

Free Executive Summary



Food Marketing to Children and Youth: Threat or Opportunity?

Committee on Food Marketing and the Diets of Children and Youth, J. Michael McGinnis, Jennifer Appleton Gootman, Vivica I. Kraak, Editors

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Creating an environment in which children in the United States grow up healthy should be a high priority for the nation. Yet the prevailing pattern of food and beverage marketing to children in America represents, at best, a missed opportunity, and at worst, a direct threat to the health prospects of the next generation. Children's dietary and related health patterns are shaped by the interplay of many factors—their biologic affinities, their culture and values, their economic status, their physical and social environments, and their commercial media environments—all of which, apart from their genetic predispositions, have undergone significant transformations during the past three decades. Among these environments, none have more rapidly assumed central socializing roles among children and youth than the media. With the growth in the variety and the penetration of the media have come a parallel growth with their use for marketing, including the marketing of food and beverage products. What impact has food and beverage marketing had on the dietary patterns and health status of American children? The answer to this question has the potential to shape a generation and is the focus of Food Marketing to Children and Youth. This book will be of interest to parents, federal and state government agencies, educators and schools, health care professionals, industry companies, industry trade groups, media, and those involved in community and consumer advocacy.

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Executive Summary

Creating an environment in which children and youth can grow up healthy should be a very high priority for the nation. Yet the prevailing pattern of food and beverage marketing to children in America represents, at best, a missed opportunity, and, at worst, a direct threat to the health of the next generation. Dietary patterns that begin in childhood give shape to the health profiles of Americans at all ages. Because these patterns reflect the intersecting influences of our cultural, social, and economic environments, ensuring that these environments support good health is a fundamental responsibility, requiring leadership and action from all sectors.

The dramatic rise in the number of U.S. children and youth who are obese, have type 2 diabetes, and are at increased risk for developing obesity and related chronic diseases in adulthood, is a matter of national concern. Obesity among children and youth has more than tripled over the past four decades—from about 5 percent in 6- to 19-year-olds in the 1960s to 16 percent in 1999–2002. More than 9 million U.S. children and youth are obese and another 15 percent are at risk for becoming obese. The prevalence of type 2 diabetes among children and youth—previously known as “adult-onset” diabetes—has more than doubled in the past decade.

As a society, we have moved well beyond the era when our dietary focus was on ensuring caloric sufficiency to meet basic metabolic needs. We are now confronted with nutritional inadequacy of a different sort. Diets that are high in calories and other constituents such as saturated fats, and low in certain nutrients are putting our children and youth at risk for diseases later in life, such as heart disease, stroke, circulatory problems,

some cancers, diabetes, and osteoporosis. Parents, communities, the government, public health sector, health care systems, and private enterprise all face significant challenges to create an environment for our children and youth that turns the course and enhances their prospects for healthy lives.

DIETARY PATTERNS FOR CHILDREN AND YOUTH

Health-related behaviors such as eating habits and physical activity patterns develop early in life and often extend into adulthood. A healthful and balanced diet provides recommended amounts of nutrients and other food components to promote normal growth and development, reduce chronic disease risk, and foster appropriate energy balance and a healthy weight trajectory. Yet the diets of America's children and adolescents depart substantially from recommended patterns that puts their health at risk. Although there have been some improvements with respect to the intake of certain micronutrients, overall our children and youth are not achieving basic nutritional goals. They are consuming excess calories and added sugars and have higher than recommended intakes of sodium, total fat, and saturated fats. Moreover, dietary intakes of whole grains, fiber, calcium, potassium, magnesium, and vitamin E are well below recommendations and are sufficiently low to warrant concern. Adolescent girls and low-income toddlers are especially at risk for inadequate intakes of iron.

The result is that the health of children and adolescents is not as good as it should or could be. Because of improvements in immunization levels, injury rates, and the availability of and access to children's services, death and disease rates for children are generally low. But more sedentary lifestyles and diets that are too high in calories, fat, sugars, and sodium, are putting children's futures at risk. Those who are poor face the greatest risk, as a result of their already greater health, social, and nutrition disparities.

If children and youth of all income and ethnic groups are to develop dietary patterns that will provide lifelong health promotion and disease prevention benefits, their diets will need to change significantly. They need to increase their intakes of fruits, vegetables, legumes, whole grains, and low-fat dairy products, and reduce their intakes of high-calorie and low-nutrient foods and beverages, including snack foods and sweetened beverages.

The dietary and related health patterns of children and youth result from the interplay of many factors (Figure ES-1)—genetics and biology, culture and values, economic status, physical and social environments, and commercial and media environments—all of which, apart from genetic predispositions, have undergone significant transformation over the past three decades. Among the various environmental influences, none has more rapidly assumed a central socializing role for young people than the media,

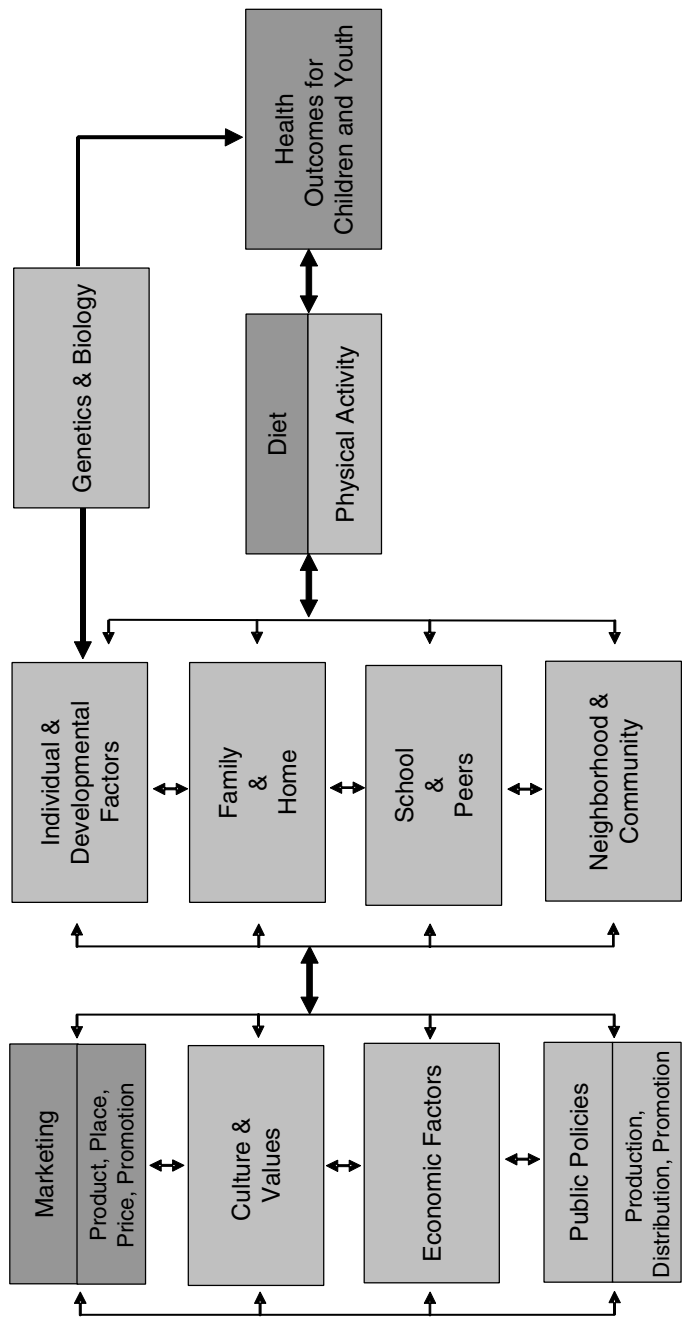


FIGURE ES-1 Influences on the diets and related health outcomes of children and youth.

in its multiple forms. With its growth in variety and penetration has come a concomitant growth in the promotion of branded food and beverage products in the marketplace, and the influence addressed in this report on the diet and related health patterns of children and youth.

FOOD AND BEVERAGE MARKETING

The commercial advertising and marketing of foods and beverages influences the diets and health of children and youth. With annual sales now approaching \$900 billion, the food, beverage, and restaurant industries take a central place in the American marketplace. Total marketing investments by these industries have not been clearly identified, although advertising alone accounted for more than \$11 billion in industry expenditures in 2004, including \$5 billion for television advertising. Television remains the primary promotional vehicle for measured media marketing, but a shift is occurring toward unmeasured sales promotion, such as marketing through product placement, character licensing, special events, in-school activities, and advergames. In fact, only approximately 20 percent of all food and beverage marketing in 2004 was devoted to advertising on television, radio, print, billboards, or the Internet.

Children and youth represent a primary focus of food and beverage marketing initiatives. Between 1994 and 2004, the rate of increase in the introduction of new food and beverage products targeted to children and youth substantially outpaced the rate for those targeting the total market. An estimated more than \$10 billion per year is spent for all types of food and beverage marketing to children and youth in America. Moreover, although some very recent public announcements by some in the industry suggest an interest in change, the preponderance of the products introduced and marketed to children and youth have been high in total calories, sugars, salt, and fat, and low in nutrients.

How this marketing affects children and youth is the focus of this report. The process begins early in life. Children develop consumer socialization skills as they physically and cognitively mature. Over the span of ages 2–11 years, they develop consumption motives and values as they are exposed to commercial activities; they develop knowledge about advertising, products, brands, pricing, and shopping; and they begin to develop strategies for purchase requests and negotiation. The family is the first socializing agent, as parents and older siblings act as sources of information and provide social support and pressure that affect children's behaviors.

Media now have a more central role in socializing today's children and youth than ever before. Advertising and marketing messages reach young consumers through a variety of vehicles—broadcast and cable television, radio, magazines, computers through the Internet, music, cell

phones—and in many different venues—homes, schools, child-care settings, grocery stores, shopping malls, theaters, sporting events, and even airports. Virtually all children ages 2–18 years now live in households with a television, and more than half of today’s children and youth report that their families have no rules for television viewing. Children and youth under the age of 18 years comprise 20 percent of those using the Internet. Myriad marketing approaches are now available, and targeted and integrated marketing has become more prevalent.

With new outlets, attractions, and tools, children and youth represent a powerful demographic force. Collectively, children and youth spend more than \$200 billion annually, and they influence many food and beverage purchases beyond those they make directly. Although children’s choices are strongly influenced by their parents and siblings, they are increasingly making decisions at younger ages in the marketplace, either in ways that are independent of parental guidance, or as agents influencing the choices and purchasing decisions of their parents and caregivers. Of the various items that children and youth purchase and influence, food and beverages—particularly candy, carbonated soft drinks, and salty snacks—consistently represent the leading categories.

An important issue in discussions about the influence of food and beverage advertising and marketing reaching children and youth relates to the stages of discernment. Before a certain age, children lack the defenses, or skills, to discriminate commercial from noncommercial content, or to attribute persuasive intent to advertising. Children generally develop these skills at about age 8 years, but children as old as 11 years may not activate their defenses unless explicitly cued to do so. Concern about young children’s limited ability to comprehend the nature and purpose of advertising, and about the appropriateness or impact of food marketing to which younger children might be exposed, led to a Federal Trade Commission (FTC) rulemaking process in the late 1970s on the question of whether advertising to young children should be restricted or banned as a protective measure. Congress eventually intervened, and the FTC terminated the rulemaking in 1981.

The question persists, however, about the effects of advertising exposure on children, and it has been deepened and broadened by a developing appreciation of the influence of environmental signals on personal behaviors, regardless of age; by the expansion and the nature of youth and child-oriented food and beverage products in the marketplace; by the dramatic augmentation of strategic tools and vehicles for marketing activities; and, in particular, by concern about the relation of the marketing environment, among the multiple influences, to the rapid growth of childhood obesity in the United States.

This concern is not unique to the United States. In addition to the

discussions in this country, several related activities have been initiated in other countries and through international organizations. Certain countries have instituted formal bans or restrictions on televised food and beverage advertising to children. Others have undertaken reviews of the issue. Prior to this study, the most recent systematic evidence review of the scientific literature was the report of Hastings and colleagues in 2003, sponsored by the Food Standards Agency in the United Kingdom. That study found that food advertising to children affected children's preferences, purchase behaviors, and consumption, not just for different brands but also for different food and beverage categories. In 2004, the World Health Assembly, drawing on a number of key documents, endorsed marketing practices and policies that acknowledged the vulnerability of children and encouraged marketing practices that promote healthful foods and beverages. Our review has been undertaken in a context of global interest in the issue.

COMMITTEE APPROACH AND EVIDENCE REVIEW

The Committee on Food Marketing and the Diets of Children and Youth was established in 2004. Its charge was to explore what is known about current food and beverage marketing practices, the influence of these practices on the diets and health of U.S. children and youth, and public and private strategies that have been used or could be used to promote healthful food and beverage choices among children and youth. The committee recognizes that a variety of interacting factors affect the health and weight of children and youth, including societal norms, culture, socioeconomic factors, race/ethnicity, education, and physical activity. Although important, these are not the subject of this report, which specifically examines the role of food and beverage marketing in the diets of children and youth.

The committee drew on multiple sources of evidence in its review, including peer-reviewed literature, as well as industry and marketing sources. Particular attention and emphasis was given to the development and implementation of a disciplined process of gathering, classifying, and considering the available scientific literature relevant to the committee's charge. Articles identified in an initial search of the literature were scanned for relevance and methodologic rigor. Approximately 200 of the strongest and most pertinent articles were further reviewed and, of these, 123 were subjected to a systematic evidence review using a protocol established by the committee. Each study was coded on several dimensions, including the relationship of marketing to diet, the cause and effect variables studied, the methods used, and the comparative relevance of the evidence. The results drawn from this assessment provide much of the foundation for the recommendations of this report and are discussed in Chapter 5.

It is important to underscore several points about the literature. First, the importance of this issue commands much more study. Although thousands of papers touch on the topic, the number of carefully designed studies is far too limited for a problem that may so substantially affect the nation's health and that is so intrinsically complicated. Second, the available peer-reviewed literature focuses predominantly on television advertising, but food and beverage marketing extends far beyond television and is changing rapidly to include integrated marketing campaigns that extend to new media platforms that target multiple venues simultaneously. Virtually no scientific studies are available to assess these other techniques. Third, the great bulk of the available research that deals with health outcomes involves direct measures only of overall television viewing, not exposure to television advertising. Because the overall amount of television viewing is highly correlated with the amount of exposure to television advertising, this measurement strategy is informative, but interpretation requires adjusting for other factors, such as sedentary behavior, snacking frequency, or the types of foods consumed. Finally, the committee acknowledges that there are certain constraints that apply to any literature of this sort. It concludes that although publication bias is possible in such research, if it exists it is small and would not influence the conclusions of the report.

On the matter of characterizing commercial marketing practices and trends, the committee faced several notable challenges. Substantial proprietary market research data were either not publicly accessible, or available only for purchase at considerable cost and with prohibitive constraints on public use of the data. Public use provisions were required because the National Academies are subject to section 15 of the Federal Advisory Committee Act of 1997, which requires that the National Academies make available to the public all written materials presented to an expert committee in order for its recommendations to be used by a sponsoring government agency. The result was highly limited availability to the committee of potentially relevant proprietary information that could be considered for the review.

The committee was also asked, if feasible, to estimate costs and provide benchmarks to evaluate progress. Because of the complexity of the issues, the multiplicity of stakeholders, and the unavailability of data necessary on which to establish estimates and baselines, the committee lacked the evidence and resources to address these dimensions with confidence. As noted below, it did, however, include in its recommendations the designation of a public agency responsible for tracking progress, and the establishment of a mechanism for commercial marketing data to be made available as a publicly accessible resource, so that such estimates and benchmarks could be developed and tracked in the future.

KEY FINDINGS

The committee's review indicates that, among many factors, food and beverage marketing influences the preferences and purchase requests of children, influences consumption at least in the short term, is a likely contributor to less healthful diets, and may contribute to negative diet-related health outcomes and risks among children and youth. The literature indicates relationships among marketing, dietary precursors, diets, diet-related health, and, in particular, adiposity (body fatness).

Specifically, the committee's systematic evidence review found that:

With respect to *dietary precursors*, food and beverage advertising on television has some influence on the preferences and purchase requests of children and youth:

- There is strong evidence that television advertising influences the food and beverage preferences of children ages 2–11 years. There is insufficient evidence about its influence on the preferences of teens ages 12–18 years.
- There is strong evidence that television advertising influences the food and beverage purchase requests of children ages 2–11 years. There is insufficient evidence about its influence on the purchase requests of teens ages 12–18 years.
- There is moderate evidence that television advertising influences the food and beverage beliefs of children ages 2–11 years. There is insufficient evidence about its influence on the beliefs of teens ages 12–18 years.
- Given the findings from the systematic evidence review of the influence of marketing on the precursors of diet, and given the evidence from content analyses that the preponderance of television food and beverage advertising relevant to children and youth promotes high-calorie and low-nutrient products, it can be concluded that television advertising influences children to prefer and request high-calorie and low-nutrient foods and beverages.

With respect to *diets*, food and beverage advertising on television has some influence on the dietary intake of children and youth:

- There is strong evidence that television advertising influences the short-term consumption of children ages 2–11 years. There is insufficient evidence about its influence on the short-term consumption of teens ages 12–18 years.
- There is moderate evidence that television advertising influences the usual dietary intake of younger children ages 2–5 years and weak evidence that it influences the usual dietary intake of older children ages 6–

11 years. There is also weak evidence that it does *not* influence the usual dietary intake of teens ages 12–18 years.

With respect to *diet-related health*, food and beverage advertising on television is associated with the adiposity (body fatness) of children and youth:

- Statistically, there is strong evidence that exposure to television advertising is associated with adiposity in children ages 2–11 years and teens ages 12–18 years.
- The association between adiposity and exposure to television advertising remains after taking alternative explanations into account, but the research does not convincingly rule out other possible explanations for the association; therefore, the current evidence is not sufficient to arrive at any finding about a causal relationship from television advertising to adiposity. It is important to note that even a small influence, aggregated over the entire population of American children and youth, would be consequential in impact.

Most children ages 8 years and under do not effectively comprehend the persuasive intent of marketing messages, and most children ages 4 years and under cannot consistently discriminate between television advertising and programming. The evidence is currently insufficient to determine whether or not this meaningfully alters the ways in which food and beverage marketing messages influence children.

CONCLUSIONS AND RECOMMENDATIONS

The prevalence of obesity in children and youth has occurred in parallel with significant changes in the U.S. media and marketing environments. This relationship has led to the committee's primary inquiry about what the available data indicate as to the influence of food and beverage marketing on the diets and health of American children and youth. This issue was the focus of the committee's systematic evidence review which is described in Chapter 5 and Appendix F.

Embedded in relevant sections throughout the text of the report, the committee presents findings in these key dimensions: health, diet, and eating patterns of children and youth; food and beverage marketing to children and youth; the influence of food and beverage marketing on the diets and diet-related health of children and youth; and the policy environment. These findings are listed again in Chapter 7. Based on these findings, the committee has identified five broad conclusions that serve as the basis for its recommendations (Box ES-1).

Reflective of the responsibilities of multiple sectors, the committee's recommendations address actions related to food and beverage production, processing, packaging, and sales; marketing practice standards; media and

BOX ES-1
Broad Conclusions

- Along with many other intersecting factors, food and beverage marketing influences the diets and health prospects of children and youth.
- Food and beverage marketing practices geared to children and youth are out of balance with healthful diets and contribute to an environment that puts their health at risk.
- Food and beverage companies, restaurants, and marketers have underutilized potential to devote creativity and resources to develop and promote food, beverages, and meals that support healthful diets for children and youth.
- Achieving healthful diets for children and youth will require sustained, multisectoral, and integrated efforts that include industry leadership and initiative.
- Public policy programs and incentives do not currently have the support or authority to address many of the current and emerging marketing practices that influence the diets of children and youth.

entertainment initiatives; parents, caregivers, and families; school environments; and public policy. Recommendations are also offered for research activities necessary to chart the path of future improvements, and the monitoring capacity to track improvements in marketing practices and their influence on children's and youths' diets and health. These recommendations reflect the current context and information in a rapidly changing environment, and should be implemented together as a package to support and complement one another.

Food and Beverage Production and Promotion

Central to making progress toward more healthful diets for children and youth will be carefully designed and sustained commitments by the food, beverage, and quick serve restaurant industries to promote the availability, accessibility, affordability, and appeal of nutritious foods and beverages.

Recommendation 1: *Food and beverage companies should use their creativity, resources, and full range of marketing practices to promote and support more healthful diets for children and youth.*

To implement this recommendation, companies should

- Shift their product portfolios in a direction that promotes new and

reformulated child- and youth-oriented foods and beverages that are substantially lower in total calories, lower in fats, salt, and added sugars, and higher in nutrient content.

- Shift their advertising and marketing emphasis to child- and youth-oriented foods and beverages that are substantially lower in total calories, lower in fats, salt, and added sugars, and higher in nutrient content (see later recommendations on public policy and monitoring).
- Work with government, scientific, public health, and consumer groups to develop and implement labels and advertising for an empirically validated industrywide rating system and graphic representation that is appealing to children and youth to convey the nutritional quality of foods and beverages marketed to them and their families.
- Engage the full range of their marketing vehicles and venues to develop and promote healthier appealing and affordable foods and beverages for children and youth.

Recommendation 2: *Full serve restaurant chains, family restaurants, and quick serve restaurants should use their creativity, resources, and full range of marketing practices to promote healthful meals for children and youth.*

To implement this recommendation, restaurants should

- Expand and actively promote healthier food, beverage, and meal options for children and youth.
- Provide calorie content and other key nutrition information, as possible, on menus and packaging that is prominently visible at the point of choice and use.

Recommendation 3: *Food, beverage, restaurant, retail, and marketing industry trade associations should assume transforming leadership roles in harnessing industry creativity, resources, and marketing on behalf of healthful diets for children and youth.*

To implement this recommendation, trade associations should

- Encourage member initiatives and compliance to develop, apply, and enforce industry-wide food and beverage marketing practice standards that support healthful diets for children and youth.
- Provide technical assistance, encouragement, and support for members' efforts to emphasize the development and marketing of healthier foods, beverages, and meals for children and youth.
- Exercise leadership in working with their members to improve the availability and selection of healthful foods and beverages accessible at

eye level and reach for children, youth, and their parents in grocery stores and other food retail environments.

- Work to foster collaboration and support with public-sector initiatives promoting healthful diets for children and youth.

Marketing Practice Standards

A reliable barometer of the commitment of the members of the food, beverage, and restaurant industries to promote the nutritional health of children and youth will be the rigor of the standards they set and enforce for their own marketing practices.

Recommendation 4: *The food, beverage, restaurant, and marketing industries should work with government, scientific, public health, and consumer groups to establish and enforce the highest standards for the marketing of foods, beverages, and meals to children and youth.*

To implement this recommendation, the cooperative efforts should

- Work through the Children's Advertising Review Unit (CARU) to revise, expand, apply, enforce, and evaluate explicit industry self-regulatory guidelines beyond traditional advertising to include evolving vehicles and venues for marketing communication (e.g., the Internet, advergames, branded product placement across multiple media).
- Assure that licensed characters are used only for the promotion of foods and beverages that support healthful diets for children and youth.
- Foster cooperation between CARU and the Federal Trade Commission in evaluating and enforcing the effectiveness of the expanded self-regulatory guidelines.

Media and Entertainment Initiatives

Because no element of the lives of Americans has a broader reach than the media and entertainment industry, their opportunities and responsibilities are great to depict and promote healthful diets and eating habits among children and youth.

Recommendation 5: *The media and entertainment industry should direct its extensive power to promote healthful foods and beverages for children and youth.*

To implement this recommendation, media, and the entertainment industry should

- Incorporate into multiple media platforms (e.g., print, broadcast, cable, Internet, and wireless-based programming) foods, beverages, and storylines that promote healthful diets.
- Strengthen their capacity to serve as accurate interpreters and reporters to the public on findings, claims, and practices related to the diets of children and youth.

Parents, Caregivers, and Families

Parents and families remain the central influence on children's attitudes and behaviors, and social marketing efforts that aim to improve children's and youths' diets therefore must be tied directly to that influence.

Recommendation 6: Government, in partnership with the private sector, should create a long-term, multifaceted, and financially sustained social marketing program supporting parents, caregivers, and families in promoting healthful diets for children and youth.

To implement this recommendation

- Elements should include the full range of evolving and integrated marketing tools and widespread educational and community-based efforts, including use of children and youth as change agents.
- Special emphasis should be directed to parents of children ages birth to 4 years and other caregivers (e.g., child-care settings, schools, after-school programs) to build skills to wisely select and prepare healthful and affordable foods and beverages for children and youth.
- The social marketing program should have a reliable and sustained support stream, through public-appropriated funds and counterpart cooperative support from businesses marketing foods, beverages, and meals to children and youth.

School Environments

If schools and parents are to remain the strongest allies working to promote and advance the interests of American children and youth, the school environment must be fully devoted to preparing students for healthful lifelong dietary patterns.

Recommendation 7: State and local educational authorities, with support from parents, health authorities, and other stakeholders, should educate about and promote healthful diets for children and youth in all aspects of the school environment (e.g., commercial sponsorships, meals and snacks, curriculum).

To implement this recommendation, companies should

- Develop and implement nutrition standards for competitive foods and beverages sold or served in the school environment.
- Adopt policies and best practices that promote the availability and marketing of foods and beverages that support healthful diets.
- Provide visible leadership in this effort by public and civic leaders at all levels such as the National Governors Association, the state and local Boards of Education, and the National Parent Teacher Association, as well as trade associations representing private-sector businesses such as distributors, bottlers, and vending machine companies that directly interface with the school administration.

Public Policy

A first obligation of public policy is to protect the vulnerable and a second is to create the conditions for a desirable future. Both call for the careful use of policy initiatives to foster healthy prospects for children and youth.

Recommendation 8: Government at all levels should marshal the full range of public policy levers to foster the development and promotion of healthful diets for children and youth.

To implement this recommendation

- Government should consider incentives (e.g., recognition, performance awards, tax incentives) that encourage and reward food, beverage, and restaurant companies that develop, provide, and promote healthier foods and beverages for children and youth in settings where they typically consume them (e.g., restaurants, schools, amusement parks, sports venues, movie theaters, malls, and airports).
- Government should explore combining the full range of possible approaches (e.g., agricultural subsidies, taxes, legislation, regulation, federal nutrition programs) for making fruits and vegetables readily available and accessible to all children, youth, and families.
- The U.S. Department of Agriculture should develop and test new strategies for promoting healthier, appealing school meals provided through the School Breakfast Program and the National School Lunch Program as well as other federal programs designed for after-school settings (Special Milk Program) and child-care settings (Child and Adult Care Food Program).
- If voluntary efforts related to advertising during children's television programming are unsuccessful in shifting the emphasis away from high-calorie and low-nutrient foods and beverages to the advertising of

healthful foods and beverages, Congress should enact legislation mandating the shift on both broadcast and cable television.*

Research

Knowledge is the bedrock of effective action and progress, yet current resources are scant to expand the knowledge base, from all sources, on the changing ways in which marketing influences the diets and health of children and youth.

Recommendation 9: *The nation's formidable research capacity should be substantially better directed to sustained, multidisciplinary work on how marketing influences the food and beverage choices of children and youth.*

To implement this recommendation

- The federal research capacity, in particular supported by the agencies of the U.S. Department of Health and Human Services (e.g., National Institutes of Health, Centers for Disease Control and Prevention, Food and Drug Administration), the U.S. Department of Agriculture, the National Science Foundation, and the Federal Trade Commission should be expanded to illuminate the ways in which marketing influences children's attitudes and behaviors. Of particular importance are studies related to newer promotion techniques and venues, healthier foods and beverages and portion sizes, product availability, the impact of television advertising on diet and diet-related health, diverse research methods that systematically control for alternative explanations, stronger measurement, and methods with high relevance to every day life.
- A means should be developed for commercial marketing data to be made available, if possible as a publicly accessible resource, for better understanding the dynamics that shape the health and nutrition attitudes and behaviors of children and youth at different ages and in different circumstances, and for informing the multifaceted social marketing program targeting parents, caregivers, and families to promote healthful diets for children and youth.

Monitoring Progress

The saying goes that "what gets measured gets done." Yet no single public body exists with responsibility or authority to track the influences of

*See text at pages 349 and 362.

marketing on the dietary practices and health status of children and youth in the United States.

Recommendation 10: *The Secretary of the U.S. Department of Health and Human Services (DHHS) should designate a responsible agency, with adequate and appropriate resources, to formally monitor and report regularly on the progress of the various entities and activities related to the recommendations included in this report.*

To implement this recommendation

- The Secretary should consult with other relevant cabinet officers and agency heads (e.g., U.S. Department of Agriculture, U.S. Department of Education, Federal Trade Commission, Federal Communications Commission) in developing and implementing the required monitoring and reporting.
- Within 2 years, the Secretary should report to Congress on the progress and additional actions necessary to accelerate progress.

The review and recommendations presented in this report are anchored in the presentation and interpretation of the evidence. This was the central charge to the committee, and the effort represents the most comprehensive and rigorous review of existing scientific literature done to date. It is important to point out that the committee was not charged with, nor did it engage in, addressing some of the broader philosophical, social, and political issues related to food and beverage marketing to children and youth. Perspectives about basic responsibilities to shepherd the welfare of those most vulnerable or impressionable, conjecture about insights from studies not yet done or information not available on the strength of relationships between marketing and behavior of children and youth, and social urgency prompted by the rapidly increasing prevalence of childhood obesity, all are legitimate and important matters for public discussion. But they were not central features of the committee's charge or work. Neither was the related, but vital, matter of physical activity, which is so inextricably a part of the challenge of childhood obesity. What the committee can contribute to the ongoing and imperative public policy questions raised by this challenge is to conclude, based upon a thorough and impartial review of existing scientific data, that the dietary patterns of our children and youth put their health at risk, that the patterns have been encouraged and reinforced by prevailing marketing practices, and that the turnaround required will depend upon aggressive and sustained leadership from all sectors, including the food and beverage industries. This is a public health priority of the highest order.

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*“Knowing is not enough; we must apply.
Willing is not enough; we must do.”*

—Goethe



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Reviewers

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

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Although the reviewers listed above have provided many constructive comments and suggestions, they were not asked to endorse the conclusions or recommendations nor did they see the final draft of the report before its release. The review of this report was overseen by **JOHANNA DWYER**, Office of Disease Prevention, National Institutes of Health, and **ELENA NIGHTINGALE**, Institute of Medicine, the National Academies.

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

Preface

Marketing works. It is a primary engine of our economy and its content can sometimes give us a glimpse of the forces shaping our futures. How marketing affects the perspectives and behaviors of our children and youth, including their diets, has been a subject of active discussion and debate for more than three decades, beginning in a time when marketing could generally be characterized in terms of the advertising done through the traditional media—television, radio, print. Times have changed markedly. Marketing is now a regular feature of virtually all the venues and communication vehicles we encounter in our daily lives. Television advertising remains the dominant form of marketing reaching children and youth that is formally tracked, but the expansion of alternative advertising and marketing strategies is evolving rapidly.

Against the backdrop of pressing public concern over the rapid and widespread increase in the prevalence of childhood obesity, Congress, through the FY2004 Health, Labor, and Education Committee appropriation, directed the Centers for Disease Control and Prevention (CDC) to undertake a study of the role that marketing of food and beverages may play as a determinant of the nutritional status of children and youth, and how marketing approaches might be marshaled as a remedy. The CDC turned to the Institute of Medicine (IOM) of the National Academies to conduct this study, a natural corollary to the IOM report released in 2004, *Preventing Childhood Obesity: Health in the Balance*.

The IOM Committee on Food Marketing and the Diets of Children and Youth is pleased to present this report, *Food Marketing to Children and*

Youth: Threat or Opportunity? The report represents the most comprehensive review to date of the scientific studies designed to assess the influence of marketing on the nutritional beliefs, choices, practices, and outcomes for children and youth. In conducting our study, the committee not only developed and applied a rigorous analytic framework to the assessment of the relevant scientific literature but also undertook an extensive review of the nutritional status and trends for children and youth, what is known about the full range of factors that influence their dietary patterns, the broad and evolving food and beverage marketing environment, and the relevant policy levers that might be brought to bear to improve our children's nutritional status. Important and relevant findings from our committee's review are distributed throughout the body of the text. A summary list of the findings is provided in the final chapter, along with the committee's overall conclusions and recommendations.

This report notes that the prevailing pattern of food and beverage products marketed to children and youth has been high in total calories, sugar, salt, fat, and low in nutrients. A dietary profile that mirrors the products marketed would put our children and youth at risk for the types of nutritional problems that we see occurring today—increasing rates of obesity, and inadequacies of certain important micronutrients—and for the development of various serious chronic diseases later in life. Dietary choices are made in the midst of myriad social, cultural, and economic environmental influences. The focus of the committee was on the role of food and beverage marketing as one of these intersecting influences.

In our review, the committee faced certain challenges related to the nature of the available research material. First, virtually all of the published scientific research has focused on advertising—and television advertising in particular. While television maintains an important place in food and beverage marketing, industry strategies have moved far beyond television advertising. Second, much of the research underpinning the development and implementation of food and beverage marketing activities is proprietary and unpublished, and, given the National Academies' requirement that information used be in the public domain, a large amount of marketing research was unavailable for the committee's use.

Nonetheless, ample information and studies were available for the committee to draw certain key conclusions, including that television advertising influences the food preferences, purchase requests, and diets, at least of children under the age of 12 years, and is associated with the increased rates of obesity among children and youth. The committee could not state the relationship in quantitative terms, but it is clear that even a small effect across the entire population would represent an important impact. Although we could not draw conclusions about the impact of the broader marketing environment, it is highly likely that the influences reinforce those

seen from advertising. Moreover, the committee found that, for an issue of this potential magnitude, there was both a need and an opportunity for substantially more industry and government attention and action—and cooperation—on an agenda to turn food and beverage marketing forces toward better diets for American children and youth. These recommendations are detailed in Chapter 7.

A word is indicated about the members of the IOM Committee on Food Marketing and the Diets of Children and Youth. Befitting the breadth of the topic, this was a committee of unusually varied expertise, experience, and perspective. It was, in addition, a committee that engaged the task with extraordinary energy, commitment, and resolve—both to undertake a rigorous assessment and to do it cooperatively. Shared leadership has been a central feature of the work, as members worked both individually and in groups to ensure that each dimension of the task was skillfully executed. The process has been thorough, the discussions vigorous, and the report represents a consensus document in the best sense of the word. We believe readers will find the documentation to be extensive, the evidence analyses to be seminal, and the findings to be carefully considered.

As is so often the case with these studies, vital guidance and tireless energy were contributed to the work by the co-study directors, Jennifer Gootman and Vivica Kraak, who received highly skilled support from research associates Leslie Sim and Shannon Wisham. We are also grateful for the careful shepherding of the study by the directors of the two sponsoring boards: Linda Meyers of the Food and Nutrition Board and Rosemary Chalk of the Board on Children, Youth, and Families.

There can be few matters of such compelling importance as the health of America's children and youth. The committee is grateful for the opportunity to contribute this report as a resource for insight and action, and we are hopeful that its recommendations will help turn the threat of the current trends into an opportunity for change.

J. Michael McGinnis, *Chair*
Committee on Food Marketing
and the Diets of Children and Youth

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The committee acknowledges the contribution of Collier Shannon Scott

and Georgetown Economic Services that shared three brief and relevant summaries of analyses—two of which had been prepared for the Grocery Manufacturers Association (GMA) and the Association of National Advertising, and the third was a collaborative endeavor between four GMA food and beverage company members—General Mills, Inc., Kellogg Company, Kraft Foods, Inc., and PepsiCo—which collectively responded to specific questions about advertising and marketing trends and company activities that were requested by the committee. We also thank Nielsen Media Research and Nielsen//Net Ratings, The Geppetto Group, KidShop, Strotzman International, and Yankelovich for sharing relevant data. There were other colleagues who provided useful international data and reports to the committee: Martin Caraher in the United Kingdom, Corinna Hawkes, Filippa von Haartman in Sweden, Gitte Laub Hansen in Denmark, and Anne-Marie Hamelin in Quebec.

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