beyond that," she said. Robert Post, deputy director of the USDA's Center for Nutrition Policy and Promotion (CNPP), remarked that the *only* way to shift eating patterns is through harnessing the power and leveraging the resources of all "influencers."

Who are those influencers? In Richard Black's opinion, both the private and the public sectors play vital roles in modifying the food supply for public health purposes. As Black, vice president of global nutrition and chief nutrition officer at Kraft Foods, put it, the private sector needs to be part of the conversation because it makes the majority of food consumed in North America. Industry also generates important information about what, how, and why people eat and has the knowledge and expertise to modify the food supply in ways that address public health needs. Without active involvement of the food industry, Black asked, "how can we hope to modify the food supply?" The public sector needs to be involved because of its knowledge of public health and its insights into issues of which the food industry may be unaware. Black asked, "How can the food industry seek to modify the food supply if we don't even know what the problem might be?"

Catherine Woteki, under secretary for USDA's REE mission area, asserted that partnerships are necessary when the scope and scale of an endeavor are more than a single entity can or will support. She pointed to the Foundation for the National Institutes of Health (FNIH)-managed

¹ This section is based primarily on remarks from the panel on the importance of partnering and the benefits and risks of partnerships moderated by David Castle. Panel members included Richard Black, William Dietz, Jonathon Marks, Robert Post, and Catherine Woteki.

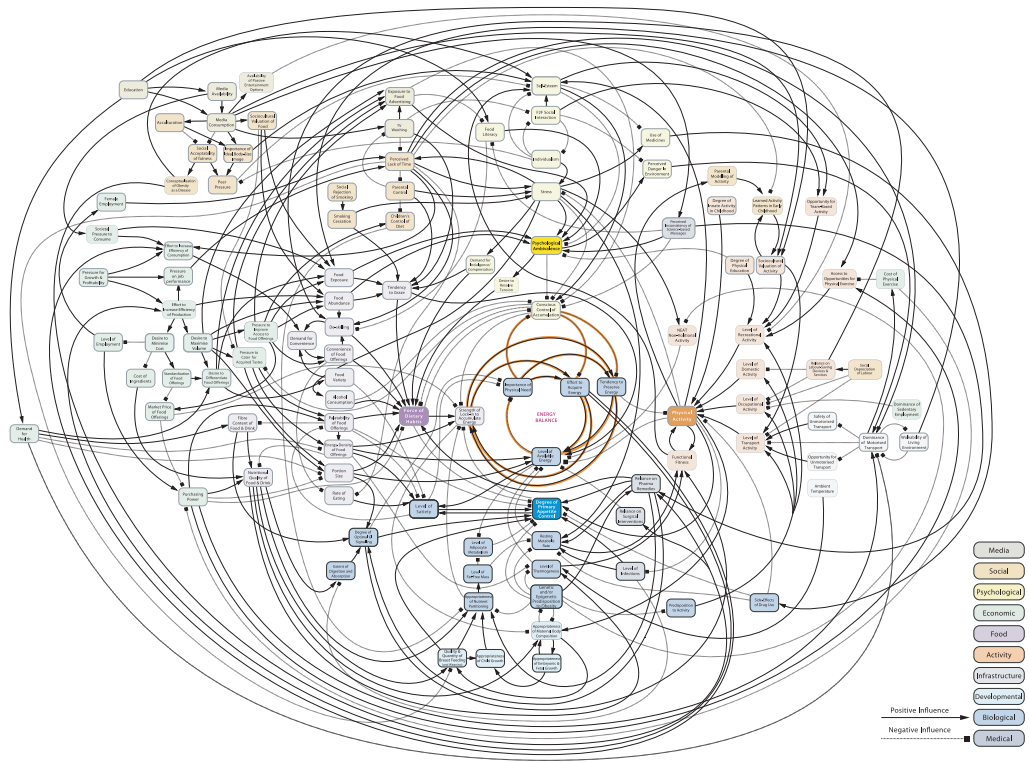


FIGURE 2-1 This map of the interrelationships of the factors that influence obesity is displayed here to illustrate its complexity. SOURCE: Foresight, 2007.

Biomarkers Consortium² and the EPODE European Network³ as two examples of projects that would not be possible in nonpartnership formats.

Whether or not all sectors *need* to be involved, many participants asserted that one of the greatest benefits of working together to tackle complex public health problems is the greater variety of expertise, perspectives, and resources brought to the table when multiple sectors convene. One participant referred to the “added value” afforded by multiple voices. Another spoke of fewer “blind spots” and more movement in directions that would not otherwise be possible. The capacity to leverage multiple resources is especially important given that each sector has unique resources to contribute. Woteki pointed to the food composition and other long-term datasets maintained by the USDA and U.S. government biosafety level 3 and 4 laboratory capacity as two unique resources that government entities can contribute and specialized manufacturing facilities and knowledge about the chemistry of biologically active compounds in food as two unique resources that industry partners can contribute.

Other key benefits of partnership identified at various times during the workshop include the “team spirit” and enthusiasm fostered by the concerted effort and the sense of ownership among the various entities; enhanced credibility resulting from broad stakeholder involvement (one participant referred to the “greater probability of success” with a “broader buy-in”); and a consistency in messaging and action that helps the public to make better food choices.

Jonathan Marks, associate professor of bioethics, humanities, and law at the Pennsylvania State University, differentiated between benefits for the public versus private sectors. Two key benefits for the public sector are (1) to derive resources and expertise from the private sector and (2) to influence the activities of the private sector. Two key benefits for the private sector are (1) to generate good will and credit for corporate social responsibility and (2) to influence the activities of the public sector, including policy making and regulatory activities.

It is probably worth mentioning at the outset that although there was

² The Biomarkers Consortium is discussed in more detail in Chapter 3.

³ The EPODE European Network was not discussed in detail at the workshop but was mentioned a few times as a model cross-sector initiative. Very generally, the EPODE (Ensemble, Prévenons l’Obésité des Enfants [Together Let’s Prevent Childhood Obesity]) European Network and the EPODE International Network are supported by multiple government, academic, and private partners. Both networks seek to build capacity in communities in several countries, including many in Europe as well as Australia and Mexico, around employing the EPODE methodology in community-based interventions. The EPODE methodology originated in France in 2004 and is designed to enable community stakeholders to implement an integrated community prevention program aimed at facilitating the adoption of healthier lifestyles. (See www.epode-european-network.com for more information.)

a great deal of emphasis during the workshop on obesity, given the urgent need for new and better tools to help people achieve and maintain weight loss (IOM, 2011), obesity was not the intended focus of this workshop. Other public health problems identified by participants as good candidates for collaborative approaches included foodborne illness, cardiovascular disease, chronic disease in general, and the health of older adults. For example, given that heart disease and stroke are, respectively, the first and third leading causes of death in the United States, speaker William Dietz, director of the Division of Nutrition, Physical Activity, and Obesity at the Centers for Disease Control and Prevention (CDC), remarked, “In the next 10 years . . . I think it’s clear that the focus needs to be on dietary risk factors for cardiovascular disease, as well as obesity.”

Regardless of the public health problem at hand, Black challenged the workshop to pursue “those places where partnership is unavoidable” with respect to certain objectives. He observed that, too often, long-term collaborations are doomed by an automatic assumption of ill intent. The notion of the unavoidable, or essential, public–private partnership emerged as an overarching theme of the workshop discussion, with several participants echoing Black’s call. Castle cautioned, however, that it is important for public and private partners to weigh the long-term strategic value against the short-term tactical utility because a tactical, and seemingly essential, solution to a particular problem may end up distorting the mandate of either sector in the long term.

It appears that the same call is being echoed in American society at large, with the U.S. government continuing to downsize and look more toward private-industry funding to assist its public health efforts. Woteki mentioned a recent directive issued by President Obama aimed at increasing collaborative work between the public and private sectors and accelerating the transfer of federal research into the marketplace. However, as Castle pointed out, while the public sector incentive to partner may be growing, it is not clear how the private sector is going to respond. Companies must convince their shareholders and boards of directors that public–private partnering is a viable business strategy. He said, “I am not throwing cold water on the [U.S. government request for engagement], but . . . I think that there’s a corresponding dynamic that has to be addressed from the private sector as well.” Another workshop participant agreed that a company’s primary responsibility is to its shareholders and added that the risk of engaging with the public sector is that too much emphasis on “doing something for the better good,” or corporate social responsibility, leads to loss of credibility within the industry. Additionally, another participant noted the risk of failure and the impact of failure on a company. “People’s jobs are on the line,” she said, when industry money is spent on public health problems that are not solved. There is also some question about whether the public is

and then, during the workshop's first breakout discussion, to explore goals in greater depth (Box 2-1).

Pre-Workshop Survey Results⁴

With respect to the different sectors' paradigms, based on a qualitative analysis of pre-workshop survey results, Finegood observed that all four sectors (academia, government, industry, and NGO) agreed that partnership is important. However, their reasons for pursuing partnerships varied (see Figure 2-2). Finegood described the academic sector as goal-oriented, with a focus on impartiality and funding; industry as more process-oriented, with a focus on shared, common, and effective solutions; and NGOs as more content-oriented, with a focus on food, health, and the environment. Since only three government representatives responded to the pre-meeting survey, no conclusion could be drawn about the government sector's paradigms.

With respect to goals, again there were some notable differences in the responses to the pre-workshop survey. Workshop participants from the academic sector are searching for access to funding while maintaining what they perceive as impartiality, with some concern that industry funding could impact that impartiality. Industry-sector representatives are searching for common messaging and a credible and equal voice at the table (i.e., private industry does not want to be, as Finegood put it, "sidelined by the pundits and editorialists"). Participants from NGOs are looking for common ground and respect for their contributions. Lastly, again, only three government representatives responded to the survey, but those that did mentioned funding and management of the potential for bias as key goals for public-private partnership.

Despite some major differences in the way the different sectors think about multisectoral collaboration and what they hope to gain from such collaboration, Finegood remarked there were also some important commonalities. Most of these were around data collection and knowledge, which participants from all sectors identified as key goals: "advance knowledge" and "provide evidence" (academic), "foster research" (government), "science base for regulation" and "technical advance" (industry), or "science base for messaging" (NGO).

Expectations: Despite Differences, Commonalities Exist⁵

Based on results from the pre-workshop survey and the report-back results listed in Box 2-1, McGinnis agreed with Finegood that although

⁴ This section is based on information presented by Diane Finegood.

⁵ This section is based on Michael McGinnis's presentation.

BOX 2-1
**Key Goals for Each Sector: Report-Back
from the First Breakout Session**

For any complex situation, there are several different levels of intervention. Most interventions tend to be at what Diane Finegood described as the lower subsystem, or structural operating, level. It is much more difficult to intervene at the higher “goals” and “paradigm” systems levels. However, changes at the top can be the most effective. Thus, the pre-meeting survey and the meeting’s first breakout session both were aimed at uncovering and reaching some common understanding around the different sectors’ deepest held beliefs (or paradigms) and goals. See Figure 2-2 for a visual representation of the different sectors’ paradigms based on results of the pre-meeting survey. Below is a list of goals identified by workshop participants from each sector during the breakout session.

Academia

- Promote public health, food safety, and nutrition.
- Increase access to industry information—not just proprietary data but also information about how the food business operates.
- Maintain impartiality and operate with financial transparency and scientific integrity.

Government

- Build trust in public-private partnerships as an ethical, legitimate way to conduct business.
- Reduce the risk of foodborne disease.

there are important differences in what the different sectors hope to gain from multisectoral collaboration, there are also some important commonalities where collaboration can and should be pursued. Table 2-1 displays a detailed summary of McGinnis’s interpretation. He identified four common interests: (1) assessment (e.g., pooling data aimed at better understanding of how eating habits influence weight and health status); (2) research (e.g., developing a common research agenda aimed at better understanding of variation in basic caloric requirements); (3) marketing (e.g., synergizing social marketing efforts aimed at improving healthy habits); and (4) vision (e.g., working together to lay out a vision of what is possible). Any and all of these areas provide ample fertile ground for public-private collaboration. McGinnis proclaimed, “We need not only . . . suspend disbelief that [collaboration] can happen. We need to suspend complacency.”

- Identify common goals and mutual benefits for all partners.
- Leverage the unique resources, expertise, and perspectives that each partner brings to the table.
- Agree on measures of effectiveness.

Industry

- Solve major problems that we cannot solve alone.
- Dispel misperceptions about the food industry, demonstrate the food industry's good intentions and expertise, and gain recognition from other sectors that the food industry can contribute to achieving common public health goals while also achieving its business objective(s).
- Arrive at a mutual understanding of the roles and issues that drive decision making across sectors so that achievable solutions can be sought.
- Recognize that emotions around food issues often cloud the ability to understand scientific findings and that the same findings from a single study are often interpreted differently by people from different backgrounds and with different belief systems.
- Experience business success by selling healthier products.
- Develop common messaging based on multisector buy-in.

NGO

- Share resources.
- Prioritize research gaps and identify achievable common goals.
- Establish win-win relationships among partners.

WITH BENEFITS COME RISKS⁶

Partnerships aimed at producing meaningful change typically involve some degree of risk taking. At several times during the course of the workshop, several participants identified risk mitigation as an integral part of the public-private partnership planning process. For example, during the last breakout session, when groups were asked to consider partnership around a specific public health problem and to think about the types of questions and issues that potential partners should be focusing on, all three breakout groups spent a great deal of time discussing the need for risk mitigation. However, in his comments, Jonathan Marks argued that “balancing” is not the only way to think about risks and benefits, and that sometimes the

⁶ This section is based on Jonathan Marks's presentation, plus additional remarks made by multiple participants, as indicated.

TABLE 2-1 Michael McGinnis’s Sample Synopsis of the Mission and Primary Functions of the Four Sectors (Academia, Government, Industry, NGO)

Sector	Mission	Primary Functions	Examples
Academia	Science	Basic research	Identifying etiological factors that contribute to various public health problems, such as obesity
		Applied research	Identifying interventions
		Assessment	Evaluating interventions
		Vision	Addressing the questions: What is needed, what is possible, by when, and how?
Government	Public health	Health protection	Regulating safety and labeling; conducting research
		Health promotion	Marketing healthy behavior; conducting research on success
		Services delivery	Fostering the availability and use of healthful products
		Assessment	Monitoring health status and program results
		Vision	McGinnis pointed to <i>Healthy People 2020</i> as an example of the government sector exercising its vision of “what can be achieved over the next decade if we set ourselves to the task.”
Industry	Food sales	Food production and marketing	Researching and developing new products; developing strategies to move new products into the market
		Returning profits to shareholders	Researching new products and strategies
		Assessment	Assessing how well products are selling and whether strategies need to be shifted
		Vision	Predicting what the market will look like in the future and evaluating the implications of that prediction
NGO	Awareness	Mobilizing public action	That is, around perceived shortfalls and injustices

TABLE 2-1 Continued

Sector	Mission	Primary Functions	Examples
		Assessment	Evaluating the state of play among key stakeholders
		Vision	Addressing the questions: What is needed, what is possible, by when, and how?

risks to the public sector partner may be so great that there should be a presumption against the partnership proceeding.

Marks outlined some of the risks to the public sector partner and, in doing so, drew on the United Nations System Standing Committee on Nutrition's (UNSCN's) list of potential risks of private-sector engagement as described in the committee's private-sector engagement policy (UNSCN, 2006). These include the following:

- “Greater corporate influence over public policy”;
- “The opportunity costs of distraction from or less interest in activities which are not of interest to the private sector but may be important for nutrition goals”;
- “Regarding private sector engagements as ends in themselves, thereby undermining strategic direction”;
- “Loss of legitimacy with key constituencies and funders due to perceived co-optation by commercial interests”;
- “Funding driven shifts in priorities at both international and national level, with fragmentation of public health/nutrition policies.”

The UNSCN places an emphasis, “above all,” on the need for “being open and clear about potential conflicts of interest” (UNSCN, 2006).

In addition to the UNSCN's policy, Marks pointed out that a number of academics have written about other concerns, such as the subordination of the public institution's values, the reorienting of its mission, and self-censorship. In relation to research, they have expressed concerns about the impact of private-sector engagement on research priorities, the outcomes and quality of the research, and the dissemination of research results. Marks emphasized that it is important to not only think about conflicts of interest but also consider more broadly (1) institutional integrity—focusing on the integrity of public institutions and on the integrity of the science—and (2) public trust in those institutions.

As one participant pointed out, most high-profile academics are themselves at risk of conflict of interest because they “build their entire careers around a particular perspective.” Yet, “they are not called out for those conflicts” and “would argue strongly that they don’t have a conflict.” Marks agreed that academic researchers may have nonfinancial conflicts of interest but argued that financial conflicts of interest at the institutional as well as the individual level are a more pressing challenge because of their systemic effects. Castle differentiated between conflicts of interest and biases and stated that the same individual-level non-financial biases apply to government officials as well. Another participant added, “You’re not going to find any person on this earth who does not have some sort of bias . . . we wouldn’t be human without it. The real question is, How do we manage it and what do we put in place as safeguards?”

So how are personal biases and institutional conflicts of interest managed and safeguarded against? There was very little dialogue about the former, other than recognition that personal bias exists and that it differs from financial conflict of interest. However, there was a great deal of debate on how to manage conflict of interest. Castle referred to the “all-or-nothing” crowd that advocates for perceived, or potential, conflicts of interest to be addressed simply by not allowing academic or government investigators to become involved with industry-funded research. That approach, Castle said, makes it very difficult to “actually get things done in the long run.” Several workshop participants expressed frustration at the cost of devaluing and excluding food industry expertise and knowledge. One participant remarked, “One of the frustrating things I see is that the folks that are making the food every day and are responsible for getting it right every day seem to be not having as much say-so as they ought.” Another participant referred to the “arrogance” of academic partners who think that they know what all the problems are. A couple of workshop participants pointed out how academic investigators who don’t trust industry risk losing touch with the problems that industry perceives as being the most important. Castle noted, “We’re starting to see the relevance of a lot of the work that gets done in universities coming under increased scrutiny.” Woteki pointed out that most funding for agricultural and food research comes from the private sector and that many academic scientists’ entire careers have been funded by industry. She said, “To say, as is done now in many different kinds of meetings, that we want to exclude people who are funded by the private sector, we’re going to be losing a very large body of expertise in the food and agricultural disciplines.”

There is no rule for engagement, Castle asserted. Some situations call for obvious choices; others, for more nuanced decision making. In some instances, he said, it may be desirable not to partner with certain organiza-

tions. For example, when dealing with childhood obesity, it would probably be very difficult to maintain credibility in certain spheres if someone were to partner with an organization known for using state-of-the-art advertising to children. Marks agreed that “in certain circumstances, the risks are so great that the presumption might be against the activity.” He said, “There might be good reasons not to partner on certain initiatives with certain actors in order to achieve that end.” In other situations, Castle argued, it may be desirable to maintain proximity to industry as a way to gather information. For example, Castle mentioned his involvement in a current project where a senior executive from Monsanto is serving on the scientific advisory board. It was a worthwhile risk, Castle said, because of the benefits of knowing a private-sector standpoint on the issues. To alleviate the risk, the influence of that particular private-sector participant is limited by very clear rules of engagement. As another example, Black described the approach taken by the World Health Organization’s (WHO’s) Department of Nutrition for Health and Development: food industry representatives do not participate in developing policy, but they do provide information to those who are developing the policy.

While the risks created by conflict of interest are important concerns, these are not the only risks. Other risks identified by workshop participants at various times during the course of discussion include the inappropriate sharing or use of information outside the partnership; the presence of ineffective partners who do not take action or who do not “really jump in and roll up their sleeves along with everybody else in the partnership”; the likelihood that a partnership constitutes a tacit endorsement of a company or product; the presence of a “halo shadow,” whereby another product or activity within a certain entity might cast a shadow on the partnership; the likelihood that a partnership project is too focused and, as such, does not address all options for dealing with a specific problem; and the presence of partners with spurious motives.

WHAT ABOUT THE PUBLIC?

Almost all of the workshop discussion focused on the interaction between government, private industry, academia, and nongovernmental organizations, with little mention of the role of consumer, or citizen, participation. Yet, as one participant stated, “The fact that a partnership is even contemplated means it’s a heavy matter. It’s going to result in or heavily influence public policy.” The participant asked, “At what point are consumer representatives, citizen representatives, legitimate partners?” Jonathan Marks agreed that public participation is an important part of partnership and encouraged workshop participants to think about how

public-private partnerships could be framed to include public participation. One participant noted the very effective role that nonprofit organizations have played over the years in engaging industry in constructive conversations. Marks added that there are many ways that public interest can be represented, not just through so-called public-interest groups.

How to Partner

There is no one-type-fits-all public-private partnership for food and nutrition research or initiatives. The structures and functions of cross-sector collaborations vary, depending on the types of entities partnering, partner intentions and contributions, and the type of project. When describing the range of Foundation for the National Institutes of Health public health partnerships, Andrea Baruchin, director of NIH Relations at FNIH, remarked, “I always say, when we’ve seen one partnership, we’ve seen one partnership, because every one [is] different.” This chapter summarizes the workshop presentations and discussion on model public-private partnerships, including the many public-private biomedical partnerships managed or coordinated by FNIH and the various food and nutrition-related partnerships in which the U.S. Centers for Disease Control and Prevention and U.S. Department of Agriculture participate.

What makes for a successful public-private partnership? Descriptions of existing cross-sectoral initiatives prompted many questions about how existing public-private partnerships manage conflict of interest, intrasectoral competition, and other challenges. Baruchin’s description of the FNIH-managed Biomarkers Consortium, a large-scale public-private partnership with broad participation from a variety of stakeholders, triggered an especially lively question-and-answer period. The question-and-answer periods fed into the broader discussion on key features of successful public-private partnerships. Also included in this chapter is a summary of that discussion.

There was little attempt to categorize the wide range of possible collaborative relationships. However, David Castle offered some general insights on variations in public-private collaboration, with an emphasis on varia-

tion in partner intention and strategic focus. He identified six strategic elements to consider when thinking about the value of potential partnerships. His presentation is summarized at the end of this chapter.

MODELS OF SUCCESS

Over the course of the workshop, participants raised many examples of public-private partnerships. Several models that were discussed in more detail are highlighted below. Andrea Baruchin provided an overview of several models of public-private partnerships being coordinated and/or managed by FNIH. William Dietz of CDC and Rob Post of the USDA Center for Nutrition Policy and Promotion also discussed the types of partnerships in which their agencies are engaged.

Foundation for the National Institutes of Health¹

The FNIH was created and authorized by the U.S. Congress specifically to develop public-private partnerships in support of the NIH mission. The foundation is a nonprofit NGO with an independent board of directors. The current board of directors is a mix of representatives from academia, philanthropy, and industry; the director of NIH and the commissioner of the U.S. Food and Drug Administration (FDA) are on the board as ex-officio members. Since its formation in 1996, FNIH has raised approximately \$590 million in support of more than 400 projects. Because it has no endowment, FNIH depends on both unrestricted and restricted donations. Additionally, because the foundation must raise money to support not only its programs but also its own administrative costs, all partnerships include an administrative fee. At any one time, the organization is managing about 100 projects, ranging in size from very large (e.g., the Biomarkers Consortium; see below) to very small (e.g., the many research projects, fellowships, awards, and other special activities established by individual donors). The foundation works with all 27 NIH institutes and centers and with a range of partners, including corporations, other foundations, academia, federal agencies, and philanthropic individuals. The FNIH has received a 4-star Charity Navigator rating for the past 5 years in recognition of the fact that most of its money, specifically, 94 cents of every dollar, directly supports programs.

Baruchin described the FNIH as a “neutral third party” that brings partners together and as a “facilitator” to ensure that all partners’ voices are heard. She emphasized the “flexible” structure of FNIH partnerships, which come in multiple shapes and sizes, depending on partners’ needs.

¹ This section is largely a summary of Andrea Baruchin’s presentation.

The FNIH operates two general types of partnerships: (1) NIH-managed partnerships, whereby funds are raised from private donors and partners to expand ongoing NIH activities and for which FNIH acts as a coordinator of the partnership, following all NIH rules; and (2) FNIH-managed partnerships, such as the Biomarkers Consortium, whereby the partnerships develop or support activities that take advantage of NIH expertise but are not led by NIH and for which FNIH coordinates *and* manages the partnership. In NIH-managed partnerships, FNIH transfers the donated funds to NIH, which then manages the science and expends the funds as necessary; FNIH sometimes coordinates the partnership through an external, or private partner, scientific board with all partners represented. In FNIH-managed partnerships, the FNIH manages all aspects of the program.

One of the largest and best known FNIH-managed partnerships is the Biomarkers Consortium, a partnership founded by FNIH, NIH, and the FDA, with other partners including the Centers for Medicare & Medicaid Services, the Biotechnology Industry Organization, and the Pharmaceutical Researchers and Manufacturers of America. The consortium was launched in 2006 to identify, develop, and validate biomarkers for use in new drug development, preventive medicine, and medical diagnostics. The partnership has 50 contributing members, including 24 companies and 26 nonprofit organizations, advocacy groups, and trade associations. To date, the consortium has launched 14 projects, 2 of which have been completed, at a total worth of approximately \$42 million. The FNIH begins fundraising only after a project proposal has been evaluated by one of four steering committees (cancer, neuroscience, inflammation and immunity, and metabolic disorders) and, if approved, its protocol has been checked by an executive committee.

I-SPY 2, an adaptive breast cancer trial, is another FNIH-managed partnership. The FNIH serves many different roles in the partnership, from fundraising to intellectual property management (e.g., it holds the master Investigational New Drug [IND] application with the FDA). The trial is adaptive in the sense that treatment is based on the individual biology of each participant's tumor (i.e., biomarker measurements). With respect to intellectual property, while most FNIH-managed partnerships are constructed in the precompetitive space, this one pushes slightly beyond that space. To avoid or handle potential intellectual property problems, the partnership uses policies generated by the Biomarkers Consortium, such that no single company stands to be the sole beneficiary of the I-SPY 2 project. New intellectual property is to be managed by the FNIH, which acts as a trusted third party and ensures the fair licensing of new inventions.

As an example of an NIH-managed partnership, Baruchin highlighted the Alzheimer's Disease Neuroimaging Initiative (ADNI), a 10-year cooperative agreement grant that NIH launched through the National Institute

of Aging (NIA) in 2004. The initiative has 24 private-company, 1 government, and 2 nonprofit-organization partners. The goal of the study is to define the progression of Alzheimer's disease by tracking normal, early, and mildly cognitively impaired subjects and Alzheimer's disease patients and to identify biomarkers that can be used as predictors of the disease. Baruchin emphasized how it was decided early on that the partnership would be "very open," with industry partners involved "from the get-go" and with data released almost in real time. The grant is administered by NIA and a steering committee, with a separate Scientist Advisory Board and a Private Partner Scientific Board (PPSB) coordinated by FNIH. Members of the PPSB participate in ADNI steering committee meetings, and the chair of the PPSB is a nonvoting member of the steering committee. The PPSB also funds ancillary projects.

During the question-and-answer period, Baruchin identified several key lessons learned from partnership work that the FNIH has been involved with since its origins in the mid-1990s:

- *Taking time to develop a public-private partnership.* Public-private partnerships, particularly large-scale projects, take time to develop. For example, the Biomarkers Consortium and the ADNI each took more than 2 years to establish.
- *Managing conflict-of-interest issues.* FNIH manages potential conflict-of-interest challenges, specifically the perceived or actual loss of government credibility as a result of partnering with industry, in several ways. Many projects involve multiple industry partners such that there is no real or perceived quid pro quo to any individual partner. Also, FNIH provides a neutral space with all stakeholders assembled when issues are discussed and maintains open and transparent governance policies.
- *Avoiding intrasectoral competition.* FNIH avoids potential intrasectoral competition by focusing on the precompetitive space. In cases where potential private industry partners are concerned about competition, those partners do not join.
- *Opting out of a partnership.* Baruchin could not recall any instance where an FNIH partner opted out of a partnership after the partnership was under way, probably because of the extensive up-front discussion that takes place around rules, governance, and other issues. However, she observed that a growing number of commitments are conditional (i.e., continued funding depends on the deliverables produced at the end of a specific time period).

Public–Private Partnerships at the CDC²

Most of the food and nutrition public–private partnerships with which the CDC is engaged are not research partnerships. Rather, their focus is on how to improve the diet. Nonetheless, they serve as a valuable model and source of lessons learned. Dietz described two CDC food and nutrition partnerships: the National Fruit and Vegetable Alliance (NFVA) and the Flour Fortification Initiative (FFI). The NFVA is a national alliance of public and private partners working collaboratively to increase nationwide access to and demand for all forms of fruits and vegetables. The alliance involves both federal and state government agencies, industry partners, and a number of NGOs or civic organizations. The FFI is a 10-year-old network that builds alliances between governments and international agencies, the wheat and flour industries, and consumer and civic organizations to promote wheat and maize flour fortification with vitamins and minerals. Dietz attributed the success of both partnerships to several factors:

- relatively narrow targets;
- common agendas that benefit all partners (with partners benefiting for different reasons);
- complementary skills, contacts, and perspectives that the different partners bring; and
- real incentives for industry partners to collaborate with each other, with no or limited financial disincentives (e.g., in the case of FFI, regulation around fortification provides incentive for flour millers to spend the money to fortify without putting themselves at a competitive disadvantage).

Partnering by the USDA Center for Nutrition Policy and Promotion³

The USDA Center for Nutrition Policy and Promotion maintains three types of partnerships, all of which involve collaboration with public and private organizations of different types:

1. *Policy development partnerships.* Post pointed to the 2010 *Dietary Guidelines for Americans* as an example of a policy development partnership. He maintained that an important phase of policy development partnerships is the solicitation of public input and comments. Development of the 2010 *Dietary Guidelines for Americans*,

² This section summarizes information presented by William Dietz.

³ This section summarizes information presented by Robert Post.

- for example, was a 4-year process, much of which involved public input and the collection of information from partners.
2. *Systematic review partnerships.* Systematic review partnerships inform federal nutrition policies and programs. Post explained how CNPP created a Nutrition Evidence Library (NEL) to conduct the systematic reviews; NEL staff collaborates with a Technical Expert Collaborative (TEC) to guide the systematic review process. Typically, six to eight experts outside the public sector are involved with each review.
 3. *Nutrition promotion partnerships* (i.e., the Nutrition Communicators Network). Post opined that there is a paradigm shift in USDA's approach to communicating and conducting outreach for the 2010 *Dietary Guidelines for Americans*. One of the pillars of the new multicomponent, multiyear, and sustained MyPlate⁴ communications initiative is using partnerships with each sector to magnify the reach of *Dietary Guidelines* messages. These nutrition promotion partnerships are where CNPP has really excelled in harnessing the power of partnership. The Nutrition Communicators Network, a commitment to promoting healthy eating in accordance with the 2010 *Dietary Guidelines for Americans*, builds on experience gained through the MyPyramid Alliance. The goals of the Nutrition Communicators Network are to go beyond communicating information by also affecting behavior, which means "giving people the "how-tos," and to effectively harness partners' expertise and networks in order to reach as many audiences as possible. The vision is to embody the socioecological framework in Chapter 5 of the *Dietary Guidelines* and answer the call-to-action in Chapter 6, where all sectors and levels of society have a role to play. The network extends across more than 6,000 community-based partners (e.g., dietitians, educators, community programs, doctors, schools) and 90 national strategic partners (e.g., health care corporations, media outlets, grocery retailers, health professional associations, restaurant chains, food manufacturers), with the aim to reach as many consumers as possible and at all of the places where consumers are making food decisions. These relationships leverage resources in novel ways to reach the consumer and are all established through agreements with no financial remuneration.

⁴ MyPlate is a visual tool developed by USDA based on the 2010 *Dietary Guidelines* to prompt healthier food choices at mealtime. For more information about MyPlate, visit www.choosemyplate.gov.

IMPORTANT FEATURES OF SUCCESSFUL PARTNERSHIPS

What makes for a successful public–private partnership? Workshop participants broached the subject at various times during the course of the workshop. This chapter draws from the many presentations and conversations that addressed the key features of successful public–private partnerships.⁵ Seven features are highlighted: (1) a sense of authentic trust; (2) mutuality (working toward a common goal, with the benefits of achieving that goal being different for different partners); (3) the feasibility of achieving the desired outcome; (4) joint planning; (5) the formulation of clear procedural steps for risk mitigation; (6) the establishment of general project management processes; and (7) complementarity (all partners contributing unique but complementary resources). The order of features listed here does not necessarily reflect the perceived importance of the different features, but rather the amount of time spent addressing each topic.

Authentic Trust⁶

Several workshop participants identified trust as one feature, if not the most important, of successful public–private partnerships. For example, Woteki noted that trust was the single most important feature of a sampling of successful public–private partnerships surveyed across the United States, Europe, and Australia (Woteki, unpublished data). Individual participants from a third session breakout group identified trust as one of the most important factors to consider when deciding whether to form a new partnership, mostly because of the important role that trust plays in risk mitigation (a more detailed description of the report-backs from that breakout session is provided later in this report).

What Kind of Trust?

Trust is not black and white. Rather, as Finegood explained, it is a spectrum. She reviewed Solomon and Flores' (2001) work on trust, noting that on one end is blind trust, which is trust in an individual or institution that, if betrayed, nonetheless persists. Blind trust requires a certain amount of self-deception. Next on the spectrum is simple trust, which is very difficult to recover if betrayed. Simple trust is devoid of suspicion and taken for granted. At the other end of the spectrum is cordial hypocrisy: a façade of good will and congeniality that hides distrust. Cordial hypocrisy can be

⁵ Many of the attributed remarks in this section were raised during the panel moderated by David Castle. Panelists included Richard Black, William Dietz, Jonathon Marks, Robert Post, and Catherine Woteki.

⁶ Some of the information in this section summarizes material presented by Diane Finegood.

very destructive to teamwork and makes honest communication impossible. In the middle of the spectrum, between simple trust and cordial hypocrisy, is authentic trust. Authentic trust is not trust that can be taken for granted. Rather, it is based on recognition of the possibility of betrayal and disappointment and the need for continuous cultivation. Authentic trust is mature, articulated, and carefully considered (Solomon and Flores, 2001). It is, Finegood said, “what we have to strive for.”

Authentic trust is important because it reduces complexity. Finegood explained that worrying about trust adds a level of complexity to a situation and that building trust reduces that complexity and enables cooperation. Authentic trust is less important in hierarchical systems, where top levels of the hierarchy dictate what happens at the lower levels. Yet, as systems become more network-based, the need for collaboration—and the need for authentic trust—becomes more important.

Black emphasized two types of trust: individual and institutional. Even if an individual trusts another individual on a personal level, if the first individual does not trust that the organization to which the second individual belongs is “going to do the right thing,” there is no potential for success. He said, “Not only does the [partnership] need to be based on trust at the personal but also at the organizational level.”

While most of the discussion around trust was focused on *intersectoral* dynamics, that is, the relationships between individuals and institutions from academia, government, industry, and public-interest NGOs, several workshop participants mentioned the significance of *intrasectoral* trust. For example, Black observed during the Building Trust workshops what he described as competition and a lack of trust between individuals within sectors. Individuals in academia do not always trust each other, nor do individuals in industry always trust each other, and so on. Finegood expressed a similar sentiment, noting that a major take-home lesson for her from the Building Trust workshops was the “aha!” moment she had when she realized that within-sector trust is more difficult to build than between-sector trust. Up until that moment, she had assumed that working with people from other sectors whose roles she did not understand would be more challenging. She observed that within-sector competition makes collaboration very difficult. This is true not just of the private sector, where different companies are competing for customer dollars, but also within academia, where different institutions or researchers are competing for profile; in the NGO sector, where different organizations are competing for donor dollars or membership; and in government, where different agencies are competing for a fixed set of tax dollars.

How to Build Authentic Trust

Building trust is not a simple task. The Building Trust Initiative developed a cluster map of barriers to building authentic trust that illustrates the magnitude of the challenge. The clusters, or barriers, include self-interest and fear, nonconstructive criticism and closed-mindedness, stereotypes and misrepresentations of other sectors, awareness and manipulation of knowledge, system barriers, competing and conflicting world views, and organizational and individual rigidity.

Nor is there a single best way to build trust. Woteki observed that while partnerships built trust in different ways, most of those ways revolve around “planning up front and getting the right kind of groundwork set.” That includes joint planning (having all partners involved in the planning from the get-go; see below), dealing with intellectual property (IP) issues, and establishing appropriate IP agreements up front (e.g., as FNIH does). Finegood remarked that another key lesson learned from the Building Trust workshops was that trust building requires a safe space. Safe spaces are important for starting conversations and deepening the different sectors’ understanding of each other, celebrating successes, and catalyzing new collaborations before the partnerships are entered into the public sphere. One participant suggested that one way to begin building authentic trust is to “put a fence around” the issue that is going to be addressed by the partnership and agree to trust each other with respect to that one issue and to leave contentious issues off the table.

In a workshop setting, trust can be addressed openly, as it was at the Building Bridges Dialogue meeting, where the entire first half of the day was spent discussing barriers to trust between industry, academia, and government. Alternatively, it can be addressed in a more indirect or secondary way by recognizing the challenge of trust but keeping the focus on other issues. The NCI-USDA meeting took an indirect approach (see Chapter 1 for more detailed information on those meetings). It is not clear which of the two approaches is more effective or more desirable and under what circumstances. One participant remarked that the approach taken by the Building Bridges Dialogue was “extremely productive” because the issue of trust “was on everybody’s mind anyway, so you might as well get it out on the table.” The NCI-USDA meeting, on the other hand, was planned and attended by scientists who wanted to jointly identify potentially collaborative areas of mutual interest. Toner explained that while the intention of the NCI-USDA meeting was to discuss science, not trust, nonetheless there was awareness that trust would have to be discussed at some point. For that meeting, however, the purpose was to start the conversation and lay some groundwork for future in-depth efforts, including discussions of trust.

Mutuality

Mutuality means that all partners are working toward the same goal and that all partners stand to benefit from achievement of that goal, even though they may not benefit in the same way. Many workshop participants noted that mutuality is another important feature of successful partnerships. Dietz mentioned that commonality of interests is an important feature of the National Fruit and Vegetable Alliance, with partners sharing the common goal of increasing fruit and vegetable intake even though their reasons for pursuing that goal differ. Industry partners want to increase sales, while government and NGO partners want to improve the public's health. In the informal survey that Woteki conducted of public-private partnerships across the United States, Europe, and Australia, respondents identified mutuality as the third most important feature of successful partnerships (after trust and joint planning). According to the results of the survey, academic partners were primarily interested in advancing knowledge and gaining publication; industry partners were primarily interested in getting a particular problem solved and incorporating the solution into their operations or commercial production; and government partners were primarily interested in long-term public good. These results align fairly well with the results from this workshop's pre-meeting survey (see discussion in Chapter 2).

Commonality of interests does not necessarily mean agreement, one participant explained. Sometimes partners have different wishes for what the ultimate outcome of their partnership will be, in which case it is important for all partners to agree that the approach to achieve the goal will enable all parties to accept the outcome, even if it is not the preferred outcome. That participant pointed to past research on *trans* fats as an example of an intersectoral collaborative effort characterized by "tolerance for the opposing view," with the food industry wishing for a different outcome than what was achieved but tolerating the outcome and moving forward accordingly. What all parties had in common in the *trans* fat example was the need to resolve the issue with a scientific approach that could be accepted by all stakeholders. Another participant pointed out that disagreement is often misinterpreted as disinterest and, as such, creates a perceived barrier to partnership. He suggested that if managed early, dissensus, or friction, could actually become a useful tool for identifying real problems that need to be addressed in order to move forward. Castle mentioned how, in an entirely different context (i.e., industrialized aquaculture), he and his colleagues were able to move beyond contention and give shape to a very contentious set of issues by not presuming that consensus was going to be reached and by identifying and focusing first on areas about which potential partners disagreed the most.

With mutuality, not only is it important that all partners stand to benefit from the partnership, but also that none stand to be put at any sort of disadvantage because of it. Dietz called attention to the need for a “level playing field,” with incentives in place to ensure that no one company is placed at a competitive disadvantage because of its participation in the partnership. For example, the Flour Fortification Initiative relies on government regulation to provide a level playing field and offset the cost of fortification. Finegood observed that some people in the public sector do not realize how important regulation is to leveling the playing field and reducing competition within the private sector.

Feasibility and Achievability

Several workshop participants identified “narrow targets” or, as Black put it, “feasibility of achieving the desired outcome,” as another key feature of successful partnerships. As previously mentioned, Dietz observed that the success of the National Fruit and Vegetable Alliance and the Flour Fortification Initiative can be partly attributed to their narrow targets. Increasing fruit and vegetable consumption is a relatively narrow target compared to, say, reducing obesity.

However, feasibility is a serious challenge. For example, reducing the sugar content of sugar-sweetened beverages, as a narrow-target way to reduce calorie intake, is not as simple as it sounds, according to Black. Black pointed out several problems with recent suggestions that the food industry slowly reduce the amount of sugar in sugar-sweetened beverages, at the same pace across all sugar-sweetened beverages, in order to “wean” people off the sweet taste. First, reducing sugar does not necessarily reduce the sweet taste. There are many ways to create a sweet taste without sugar. So the mandate would have to be to reduce sweetness, not just sugar content. Second, sugar-sweetened beverages are not the only sweet beverages available to consumers. For example, many natural juices are very sweet. So the mandate would have to extend to juices. Third, sweet beverages are not the only sweet products available to consumers. So the mandate would have to extend to all sweet food products. In fact, the entire food industry would have to join the effort and do so at the same time so that no single company is placed at a competitive disadvantage. Fourth, reducing sweetness does not necessarily translate into reduced caloric intake, which is the ultimate goal or reason for trying to wean people off the sweet taste in the first place. If food producers reduce sweetness without reducing calorie content, the effort would be for nil. So the mandate would have to be to reduce sweetness *and* calorie content.

Joint Planning

Some workshop participants stressed the importance of joint planning, with all partners involved in planning activities from the beginning, and of maintaining a space for all partners to have an equal voice throughout the duration of the partnership. In the informal survey of public-private partnerships across the United States, Europe, and Australia that Woteki mentioned, respondents identified joint planning as the second most important feature of a successful partnership (i.e., after trust). That is, all partners were involved in planning projects from the beginning and continued to remain involved as the projects matured. Black pointed to the Keystone Food and Nutrition Roundtable development of a unified front-of-package labeling program as a partnership built on a fully participatory process. The partnership was mediated by an impartial moderator who ensured that all partners had equal voices.

Risk Mitigation Measures

Despite the value of the Keystone participatory process as noted by Black, when it was announced, this multisectoral approach to developing a universal front-of-package labeling system faced high-profile skepticism in the media from some public-interest NGO and academic representatives. Black acknowledged that without giving special consideration to risk mitigation from the outset, partnerships such as the Keystone example can be confronted with public skepticism or unanticipated controversy. Throughout the workshop, several participants similarly stressed the importance of anticipating and managing partnership risk. Some examples of tools that may help minimize risks associated with cross-sector collaboration are featured in Chapter 4.

Mechanics of Partnering

Although the mechanics of partnering, such as who does what when, were not discussed at length, some participants identified certain functional aspects as being key features of a successful partnership. Black stressed that individuals at the table must have the authority or mandate to negotiate on behalf of an organization. He said, "It's really essential that when you're participating in a conversation you can actually speak on behalf of your organization." By "organization," he was referring broadly to a company, academic organization, or any other type of organization. When individuals meet to discuss partnership ideas or issues but then have to "check back" with their organizations, the dialogue "crashes." He also pointed to the importance of legal accountability around risk mitigation (i.e., "who owns

what, who has to do what”) and of standard project management concerns. Others stressed the importance of having procedures in place for data and intellectual property management.

Complementarity

Several participants emphasized the importance of each partner’s contributing something unique to the partnership—whether scientific expertise, facilities, food product(s) around which the partnership revolves, money, or other resources. Partnering does not necessarily involve providing actual funds or even in-kind goods or services; there are many ways to contribute.

STRATEGIC VALUE OF PUBLIC–PRIVATE COLLABORATION⁷

As illustrated earlier, clearly there is a wide range of collaborative possibility. There are many different types of partnering entities, many different types of projects that partners collaborate on, and many different ways that partners contribute to partnerships. There are also many different strategies behind public–private collaboration. Castle identified six strategic elements to consider when thinking about the value of a potential partnership:

1. nature of the relationship among the partners;
2. management function of the partnership;
3. extent of risk transference from one partner to another;
4. research function of the partnership;
5. type of knowledge created by the partnership; and
6. how the partnership is framed.

Each of these strategic elements is expanded on below. Castle urged people to consider how these six strategic elements could be captured in a decision-making pathway such as the one depicted in Figure 3-1.

Nature of the Relationship

The relational nature of a public–private partnership can be either consultative, whereby the public sector, or state, seeks input from outside organizations or groups; contributory, whereby the state funds a particular cause or organization; operational, whereby the state partners with outside organizations and groups but retains all power; or substantive, whereby risk and reward are correlated with equity and decision-making power. Castle noted that some people consider substantive partnerships to be

⁷ This section summarizes David Castle’s presentation.

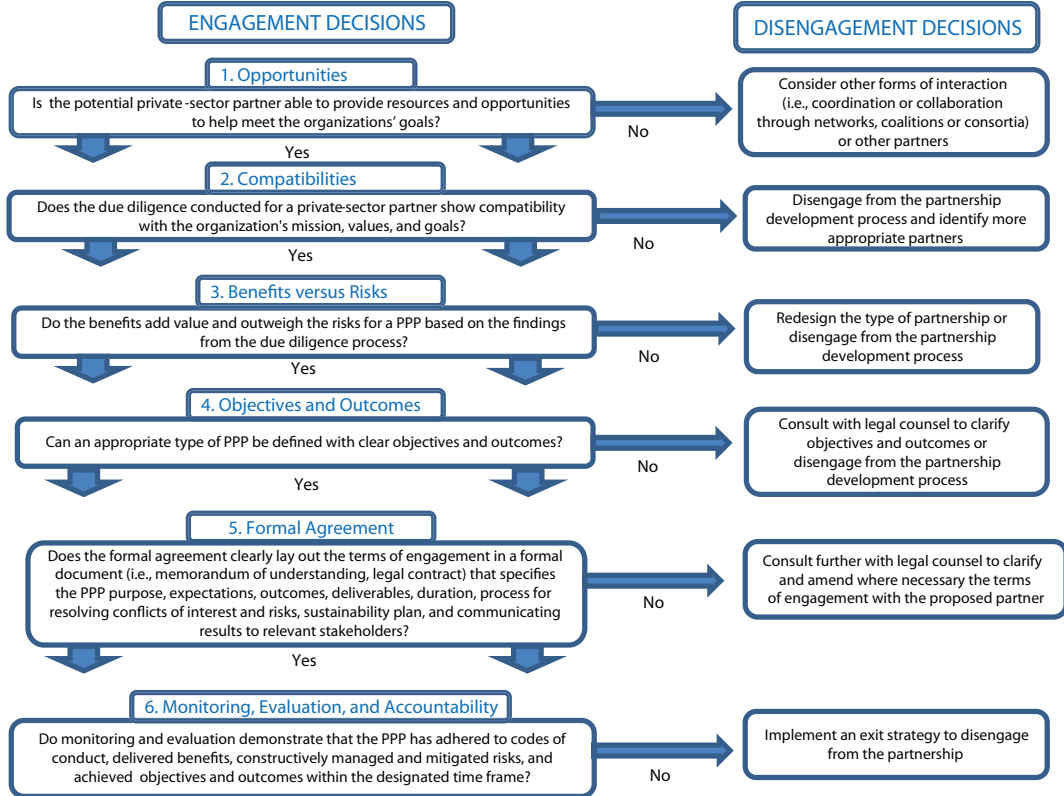


FIGURE 3-1 A benefit-risk decision-making pathway for engaging in public-private partnerships.
 SOURCE: Kraak et al., 2011.

the only “true” partnerships and the norm toward which all partnerships should be striving, implying that the others involve certain compromises. In his opinion, while the other three types of partnerships may involve some compromise, they often work well as short-term tactical collaborations.

Management Function

Castle explained that partnerships are “not always about the objectives and goals.” Sometimes, the purpose of a partnership is to deal with more proximate issues that need to be worked out. He identified three types of management function:

1. *network management*, whereby the partnership is built around the need to manage a research, information sharing, public communication, or other network and is focused on the joint development of rules, norms, and incentives;
2. *project management*, whereby the partnership is built around the need to develop goals and implement resources for a specific project; and
3. *process management*, whereby the partnership is built around the need to facilitate interaction and cooperation between actors in long-term projects (e.g., academia and industry working together on a problem, with government managing the process and ensuring that it runs smoothly).

Extent of Risk Transference

Many people tend to “tiptoe” around the issue of risk transference, Castle observed, because of the difficult discussions that the issue prompts (e.g., who is most exposed to risk, whether risk is being silently transferred from one partner to another). Partnerships manifest varying levels and types of risk transference, with capital-intensive infrastructure projects typically having different levels and types of risk transference than projects built on existing capital. While risk transference often involves legal liability, it could also involve operational risk. For example, in a jointly developed lab facility, operational risk transference questions that could arise include the following: Who actually takes on the responsibility for thinking about how the lab is going to be designed and built? Who actually takes on the responsibility for financing, leasing or buying, and taking on all of the various other operational tasks?

Research Function

Although the focus of this meeting was on research partnerships, not all research partnerships are alike. Castle identified three ways that partnerships can function in a research-based collaboration. First, some partnerships create transactional spaces for managing uncertainties and hidden costs. For example, many universities have a difficult time managing the inflating costs of scientific research infrastructure and will partner with industry entities that take on that role. Second, some research partnerships are strategically based on the need to obtain certain scales of economy and scope. Third, the private sector often enters into partnerships from which it can derive the benefits of knowledge generation without taking on all the risks of generating that knowledge. Sometimes long-term research requires public investment because of private-sector need for short-term return on investment. A problem with risk-averse industrial research partnerships, Castle noted, is that the overall rates of in-house industrial research tend to decrease over time.

Type of Knowledge

Castle listed four types of knowledge generated by research partnerships:

1. *know-why*, whereby partnering with university-based researchers guarantees the formal and collective development of codified knowledge, with peer-reviewed publication;
2. *codified know-how*, whereby the knowledge generated is the subject of intellectual property rights, mostly in the form of patents but also trade secrets, and which often involves a collaborative licensing agreement;
3. *tacit know-how*, whereby the knowledge generated is in the form of an intellectual asset that needs to be managed (i.e., knowledge that is not directly fixed in a commodified or licensed product or service), often does not have the potential for licensing, and therefore, tends to involve informal partnering; and
4. *know-who*, whereby partnerships are based on the identification and location of key individuals, organizations, and networks.

Know-who is arguably the most important strategic element to consider when evaluating whether to enter a new partnership, Castle suggested.

Framing of the Partnership

Finally, Castle emphasized the importance of framing public-private partnerships as “innovation systems,” that is, systems that are able to ac-

commodate the constant reconfiguring of the “triple helix” of industry, academia, and government that our changing public health landscape demands. “The targets are moving,” he said. “For the longest period of time it might have been communicable diseases. Now we’re talking about an era where our principal focus is on non-communicable diseases. In the future, non-communicable diseases will remain a problem, but it might also actually be the case that we get so good at dealing with non-communicable diseases of the body that we find our major struggle will be to cope with people who live longer physical lives but their minds do not stay as healthy.” In response to the triple helix, one participant suggested the metaphor be amplified, perhaps to a “double, double helix,” to include the public, such as through the involvement of public-interest NGOs.

What Next?

Conducting workshops such as this one, as well as those mentioned in Chapter 1, is a good first step to building public–private partnerships in food and nutrition. This particular meeting created a safe space for representatives from different sectors not only to become more familiar with each other’s deeply held beliefs and goals for public–private partnership and explore the possibility of collaboration, but also to develop an understanding of processes and actions necessary for moving forward. This chapter summarizes the presentations and discussions that led to this understanding.

Specifically, workshop participants spent a great deal of time discussing and testing a draft assessment tool to use when making decisions about whether to enter a new partnership. The second breakout session was aimed at identifying which features of the tool would likely be most helpful. During the third breakout session, participants used the tool to guide their exploration of possibilities for public–private partnership in specific areas of food and nutrition (i.e., obesity, food labeling and messaging, calorie reduction). There was also a brief discussion on the importance of having a mechanism in place for opting out of an existing partnership.

Additionally, Jonathan Marks offered suggestions for how to navigate the ethics of private sector engagement. He referred workshop participants to the criteria and mechanisms developed by the United Nations System Standing Committee on Nutrition and the WHO Partnership for Maternal, Newborn, and Child Health (PMNCH). Marks’s suggestions prompted debate about how to cultivate public trust in public–private collaboration

in food and nutrition and whether there were any mechanisms that could be helpful in generating that trust.

Finally, Michael McGinnis offered some closing remarks on general areas in food and nutrition that he considers ripe for future collaboration, based on mutual interest among all sectors. These include research (e.g., developing a common research agenda aimed at understanding variation in basic caloric requirements) and assessment (e.g., pooling data on eating habits and the impact of eating habits on weight and health status). Indeed, that the mutual desire for more data and knowledge makes research and assessment especially conducive areas for public-private collaboration was an overarching theme of the workshop.

TOOLS FOR BUILDING PUBLIC-PRIVATE PARTNERSHIPS IN FOOD AND NUTRITION

One outcome of the Building Trust Initiative was a one-page list of questions to consider when assessing whether to engage in a partnership, that is, the types of things that potential partners should think about as they enter into a dialogue on multisectoral collaboration (Table 4-1). Finegood offered the one-page list of questions as a draft assessment tool for use during the workshop. Participants used the questions as guidance during the second breakout session, when exploring “metrics of acceptability,” or factors to consider in deciding whether to engage in a partnership. The questions were used again during the third breakout session, when participants explored possibilities for partnerships on specific topics.

The draft assessment tool has three general categories, or domains, of questions:

1. *Initiation.* The first set of questions revolves around what potential partners should be thinking about at the beginning of a partnership. The benefit-risk decision-making pathway displayed in Figure 3-1 from Kraak and colleagues (2011) would fall within this domain. Based on work done during the Building Trust workshops, Finegood listed several questions, or issues, to consider during the initiation phase of a partnership: level of authentic trust; commonality of interests; brand complementarity; appropriate authority and mandate to negotiate; appropriate expertise, capacity, and resources; feasibility of achieving common goals; legal accountability throughout; and risk mitigation.¹

¹ Most of these issues were addressed during this workshop and are summarized elsewhere in this report. The only one that was not discussed in extensive detail was brand complementarity. According to Finegood, clashing of a private brand and a nonprofit brand and the impact of

TABLE 4-1 Draft Tool for Assessing Partnerships

	Value of Item		
	Low	Medium	High
Initiation: Shall I engage in this partnership?			
Level of authentic trust			
Commonality of interests			
Brand complementarity			
Appropriate authority and mandate to negotiate			
Appropriate expertise, capacity, and resources			
Feasibility of achieving common goals			
Legal accountability throughout			
Risk mitigation (for media attention, public scrutiny)			
Development: If yes, how do we maintain our relationship?			
Leadership and champions identified			
Clarity of roles, responsibilities, accountabilities, jurisdiction, and commitment to completion			
Opportunity for sharing assets (e.g., reach, resources, influence)			
Commitment to and capacity for internal and external communications throughout			
Capacity for project and issues management			
Completion: And now that we have achieved our goals . . .			
Planning for project closure and celebration			
Evaluation of partnership is planned and resourced			

SOURCE: Diane Finegood and Margaret Rudolf.

2. *Development.* The second set of questions to consider when assessing partnerships pertains to the maintenance of the partnerships, including whether to disengage from a partnership. Again, based on work conducted during the Building Trust workshops, Finegood listed several questions, or issues, to consider when evaluating this development phase: identification of leaders and champions; clarity of roles, responsibilities, accountabilities, jurisdiction, and commitment to completion; opportunity for sharing assets; commitment to and capacity for internal and external communications; and capacity for project and issues management.
3. *Completion.* It is just as important to consider termination of the partnership as it is initiation and development. Many Building Trust workshop participants identified two key issues, or questions, to consider when evaluating the completion phase of a partnership: (1) whether

the clash on that partnership had a great deal to do with many Building Trust workshop participants identifying brand complementarity as an important issue.

project closure and completion have been planned and (2) whether evaluation of the partnership has been planned and resourced.

Reflecting on Workshop Participants' Own Best Practices

During the second breakout session, workshop participants were asked to think about past partnership experiences and to consider two questions. First, what benefits and risks of partnership should I be considering when determining the balance across all partners (e.g., money, in-kind resources, other assets)? Second, how do I determine the acceptability of a specific public-private partnership and whether I want to enter into that partnership? Groups were asked to report back to the group at large any common themes among responses to the second question only. Those report-back

BOX 4-1

Reflecting on Our Own Best Practices: Report-Back from the Second Breakout Session

Workshop participants were asked to think about partnership experiences they have already had and to consider how they determine the acceptability of a specific public-private partnership. Here is a summary of the "metrics of acceptability" identified by the mixed-sector breakout groups. The numbers in parentheses indicate the number of breakout groups (total of six) that identified that particular metric (although not necessarily with the language used here) as being important.

- **Agreement on a common agenda and goal, with return of investment for all partners (5).** One breakout group spokesperson said, "We want to make sure that there are some common goals or common approaches to what you want to achieve." Another breakout group emphasized that recognizing potential areas of disagreement and explicitly agreeing that those areas will not be addressed is an integral part of identifying where commonalities reside and, thus, where productive partnerships can be nurtured.
- **Contributions of partners, with each partner bringing something unique and complementary to the table and with all partners engaged and committed and not just signing on to the cause (5).** With respect to unique contributions, one breakout group spokesperson explained, "That doesn't necessarily mean a tremendous amount of expertise, although obviously you want that, but it could also mean that they bring something else to the table that's important, be it political power or something else." Another breakout group identified the importance of a balanced representation between "the usual players" and new players who bring with them the potential for innovation. Yet another group emphasized the importance of maintaining a balanced bias.

results are summarized in Box 4-1. As previously mentioned, the groups were mixed with respect to sector, with representatives from government, academia, industry, and NGOs present at each table. Thus, the breakout discussions and report-backs to the group at large represent diverse sets of voices.

Finewood observed that the report-back results were very closely aligned with the types of questions and issues that were included in the draft tool (Table 4-1). However, she emphasized the need to modify the language of the draft tool in order to make it more accessible to more potential partners. The breakout groups reported that many representatives from the different sectors identified the same key metrics of acceptability but that different language was sometimes used to articulate those metrics.

- **Compatibility, both individual and institutional (3)** (e.g., core values of the partners). With respect to individual compatibility, one breakout group spokesperson said, “We have to be able to get along. We don’t want to fight with each other at the table. If we have any issues with that, we might want to reconsider the relationship.”
- **Scope and extent of the project (3)**, including its feasibility and achievability.
- **Past partnership history and performance (2)** (e.g., proven track record of success, history of credibility).
- **Having clear procedural steps in place (2)**, including an operation plan or research design in place, metrics for measurement and evaluation, and procedural steps for opting out. With respect to evaluation, one breakout group emphasized the importance of a “built-in evaluation throughout the partnership” because a partnership is a “living entity that develops over time.”
- **Sense of authentic trust among the sectors that allows for adaptation and (anticipated) progress (2)**. Also, the manager of the partnership, if there is one, must be trusted by all parties.
- **Public trust (1)** (i.e., whether the public is going to react negatively to the partnership).
- **Apparent importance of solving the problem (1)**.
- **The absence of “nonstarters” (1)**. One breakout group spokesperson explained, “If there is a subject matter or something that just doesn’t align with the agenda of your organization, you might not want to get into that relationship” (e.g., tobacco and public health).
- **Benefits of participation considered against the risks and benefits of nonparticipation (1)**.

Opting Out

Importantly, decisions about cross-sector partnerships extend beyond whether to enter into a new partnership. As Castle pointed out, sometimes partners need to disengage from collaborations to which they have already committed. Castle remarked that an important feature of the Kraak and colleagues (2011) benefit-risk decision-making tree is that it includes decisions for disengagement alongside decisions for engagement. In voluntary partnerships, Castle said, “opting out as smoothly as you opt in should be a guiding light.” Marks noted that sometimes there are irresolvable ethical issues. He said, “Some kinds of partnership may not be appropriate in certain circumstances. It’s important to keep that in mind.”

Navigating the Ethics of Engagement²

Marks emphasized that from the perspective of the public sector and the academy, it is important to safeguard both integrity—including institutional integrity, individual integrity, and scientific integrity—and public trust. He stressed, “public trust extends beyond the legitimate but narrower concerns about conflicts of interest.” In navigating the ethics of public-private partnerships, Marks said it is important to keep in mind two elements: substantive criteria and procedural mechanisms, including some form of initial review, monitoring and evaluation, and ex post analysis. A discussion of ethics requires recognition that there are some cases where one should not engage in a public-private partnership and other cases where one should disengage, as raised in the previous section. Elaborating on this, Marks observed that some private institutions may not be appropriate partners, that some initiatives may not be suitable for public-private partnerships, and that some kinds of partnership may be inappropriate.

Marks suggested that workshop participants look to the substantive criteria and procedural mechanisms developed by the UNSCN and the WHO Partnership for Maternal, Newborn, and Child Health as models for navigating the ethics of public-private partnership engagement. Both entities have wrestled with conflicts of interest and the institutional and scientific integrity and public trust challenges created by private sector engagement in public sector efforts. Marks noted that he offered these examples as starting points for discussion.

The UNSCN produced a private-sector engagement policy in 2006 and a follow-up proposal in 2007 (UNSCN, 2006, 2007). Both documents contain a series of “principles of engagement”:

² This section summarizes Jonathan Marks’s presentation.

- relevance to UNSCN’s vision and mandate;
- effectiveness and efficiency of the partnership as it relates to UNSCN goals (i.e., the outcomes of the partnership should be aligned with achieving UNSCN goals, and the use of UNSCN’s resources should be appropriate when compared to alternative actions);
- management of conflicts of interest, including identifying the interests of partners, assessing potential conflicts of interest, and recognizing in some cases that exclusion is the appropriate response;
- independence from vested interests based on credibility concerns;
- transparency;
- diversity, such that no one type of private sector organization receives preferential treatment;
- differential safeguards, meaning the safeguarding of activities related to public policy making from corporate influence; and
- the promotion of and respect for human rights principles.

Both documents also differentiate among three types of engagement: (1) direct funding; (2) contributions in kind, including access to resources; and (3) dialogue.³ Marks noted that the policy effectively takes financial and in-kind contributions “off the table.” He quoted Rule 20 of the UNSCN 2007 document: “In order to protect against institutional conflict of interest, the Steering Committee will ensure that the SCN does not accept financial or in-kind contributions from food-related PSOs (private-sector organizations) for any of its activities, whether they are developed through Working Groups or through the Steering Committee/Secretariat based work plans.” With respect to other, non-food-related PSOs, the policy states in Rule 22 that direct funds and in-kind contributions can only come from PSOs with “satisfactory assessment ratings with regard to their performance on human rights, labour rights, environment and good governance criteria” (UNSCN, 2007).

The WHO PMNCH has made two attempts to develop a set of principles for private-sector engagement. The first attempt resulted in a set of five principles (based on the *WHO Policy Framework for Engaging and Working with the Commercial Private Sector*):

1. The interaction must demonstrate a clear added value for public health.
2. WHO must maintain its independence, in keeping with WHO policy on conflicts of interest. (Marks noted this requires more broadly

³ Although not of relevance to the UNSCN, these documents also identify joint delivery projects as a fourth potential type of engagement.

- maintaining objectivity and the three “I’s”: integrity, independence, and impartiality.)
3. The interaction should not be seen as an endorsement of a particular product or activity, nor should any private-sector entities be excluded at the benefit of others.
 4. Cooperation with the private sector should be transparent.
 5. WHO should not collaborate with companies who produce a product or engage in practices that will be detrimental to health or harm its reputation (WHO PMNCH, 2010).

More recently, Marks said, the PMNCH appears to have expanded and subtly modified this set of principles, such that there are now seven principles of private-sector engagement:

1. strategic alignment;
2. clear added value;
3. independence and impartiality;
4. no exclusivity;
5. transparency;
6. no conflicts of interest; and
7. process, with an emphasis on due diligence.

With respect to the seventh principle, the PMNCH calls for both risk assessment and risk management. Criteria for partner selection include a corporate track record of social responsibility and leadership, a history of commitment to development and health goals, a responsible environmental and labor practice, and a positive public image. Addressing the implications of these approaches for public–private partnerships related to food and nutrition, Marks said, “I do think that some kind of due diligence on the private sector partners will be vital when it comes to addressing public trust.”

Marks also stressed the importance of conducting what he called a “3-P impact assessment,” that is, an examination of the partnership before, during, and after the partnership has ended. Like an environmental impact assessment or a regulatory impact assessment, he said, “it’s really important to have that kind of assessment process.” Such assessments can help to identify gaps in the mission of the public partner left by even legitimate public–private partnerships, that is, ones that fulfill all substantive criteria and have all of the necessary procedural safeguards in place. Sometimes partnerships are so narrowly focused that they ignore other key objectives to which a public-sector entity is committed by statute or by virtue of its mission statement. Where there are legitimate concerns about failure to satisfy its mission, Marks suggested a necessary precondition for a public-sector actor entering into a public–private partnership on one initiative

might be that it would, at the same time, make a commitment to address another initiative that would otherwise be neglected.

Finally, Marks encouraged cultivation of what he called a “moral imagination.” Very rarely do ethical dilemmas have only two possibilities. Usually, there are at least half a dozen solutions to any problem, with one or two being terrible and the challenge being to identify the optimal solution among the others. He said, “As we face really complex social problems in relation to food and nutrition, it’s important to exercise and cultivate that moral imagination.” As an example of the type of problem requiring what Marks called “moral imagination,” he pointed to the pre-workshop survey data indicating concern among industry representatives that industry-funded research is not widely respected. He suggested reconsidering options that have been proposed in the past but set aside, such as capitation fees on industry-sponsored research or other mechanisms to generate funds for research that might not be in the direct interest of industry but would serve to create a rich body of food and nutrition research.

Cultivating Public Trust in the Food Industry

Marks’s comments triggered a lively discussion on the broader issue of public mistrust and the food industry, including whether mistrust of the food industry is the same as or greater than mistrust of the pharmaceutical industry. One participant viewed the two industries as equally problematic in the public eye and argued that because the pharmaceutical industry is able to engage in successful public–private partnership, the food industry should be able to do the same. The barriers should not be perceived as insurmountable. Yet, not everyone agreed. Another workshop participant said that on the contrary, people trust the food industry less than they trust the pharmaceutical industry. The question is, Why? Are there mechanisms used by the pharmaceutical industry that could be applied to help build public trust in the food industry?

It was suggested that perhaps the problem is with the public understanding, or misunderstanding, of risk and how the public thinks about risk in the context of food. In other words, pharmaceutical products come with risk, and the public is aware of that risk and accepts it because the potential benefits are so great. Public perception of food products, on the other hand, is that such products carry no risk at all and that the food industry is to be blamed for problems that arise. Castle identified two critical differences between the two industries, both of which make the pharmaceutical industry more predictable as an industry partner and, therefore, more trustworthy. First, the pharmaceutical industry tends to be more vertically integrated than the food industry, with the entire value chain controllable. Second, intellectual property management in the pharmaceutical industry is struc-

tured primarily around patents, whereas in the food industry it is structured primarily around trade secrets. Neither structure is “better,” Castle said, but there is predictability with the timeliness of public disclosure of patenting that does not exist with trade secrets. The greater predictability helps with managing uncertainties. Marks suggested that an important difference between the two industries is the higher quality of evidence of benefit versus risk required for pharmaceuticals. He referred workshop participants to a recent IOM (2010a) report *Evaluation of Biomarkers and Surrogate Endpoints in Chronic Disease* and its call for “the same level of scientific evidence of benefit and risk” for food as for drugs.

MOVING THE CONVERSATION FORWARD: THREE POSSIBLE PARTNERSHIP PROJECTS

During the third breakout session, workshop participants chose three topics in food and nutrition that could serve as good subjects for public-private collaboration: (1) obesity, specifically why the challenge of developing a public-private collaboration focused on obesity is different from other food and nutrition-related public health challenges; (2) food labeling and messaging; and (3) calorie reduction. Three breakout groups were formed, with workshop participants joining whichever group they wanted to join. The groups were asked to articulate a goal for a partnership on their topic and, using the draft assessment tool as a guide, to identify questions they should be asking about a potential partnership at this very early stage of the conversation. As with the second session, each breakout group included representatives from all sectors (i.e., government, academia, private industry, NGOs), and thus each report-back to the group at large reflects a collection of diverse voices.

Obesity

Obesity was mentioned several times during the course of the workshop as an example of the type of complex public health challenge requiring an “all-sails-up” approach. For example, Dietz commented on how the challenge of obesity is different from other public health challenges, such as increasing fruit and vegetable intake, because obesity itself is such a broad target. Its broad scope makes it difficult for partners to agree on a common agenda and achievable goal. Narrowing the target could alleviate some of that difficulty. As Finegood pointed out, narrowing the target sometimes also increases public acceptability of a partnership. Thus, the breakout group spent most of its time trying to narrow the target and identifying specific obesity-related issues that could be addressed through public-private collaboration.

Topics considered by the group included promotion of the desirability of healthy choices; better collection of data on marketing to children; and the promotion of fruits, vegetables, and grains. The one topic that received more attention than the others was the development of food technologies that promote healthy weight, for example, products with fewer calories per weight or volume. Several group members observed that focusing more narrowly on pro-healthy weight technologies would be less contentious than focusing more broadly on reducing overall calorie consumption. Many group members also raised the promotion of physical activity as another possible target for a public-private collaboration aimed at reducing obesity. As with pro-healthy weight technologies, focusing more narrowly on physical activity would be less contentious than focusing more broadly on reducing overall calorie consumption. As they said, “Nobody has to give up profit in order to promote physical activity.” A few participants in the group, however, cautioned that some public-interest NGOs and academics view this as a diversion of attention by the food industry from the products they manufacture and market to physical activity solutions, leading to stakeholder mistrust in the industry’s motives unless complementary activities (e.g., product reformulation, pledges and commitments to improve marketing practices) are also undertaken.

While the group did not explicitly pull from the draft assessment tool any metrics of acceptability, much of the discussion was centered on risk mitigation, with pro-healthy weight food technologies and the promotion of physical activity considered less threatening than other goals. The discussion of physical activity as a target led to some dialogue about whether there were any partners that would not be welcome at the table because of the risk of public mistrust. For example, would such a partnership exclude sugar-sweetened beverage companies? Some participants in the group expressed concern that excluding potential partners would actually increase the risk of mistrust. Finegood said that one of her take-home lessons from that particular breakout discussion was the notion of “safety in numbers,” that is, the more partners at the table the more likely is the partnership to be acceptable to the public.

Food Labeling and Messaging

The food labeling and messaging breakout group spent a great deal of time searching for common ground, that is, an area where all sectors could contribute and would benefit. One participant said, “We spent more than half our time just trying to get to what we were going to address.” The conversation progressed only to the point of identifying a common goal to develop a process for the qualification of biomarkers that can be useful in promoting healthy foods (e.g., biomarkers that clinicians could use as

predictors of health outcomes). To encourage wide participation, the focus of the initiative would be on the qualification process itself, not on any particular type of biomarker.

While the breakout group did not explicitly identify “risk mitigation” from the draft assessment tool as a key factor to consider when evaluating whether to enter into a public-private partnership aimed at developing a biomarker qualification process, it did address risk. Specifically, the group discussed the risk associated with not considering the legal issues that would have to be taken into account to ensure that this type of initiative, and the qualified biomarkers resulting from it, would actually be applicable in the market (i.e., that there would be no postmarket issues around how claims substantiated by the qualification process are being communicated). Likewise, while the group did not explicitly pick “commonality of interests” from the draft assessment tool as a key metric of acceptability, clearly it was an important focus of the conversation.

Calorie Reduction

The calorie reduction breakout group progressed the furthest in terms of identifying a goal for a public-private partnership around a specific issue *and* identifying key metrics of acceptability from the assessment tool. Many group members supported a focus of their hypothetical partnership on a behavioral research project on calorie reduction. These members identified two specific goals: (1) gauge people’s awareness of “know your number,” possibly using EPODE as a model, and (2) conduct a natural experiment on the impact of front-of-package calorie labeling, using the introduction of front-of-package labeling as a baseline and conducting multicenter clinical trials to evaluate the impact of reduced-calorie products in different communities.

From the draft assessment tool, many group members identified “level of authentic trust,” “commonality of interests,” and “risk mitigation” as key factors to consider when thinking about whether to engage in a behavioral research partnership; “clarity of roles, responsibilities, and accountabilities” as an important factor to consider when evaluating development of the partnership; and “evaluation,” not just of the research but also of the partnership itself, as a key factor to consider when assessing whether the partnership has reached its goal(s).

Reflections on Applying the Draft Assessment Tool to Possible Partnership Projects

Most participants reflected that discussing cross-sectoral collaboration in the context of concrete issues, such as those addressed during the

third breakout session (i.e., obesity, labeling and messaging, calorie reduction), is much more challenging than discussing collaboration in general terms. Finegood received a mixed response when she asked workshop participants how helpful the third breakout session had been compared to the first two. The mixed response led to some discussion about what, if anything, could have been done differently to push the breakout sessions further along in their conversations and what could be done next to push the next conversation(s) further along. For example, did the calorie reduction breakout group progress the furthest because, by chance, the “right group” of people had assembled? Would the other two breakout groups have progressed further if the groups had been assembled more selectively? Did NCI-USDA take the better approach in their meeting, by assembling the “right group” of people (i.e., research scientists) to identify topics for partnership—in that case, scientific research gaps—before discussing how those gaps could be filled through public–private collaboration? A participant who attended the NCI-USDA meeting said, “I think you can do it either way, but the bottom line is, as you move forward, you will always be going back and forth.” That is, even as a conversation moves forward into the specifics of a particular public–private partnership, at various times participants will have to revisit the basic premises of the partnership. It was suggested that having facilitators present in each group might have helped keep the groups on task. However, some people expressed concern that a facilitator might have been too restrictive at such an early point in the conversation and that one of the goals of the workshop was to “*openly explore*” opportunities for partnership.

MOVING BEYOND DISCUSSION TO ACTION

While there are many successful public–private partnerships to celebrate and many benefits to be gained by entering into such partnerships, risk and risk mitigation are clearly front and center in many people’s minds when thinking about public–private collaboration. McGinnis observed that all of the suggested topics, or projects, articulated during the third breakout session report-backs were ones that could be engaged without a great deal of threat to individual participants.

In his closing remarks, McGinnis identified three types, or “three buckets,” of reduced-risk activities. First are those that focus on what he called the “antecedents” to regulatory activities and product development. Most partners are unlikely to get involved in the regulatory process itself or in the actual development of products that are going to be marketed, but the antecedents to those events, he said, “can be ripe for collaborative work.” His comments echoed earlier remarks by Woteki, who pointed out the potentially very important role of collaborative work in the pre-competitive

research arena. The second bucket of potential collaborative activity is filled with activities that work “in parallel” to the marketing of products. Again, it is unlikely that individual companies are going to collaborate in marketing their products, but a number of parallel activities, such as social marketing or the sharing of information about the relationship between marketing and behavior, could be undertaken collaboratively. The third bucket is filled with “results,” or evaluation, of previous activities. For example, what is it about particular regulatory, research, or marketing processes that leads to certain results? He said, “All three of those areas have many opportunities for unthreatening, if you will, collaborative work.”

Additionally, as mentioned earlier, McGinnis identified four common interests among the different sectors that not only are appropriate for, but necessitate, collaborative action: (1) assessment (e.g., pooling data on eating habits and the impact of eating habits on weight and health status); (2) research (e.g., developing a common research agenda aimed at understanding variation in basic caloric requirements); (3) marketing (e.g., synergizing social marketing strategies aimed at improving healthy eating); and (4) vision (e.g., working together to develop a vision of what is possible). In McGinnis’s opinion, it is our “our obligation” to start with the assumption that action in any of these four areas “has to be collaborative” and to undertake these activities at the individual level only if collaborative efforts fail. He urged, “Our starting point should be that any activity in these arenas ought to be a collaborative effort.” With respect to tangible next steps, he suggested that Food Forum members consider establishing working groups to propose and assess possible collaborative projects, including possible participants, and the appropriate neutral venue or body to convene and coordinate them.

References

- Bar-Yam, Y. 2004. *Making things work: Solving complex problems in a complex world*. Boston, MA: Knowledge Press.
- Chrislip, D. D., and C. E. Larson. 1994. *Collaborative leadership: How citizens and civic leaders can make a difference*. San Francisco, CA: Jossey-Bass.
- Flegal, K. M., M. D. Carroll, C. L. Ogden, and L. R. Curtin. 2010. Prevalence and trends in obesity among U.S. adults, 1999-2008. *Journal of the American Medical Association* 303(3):235-241.
- Foresight. 2007. *Tackling obesities: Future choices—obesity system atlas*. UK Government Office for Science. <http://www.bis.gov.uk/assets/bispartners/foresight/docs/obesity/11.pdf> (accessed April 2, 2012).
- IOM (Institute of Medicine). 2010a. *Evaluation of biomarkers and surrogate endpoints in chronic disease*. Washington, DC: The National Academies Press.
- IOM. 2010b. *Providing healthy and safe foods as we age: Workshop summary*. Washington, DC: The National Academies Press.
- IOM. 2011. *Leveraging food technology for obesity prevention and reduction efforts: Workshop summary*. Washington, DC: The National Academies Press.
- Kraak, V. I., B. Swinburn, M. Lawrence, and P. J. Harrison. 2011. Accountability of public-private partnerships with food, beverage and quick-serve restaurant companies to address global hunger and the double burden of malnutrition. *SCN News* 39:11-24.
- NCHS (National Center for Health Statistics). 2011. *Health, United States, 2010: With special feature on death and dying*. Hyattsville, MD: NCHS.
- Solomon, R. C., and F. Flores. 2001. *Building trust in business, politics, relationships, and life*. New York: Oxford University Press.
- UNSCN (United Nations System Standing Committee on Nutrition). 2006. *SCN private sector engagement policy*. http://www.unscn.org/en/structure/scn_and_the_private_sector/ (accessed April 2, 2012).
- UNSCN. 2007. *A draft proposal for initiating SCN private sector engagement*. http://www.unscn.org/en/mandate/private_sector/ (accessed April 2, 2012).

- WHO PMNCH (World Health Organization Partnership for Maternal, Newborn, and Child Health). 2010. *Draft policy for engagement with the private sector—Principles for engagement*. http://www.who.int/pmnch/about/steering_committee/B9_10_7_1_principles_recommendations_pmnch_engagement.pdf. (accessed April 2, 2012).
- Woteki, C. (unpublished). *Informal survey of public-private partnerships in the U.S., Europe, and Australia*.

A

Workshop Agenda

Building Multisectoral Partnerships in Food and Nutrition: A Workshop

The Pew Charitable Trusts
901 E Street, NW, 10th floor
Washington, DC 20004
Carolinas Room

DAY 1: NOVEMBER 1, 2011

8:30 a.m. **Welcome and Introductions**
Michael Doyle, Food Forum Chair
University of Georgia

SESSION 1—FOUNDATION SETTING: THE IMPORTANCE OF PARTNERING

Goal: Explore two questions: (1) Why partner? and (2) What should partnering look like?

9:00 **Benefits and Risks of Partnerships**
Moderator: *David Castle, University of Edinburgh*

Panel:
Catherine Woteki, U.S. Department of Agriculture (USDA)
William Dietz, Centers for Disease Control and Prevention
Richard Black, Kraft Foods
Robert Post, USDA Center for Nutrition Policy and Promotion
Jonathan Marks, Pennsylvania State University

10:30 *Break*

10:45 **Framing the Dialogue on Partnerships—Reflecting on Our Sector’s Paradigms and Goals**

Facilitator: *Diane Finegood, Simon Fraser University*

- Report-back on the findings from the pre-meeting survey
- Guided small-group discussions and report-back

12:00 p.m. *Lunch*

SESSION 2—PARTNERSHIPS IN PRACTICE

Goals: (1) Exchange knowledge about current food and nutrition partnerships. (2) Understand better the factors that help build healthy partnerships and achieve meaningful results.

1:00 **Key Outcomes and Reflections from Other Meetings**

Cheryl Toner, National Cancer Institute

Sylvia Rowe, SR Strategy

Eric Hentges, ILSI (International Life Sciences Institute)

2:00 **Types of Relationships and Their Strategic Focus**

David Castle, University of Edinburgh

2:30 **Best Practices and Models—Reflecting on Our Own Best Practices and Approaches**

Facilitator: *Diane Finegood, Simon Fraser University*

- Guided small-group discussions and report-back
 - *How do I determine the acceptability of a specific public-private partnership?*
 - *How do I determine the feasibility of a specific public-private partnership?*
 - *What resources or assets do I have to offer in public-private partnerships?*
 - *What benefits and risks of partnership should be considered when determining the balance across all partners (e.g., money, in-kind resources, reach)?*

4:00 **Best Practices and Models—Examples from the Field**

Andrea Baruchin, Foundation for the National Institutes of Health

4:30 **Institutional Integrity, Public Trust, and the Ethics of
Public–Private Partnerships**
Jonathan Marks, Pennsylvania State University

5:00 *Adjourn*

DAY 2: NOVEMBER 2, 2011

SESSION 3—INITIATING PARTNERSHIPS

Goal: To foster dialogue, in small-group discussions, on the themes that have risen as common priorities for moving forward during the workshop.

8:30 a.m. **What Now? Translation to Topics of Mutual Interest**
(Small-Group Discussions)
Facilitators: *Diane Finegood and David Castle*

10:15 **Report-Back from Small-Group Discussions**

11:00 **Concluding Thoughts**
Michael McGinnis, Institute of Medicine

11:30 *Adjourn*

B

Speaker Biographical Sketches

Andrea Baruchin, Ph.D., is director of National Institutes of Health (NIH) Relations at the Foundation for the National Institutes of Health (FNIH). In this role she is the liaison between the FNIH and the institutes and centers of NIH. Important aspects of her job are to educate about the FNIH and its activities and to proactively seek FNIH projects that support the foundation's mission to foster public health through scientific discovery, translational research, and the dissemination of research results through specially configured, high-impact, public-private partnerships consistent with the priorities of NIH. Before joining the FNIH, Dr. Baruchin was chief of staff in the Office of Research at Vanderbilt University Medical Center. Dr. Baruchin also previously served as associate director of the Vanderbilt Brain Institute. Prior to working at Vanderbilt University, Dr. Baruchin was chief of science policy at the National Institute on Drug Abuse, NIH, and she also served as associate director for science policy in the Office of Science Policy and Program Planning at the National Institute of Mental Health, NIH. Dr. Baruchin received her B.S. in biology and her M.S. in natural sciences from the State University of New York at Buffalo and her Ph.D. in molecular neurobiology from the University of Pittsburgh.

Richard M. Black, Ph.D., is vice president of global nutrition and chief nutrition officer at Kraft Foods. In this role, he is responsible for leading corporate-wide nutrition programs: developing strategies, guidelines, and portfolio improvement opportunities and providing overall accountability for nutrition research, nutrition communications, and nutrition business applications. Prior to joining Kraft, Dr. Black represented different organi-

zations in a variety of technical and research positions. Most recently, he was executive director for the International Life Sciences Institute North America. As head of nutrition research, he worked at the Novartis Consumer Health Center in Switzerland guiding research in medical, health, and functional nutrition. At Nestlé in Canada, Dr. Black was director of scientific and regulatory affairs and manufacturing services. He was also manager of nutrition and scientific affairs at Kellogg Canada. At McMaster University, he received B.S. degrees in psychology and in chemistry and completed his Ph.D. in psychology. At the University of Toronto, Dr. Black did a postdoctoral fellowship in the Departments of Nutritional Sciences and Psychiatry, Faculty of Medicine, and subsequently served as assistant professor in the Department of Nutritional Sciences.

David Castle, Ph.D., is professor and chair of Innovation in the Life Sciences in the School of Political Science at the University of Edinburgh. His interests include innovation in the life sciences and social aspects of biotechnology, and his research focuses on the interaction between science and society, including democratic engagement, regulation and governance, and intellectual property and knowledge management. He has published dozens of peer-reviewed articles and book chapters and several books on the social dimensions of science, technology, and innovation. Dr. Castle has received several major research awards and has considerable experience leading strategic research initiatives and research project management. In addition, he has consulted widely for government and industry on issues such as the impact of national technology transfer policies and programs, intellectual property strategies for health research and development, and the role of nonscientific considerations in the regulation of science and technology.

William 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 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 the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). 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, as a past member of the NIDDK Task

Force on Obesity, and as a former president of the then American Society for Clinical Nutrition. Dr. Dietz was elected to the Institute of Medicine in 1998. He received a B.A. from Wesleyan University, M.D. from the University of Pennsylvania, and Ph.D. in nutritional biochemistry from MIT.

Diane T. Finegood, Ph.D., is professor in the Department of Biomedical Physiology and Kinesiology at Simon Fraser University, British Columbia. Dr. Finegood leads the Chronic Disease Systems Modeling Lab, which houses staff and students working to build maps, models, and solution-oriented frameworks to help address the problem of obesity. Dr. Finegood also serves as executive director of the CAPTURE Project (Canadian Platform to Increase Usage of Real-World Evidence), which aims to build a system to support the collection and use of practice and policy-relevant, “real-world” evidence. In 2008, Dr. Finegood completed her 8-year tenure as scientific director of the Canadian Institutes of Health Research, Institute of Nutrition, Metabolism and Diabetes (INMD). During her appointment, she guided Canada’s health research agenda across INMD’s mandate and within its strategic priority on obesity and healthy body weight. Dr. Finegood’s efforts helped to grow Canada’s obesity research and knowledge transfer efforts through support for research, development of innovative research programs, development of key partnerships, and innovative projects such as Canada on the Move and the Building Trust workshop series. Dr. Finegood received her M.Sc. in biomedical engineering from Northwestern University and her Ph.D. in physiology and biophysics from the University of Southern California.

Eric Hentges, Ph.D., joined the International Life Science Institute, North America (ILSI-NA), as executive director in 2007. ILSI-NA is a nonprofit organization located in Washington, DC, that provides a forum for academic, government and industry scientists to identify and resolve nutrition and food safety issues important to the health of the public. Prior to this appointment he served as the executive director of the U.S. Department of Agriculture’s (USDA’s) Center for Nutrition Policy and Promotion. In this position he had oversight of the USDA’s involvement in the development of the 2005 *Dietary Guidelines for Americans* and MyPyramid food guidance system. Dr. Hentges has more than 25 years of experience directing nutrition research, priority planning, and administration of competitive research grant programs for several national organizations. Additionally, he has led the development and implementation of nutrition education programs and consumer market research programs. Dr. Hentges holds degrees from Iowa State University, Auburn University, and Oklahoma State University. He is a member of the American Society for Nutrition and the Institute of Food Technologists.

Jonathan H. Marks is associate professor of bioethics, humanities, and law at Pennsylvania State University, where he is also director of the Bioethics Program and associate director of the Rock Ethics Institute. Mr. Marks is currently a nonresidential fellow at the Edmond J. Safra Center for Ethics at Harvard University. He leads a collaborative research project exploring the ethical and policy implications of industry sponsorship of health-related food research, nutrition education, and practice. In 2008, he was co-organizer—with Donald B. Thompson, professor of food science at Pennsylvania State University—of a workshop sponsored by the Rock Ethics Institute on the Ethical Challenges and Policy Implications of Industry-Funded Health-Related Food Research. The current research collaboration builds on that workshop. Mr. Marks has published widely on the intersections of law, ethics (including professional ethics), and policy, and his work has appeared in the *New England Journal of Medicine*, *American Journal of Law and Medicine*, *American Journal of Bioethics*, and *Hastings Center Report*. He has also authored or co-authored op-eds for the *New York Times*, *Los Angeles Times*, and *The Times* (London). Mr. Marks spent 2009-2011 in residence at the Edmond J. Safra Center for Ethics at Harvard and, prior to joining Penn State, was a Greenwall fellow in bioethics at Georgetown and Johns Hopkins Universities. Mr. Marks is also a barrister and founding member of Matrix Chambers, London.

Michael McGinnis, M.D., M.P.P., is a physician, epidemiologist, and long-time contributor to national and international health programs and policy. He now is senior scholar and director of the Institute of Medicine's (IOM's) Roundtable on Value & Science-Driven Health Care, as well as an elected IOM member. Much of his policy leadership stems from his four-administration tenure, perhaps unique among federal appointees, with continuous service through the Carter, Reagan, Bush, and Clinton administrations as the key point person for disease prevention and health promotion. Several still-prominent initiatives were launched under his guidance, including the *Healthy People* national goals and objectives process, the *Dietary Guidelines for Americans*, and the U.S. Preventive Services Task Force. Internationally, he served as epidemiologist and state director for the successful World Health Organization smallpox eradication program in India and, more recently, as chair of the international task force to rebuild the health and human services sector in postwar Bosnia.

Robert C. Post, Ph.D., M.Ed., M.Sc., is deputy director of the Center for Nutrition Policy and Promotion an agency of the U.S. Department of Agriculture (USDA). He serves as an adviser to the under secretary for food, nutrition, and consumer services and serves collaboratively with the executive director on a broad range of policy, organizational, and technical

issues that focus on improving the health of Americans by developing and promoting dietary guidance that links scientific research to the nutrition needs of consumers. A primary goal for Dr. Post is to create remarkable ways to promote positive changes in the nutrition and health habits of Americans through a variety of effective educational and marketing tools, such as MyPyramid (MyPyramid.gov). He is dedicated to creating innovative promotional and outreach programs that help Americans make small steps toward improved dietary behaviors where they shop, work, play, and prepare foods. Dr. Post has been awarded certificates of merit for his technical competence and leadership qualities in directing many vital USDA and interagency projects. He has also authored more than 75 technical papers and publications. Dr. Post holds a Ph.D. in public health and science education policy and program administration from the University of Maryland, where he also earned an M.Ed. in health communications, media, and technology; an M.S. in food science and microbiology; and a B.S. in food science and biochemistry.

Sylvia B. Rowe, M.A., is currently president of SR Strategy, LLC, pursuing communications and issues management consulting on a broad range of health, nutrition, food safety, and risk issues. She is also an adjunct professor at the University of Massachusetts Amherst and Tufts Friedman School of Nutrition Science and Policy. Previously, Ms. Rowe served as president and chief executive officer of the International Food Information Council (IFIC) and the IFIC Foundation, in Washington, DC. She has served on several boards and advisory committees of the following: the American Heart Association's Council on Nutrition, Physical Activity, and Metabolism; American Society of Association Executives Foundation; Food Update Foundation; Tufts University School of Nutrition Science and Policy Graduate Program in Nutrition Communication; University of Rochester Medical Center Nutrition Academic Award Program; Food and Drug Law Institute; Society for Nutrition Education Foundation; and Maryland Title IX Commission. She is also a member of the International Women's Leadership Forum, National Press Club, American Newswomen's Club, American Society of Association Executives, and Institute of Food Technologists. Ms. Rowe received a B.A. from Wellesley College and an M.A. from Harvard University, both with honors.

Cheryl Toner, M.S., R.D., is currently serving as a fellow to the Nutritional Science Research Group, Division of Cancer Prevention, National Cancer Institute. In her role there, she is exploring ways to facilitate dialogue and research collaboration between NIH and the food-related industries in order to bridge gaps between nutrition science and the food supply. Cheryl runs a consulting business in the Washington, DC, area, providing commu-

nication and strategy services to organizations with a focus on food, health, and wellness. She is also actively involved in the American Dietetic Association, currently serving as the member services director for the Sports, Cardiovascular, and Wellness Nutrition Practice Group. Prior to launching CDT Consulting, LLC, in 2007, Cheryl directed nutrition and food safety communication programs for the International Food Information Council. She earned a B.S. in nutrition at the University of Houston and an M.S. in nutrition at Texas Woman's University, and she completed her dietetic internship at the Houston Veterans Affairs Medical Center.

Catherine Woteki, Ph.D., is under secretary for the U.S. Department of Agriculture's (USDA's) Research, Education, and Economics (REE) mission area and the department's chief scientist. Before joining USDA, Dr. Woteki served as global director of scientific affairs for Mars, Inc., where she managed the company's scientific policy and research on matters of health, nutrition, and food safety. From 2002 to 2005, she was dean of agriculture and professor of human nutrition at Iowa State University. Dr. Woteki served as the first under secretary for food safety at USDA from 1997 to 2001, where she oversaw U.S. government food safety policy development and USDA's continuity of operations planning. Dr. Woteki also served as the deputy under secretary for REE at USDA in 1996. Prior to joining USDA, Dr. Woteki served in the White House Office of Science and Technology Policy as deputy associate director for science from 1994 to 1996. Dr. Woteki has also held positions in the National Center for Health Statistics of the U.S. Department of Health and Human Services (1983-1990), in the Human Nutrition Information Service at USDA (1981-1983), and as director of the Food and Nutrition Board of the Institute of Medicine (IOM) of the National Academy of Sciences (1990-1993). In 1999, Dr. Woteki was elected to the IOM, where she has chaired the Food and Nutrition Board (2003-2005). She received her M.S. and Ph.D. in human nutrition from Virginia Polytechnic Institute and State University. Dr. Woteki received her B.S. in biology and chemistry from Mary Washington College.

C

Workshop Attendees

Adam Adams
Mars, Inc.

Richard Black
Kraft Foods

Frank Busta
University of Minnesota

David Castle
University of Edinburgh

Paul Coates
National Institutes of Health
(NIH), Office of Dietary
Supplements

J.B. Cordaro
Mars, Inc.

Susan Crockett
General Mills

Richard D'Aloisio
Kraft Foods

Francesca Dea
The Obesity Society

Eric Decker
University of Massachusetts

William Dietz
Centers for Disease Control and
Prevention

Michael Doyle
University of Georgia

Marianne Smith Edge
International Food Information
Council (IFIC)

Merita Emini-Sadiku
American Society for Nutrition

Diane Finegood
Simon Fraser University

Cindy Goody
McDonald's

Sonya Grier
American University

Jonathan Marks
Pennsylvania State University

Eric Hentges
International Life Sciences Institute
(ILSI)

Len Marquart
University of Minnesota

Kate Houston
Cargill

Michael McGinnis
Institute of Medicine (IOM)

Terry T-K. Huang
University of Nebraska Medical
Center

John Milner
NIH, National Cancer Institute
(NCI)

Van Hubbard
NIH, Division of Nutrition
Research Coordination
(DNRC)

Erik Olson
The Pew Charitable Trusts

Susan Pitman
FoodMinds, LLC

Wendy Johnson-Askew
Nestlé

Robert Post
USDA, CNPP

Lee Johnston
Simon Fraser University

Leslie Pray
Science Writer

Molly Kretsch
U.S. Department of Agriculture
(USDA)

Elizabeth Rahavi
IFIC

Alison Kretser
ILSI

Sarah Roller
Kelley Drye & Warren LLP

Marge Leahy
Coca-Cola

Sylvia Rowe
SR Strategy

Jessica Leighton
Food and Drug Administration
(FDA), Office of Foods

Barbara O. Schneeman
FDA, Center for Food Safety and
Applied Nutrition (CFSAN)

Shelley Maniscalco
USDA, Center for Nutrition Policy
and Promotion (CNPP)

Pamela Starke-Reed
NIH, DNRC

Lisa Sutherland
Kellogg

Parke Wilde
Tufts University

Donald Thompson
Pennsylvania State University

Catherine Woteki
USDA

Cheryl Toner
NIH, NCI

IOM Staff

Paula Trumbo
FDA, CFSAN

Allison Berger
Geraldine Kennedo
Linda Meyers
Laura Pillsbury

Taylor Wallace
Council for Responsible Nutrition

