This report summarizes proceedings and recommendations of a workshop on trends, needs, and issues in maternal and child nutrition services and presents 28 major recommendations and associated action strategies which address general areas, women's nutrition for optimal reproductive health, infant nutrition, child nutrition, adolescent nutrition, and nutrition for children with special health care needs. Sample recommendations include the following: aggressively support nutrition services as an essential component of emerging national health care plans; increase the number and improve the quality of personnel providing nutrition services; provide all pregnant and lactating women with access to nutrition services; promote breastfeeding among all women; assure the availability of infant nutrition services; develop a U.S. infant feeding code which positively states the responsibilities of formula and food manufacturing industries in promoting breastfeeding and appropriate infant feeding practices; ensure quality nutrition education programs for school-age children and adolescents; expand the research base in adolescent nutrition; expand access to nutrition services for children with special health care needs and their families; and establish a nutrition data system for children with special health care needs. A glossary of acronyms and a listing of organizations represented at the workshop are included. (DB)
Better Nutrition for Mothers, Children, and Families

December 6–8, 1990 • Washington, D.C.
Executive Summary
Call to Action

Better Nutrition for Mothers, Children, and Families

December 6–8, 1990
Washington, D.C.

Sponsored by:
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Health Resources and Services Administration
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In cooperation with:
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Interorganizational Nutrition Group

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Foreword

The national workshop "Call to Action: Better Nutrition for Mothers, Children, and Families" provided an important and strategic opportunity for a large number of national organizations and agencies who impact on the health and nutrition of mothers, children, and families to focus on the improvement and promotion of their nutritional health and well-being. Well documented in recent publications—Surgeon General's Report on Nutrition and Health and the Institute of Medicine publication Diet and Health—and underscored in the Healthy People 2000: National Health Promotion and Disease Prevention Objectives related to nutrition, the quality of nutrition can have a significant effect on growth and development, prevention of disease, promotion and maintenance of health, and quality of life.

The workshop served as a forum for identifying current needs and issues in maternal and child nutrition services, reaching a consensus on priorities, developing key recommendations, and outlining specific actions and strategies which should be taken to implement the recommendations. Special emphasis was placed on fostering a collaborative approach to problem-solving and program development among agencies and organizations.

The leadership provided by the Maternal and Child Health Interorganizational Nutrition Group (MCHING) in organizing and planning the workshop will serve as an example for other national professional organizations and agencies who have substantial involvement in and potential for improving maternal and child nutrition services. The goals of MCHING—to develop and improve communication, exchange of information, and working relationships between key federal agencies and national organizations concerned with maternal and child nutrition, and to provide a forum to advocate for nutrition services for this population—can be supported and further strengthened if more organizations and agencies in the nation join hands in a collaborative effort.

These proceedings of the workshop provide an overview of the trends, needs, and issues in maternal and child nutrition services and present recommendations and action strategies to improve such services. It is hoped that the collaborative approach to problem-solving and program development in maternal and child nutrition demonstrated by MCHING and the workshop participants will serve as a model and further stimulate and support coordinated action at federal, state, and local levels. Improving the nutritional health of mothers, children, and families in the nation by improving the availability and quality of nutrition services accessible to them is the ultimate goal.

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This workshop was made possible by a grant from the Maternal and Child Health Bureau (MCHB), Health Resources and Services Administration, Public Health Service, U.S. Department of Health and Human Services. The guidance of Vince L. Hutchins, director, E. Ann Prendergast, chief nutritionist, and M. Elizabeth Brannon, training program director, was instrumental in facilitating the workshop and preparing this publication. The advice and support they provided throughout the entire effort was greatly appreciated.

Deep gratitude is also expressed to the many individuals who generously participated in the planning and implementation of this workshop. The representatives of the member organizations of the Maternal and Child Health Interorganizational Nutrition Group (MCHING) who provided leadership, participated in planning meetings, and reviewed drafts of numerous documents contributed to the success of the workshop. The authors and reviewers of the workshop papers provided an excellent foundation for workshop discussions. The presentations of the workshop speakers and panel members provided helpful information and stimulated work group discussions. The 30 work group facilitators, recorders, and resource persons—identified on the workshop participants list—responded to their charge, assuring that the benefits of the workshop would be available to a broader audience.

Appreciation is expressed to the many organizations and agencies who selected and supported representatives to participate in the workshop, and to the workshop participants themselves who contributed their time, creativity, and enthusiasm to workshop deliberations and who will have a strategic role in following up on the recommendations and action strategies emanating from the workshop.

Heartfelt thanks is expressed to Mary C. Egan, MCH consultant, National Center for Education in Maternal and Child Health, who was the true architect and moving force behind this effort. The words from the title page “with the assistance of Mary C. Egan” do not adequately describe her vision and key leadership role in the organization of MCHING, the planning of the workshop, and the preparation and editing of this document.

Appreciation is also expressed to other colleagues at the National Center for Education in Maternal and Child Health for their enthusiastic support of MCHING. The nutrition staff, Susan Shapiro and Katrina Holt, contributed innumerable creative ideas for the development of the workshop, assisted with the proceedings, and provided staff support to MCHING. Paula Sheahan and Maureen Seller made a major contribution by attending to many details of conference arrangements. The expertise of the publication staff—Carol Adams, copy editor; Dan Halberstein, primary designer; and Chris Rigaux, publications coordinator—is evident in this publication and the workshop-related materials. Many thanks are also due to Rochelle Mayer, program director, and Robert C. Baumiller, director, for their continuous support, leadership, and direction throughout the entire project.
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2. **Societal Trends that Affect Nutrition Status and Services for the Maternal and Child Health Populations**
   - Milton Kotchuck, Ph.D., M.P.H., Janice Dodds, R.D., Ed.D.,
   - Steven Wing, Ph.D., and Jonathan Kotch, M.D., M.P.H.

3. **Women’s Nutrition For Optimal Reproductive Health**
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4. **Infant Nutrition**
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5. **Child Nutrition**
   - Johanna Dwyer, D.Sc., R.D., and Jennifer Arent, M.S., R.D.

6. **Adolescent Nutrition: Trends and Critical Issues for the 1990s**
   - Mary Story, Ph.D., R.D., Felix Heald, M.D., and Johanna Dwyer, D.Sc., R.D.

7. **Children with Special Health Care Needs**
   - Marion Taylor Baer, Ph.D., R.D., Sheila Farnan, M.P.H., R.D.,
   - and Alvin M. Mauer, M.D.
   Betsy Haughton, Ed.D., R.D., Ellen B. Thompson, R.D., M.S.,  
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The national workshop "Call to Action: Better Nutrition for Mothers, Children, and Families," held in December 1990, was an important part of the continuing efforts of the Maternal and Child Health Bureau, U.S. Department of Health and Human Services, to disseminate information about needs and issues in maternal and child health and to promote and support coordination among organizations and agencies at the national, state, and local levels which can impact upon the health of our nation's mothers, children, and families. With special emphasis on fostering a collaborative approach to problem-solving and program development, the workshop provided a forum for identifying current needs and issues in maternal and child nutrition services, reaching a consensus on priorities, developing key recommendations, and outlining specific actions and strategies which should be taken to implement the recommendations. Forty-four voluntary, professional, educational, and nonprofit organizations, and 14 federal agencies sent representatives to the workshop. The representatives had an active interest in maternal and child health (MCH) and nutrition, and had demonstrated leadership roles in their organizations and agencies.

Leadership in the planning and implementation of the national workshop was provided by the Maternal and Child Health Interorganizational Nutrition Group (MCHING). The group includes representatives of the following national professional organizations, which have substantial involvement in and potential for improving maternal and child nutrition services: the American Dietetic Association, the American Public Health Association, the Association of Faculties of Graduate Programs in Public Health Nutrition, the Association of Maternal and Child Health Programs, the Association of State and Territorial Public Health Nutrition Directors, the National Association of WIC Directors, and the Society for Nutrition Education. The goals of MCHING are to develop and improve communication, exchange of information, and working relationships among key federal agencies and national organizations concerned with maternal and child nutrition, and to provide a forum for advocacy for nutrition services for the MCH population.

This summary briefly describes the foci of the 14 background papers prepared by invited authors for the workshop, discusses highlights of presentations given by speakers and panelists, and presents the recommendations and strategies for action developed by workshop participants.

Workshop Background Papers
The background papers provide a historical perspective on nutrition services in maternal and child health, give an overview of trends and issues in maternal and child nutrition, and discuss some specific action steps needed to improve nutritional health of mothers, children, and families.

A Historical Perspective. Four themes underlying the evolution of nutrition services in maternal and child health in the United States are discussed in "Nutrition Services in the Maternal and Child Health Program: A Historical Perspective." These themes are the cyclic nature of development, the parallel development of
MCH nutrition services and the broad MCH program, the interrelatedness of events or the ripple effect, and the influence of the social, economic, and political climate of the times. Over time changes in the programmatic and administrative aspects of nutrition services have included changes related to the focus/emphasis, organizational locus, methods of delivering nutrition services to the MCH population, sources of funds, and training of nutrition personnel for MCH services. Among the recurring issues in maternal and child nutrition services are: The adequacy and quality of the assessment of nutrition needs and problems as a basis for planning and action in nutrition services in MCH programs; the organization and financing of nutrition services; the need for improved coordination and collaboration among all concerned with nutrition services; the training of health practitioners in the science of nutrition and its application to health care; and the transfer and application of nutrition research in order to improve practice. Some of the important characteristics of each decade and milestones which influenced the development of MCH nutrition services are summarized.

Societal Trends. The background paper "Societal Trends That Affect Nutrition Status and Services for the Maternal and Child Health Populations" identifies some of the broad socioeconomic, demographic, health, nutrition, technological, legislative and political trends that affect nutrition status and services for the MCH population. It is expected that the MCH population will remain large in absolute size; become increasingly culturally diverse with a growing number of black, Hispanic, and Asian children; and remain predominantly urban. High rates of childhood poverty will create a continuing need for MCH nutrition services and monitoring of nutrition status. The tremendous expected growth in female employment (specifically maternal) may lead to institutions other than the family becoming more responsible for some or all of children's meals, and thus they will become an important group to reach with nutrition education.

Trends related to health and nutrition—such as the increasing prevalence of chronic illness and disability in children, the compromised nutrition status of many children, the continued presence of hunger, inadequate health insurance coverage, and the decreasing number of accessible health care providers—will also impact on nutrition services. Modern technology, especially in food processing and agricultural production, is creating changes in the availability, quality, composition, and safety of the food supply, and is also affecting the economics and complexity of the marketplace. When new information and mass communication technologies—which offer both health professionals and industry better ways to present and target their messages—are combined with the increasingly complex food supply industry, the impact on food consumption patterns can be both positive and negative. Among the legislative and political trends discussed are the lack of a comprehensive legislative effort to address poverty and social inequities which exist, the continuing conflict regarding values related to the role and status of women and families, and the negative impact of poverty and inflation on access to food programs.

Women's Nutrition for Optimal Reproductive Health. The paper "Women's Nutrition for Optimal Reproductive Health" considers nutrition goals during the reproductive years and circumstances which can prevent a woman from achieving nutritional well-
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being. The need for a focus on maternal nutrition, particularly individualized nutrition counseling for women during all phases of their reproductive years, is emphasized.

The paper presents current data related to energy and protein requirements, vitamin and mineral considerations, and dietary non-nutrients during pregnancy. The value of nutrition intervention programs for high-risk women is underscored by the review of several intervention study efforts undertaken to improve pregnancy outcome. Recent findings of the Institute of Medicine’s Subcommittee on Nutritional Status and Weight Gain During Pregnancy, indicating that gestational weight gain has an important relationship to fetal growth and that the relationship appears to vary according to prepregnancy weight-for-height, have important implications for counseling by professional care providers and for the monitoring of weight gain throughout pregnancy. Attention was directed to the Institute of Medicine’s recommendation that health care providers adopt and implement standardized procedures for obtaining and recording anthropometric measurements to serve as a basis for classifying women according to weight-for-height, for setting weight gain goals, and for monitoring weight gain over the course of pregnancy.

Attention to preconceptional issues such as underweight, obesity, micronutrient imbalance, substance use/abuse, and control of chronic disease can reduce the risk of adverse pregnancy outcome and significantly affect the course and outcome of pregnancy. In the postpartum period, the nutrition demands of lactation need attention, as do the weight reduction programs undertaken by some women to accelerate the rate of postpartum weight loss.

Infant Nutrition. The background paper “Infant Nutrition” emphasizes the critical role of nutrition in the first year of life, when nutrient requirements are higher because of rapid growth and development. Three general approaches to estimating nutrient requirements of infants are described, and their major shortcoming (the lack of functional end points which emphasize specified capacities or long- or intermediate-term health consequences) is noted.

Current issues in infant nutrition relate to growth patterns in breastfed infants, the mechanisms by which human milk constituents protect infants from acute infection, the declining incidence of breastfeeding, the effect of infant feeding choice on intermediate-term outcome, and the effect of iron and other nutrient deficiencies on functional abilities and health. Issues which require continuing attention include the limitations of the information base needed to further develop nutrition management protocols for low birthweight infants, the nutrition problems of infants with special health care needs and the difficulties encountered in screening and assessing them and providing indicated intervention, and the continuing prevalence of poor infant feeding practices. Although efforts have been made to improve the infant nutrition data base, limited data are available on the behavior and practices of child caretakers in relation to infant feeding and parenting, and on infant feeding practices in culturally diverse populations.

Child Nutrition. The background paper “Child Nutrition” stresses the importance of nutrition during childhood for adequate growth and for the maintenance of health. In addition to discussing nutrient requirements, the paper considers the developmental, cultural, and emotional needs of children that must be
taken into account in planning their food intake.

Common nutrition problems among children—obesity, failure to thrive, iron deficiency anemia, and dental caries—can have significant short- and long-term consequences. The most common effects related to childhood obesity are psychosocial, including disturbed family interactions, peer disapproval, academic discrimination, low self-esteem, and poor body image. Children who suffer from failure to thrive are at risk for lasting deficits in growth, cognition, and socioemotional functioning. The physiological effects of impaired iron status and the association between iron deficiency anemia and suboptimal behavior, as demonstrated by lower scores on tests of development, learning, and school achievement, are of concern, as are dental caries which affect 98 percent of all American children. Dietary and lifestyle interventions in childhood to prevent chronic diseases in adulthood deserve more attention.

The model proposed for nutrition services for children includes problem identification by screening every child to identify those at highest risk and then by providing a more detailed assessment by a nutritionist for those children found to be at risk. Four basic approaches to intervention are suggested—health promotion, risk reduction, disease treatment and control, and rehabilitation. The final steps of the model include follow-up and evaluation to assess accomplishments and outcomes.

Inadequate nutrition services in day care programs, lack of participation in and coverage of child nutrition programs, nutrition gaps in school health services and school-based clinics, and the need for greater focus on nutrition services for children with special developmental and health needs are among the child nutrition issues of concern. Integration of nutrition services into all aspects of child health care, and into day care policies and school health services, is stressed.

Adolescent Nutrition. The major nutrition-related issues and concerns of youth today, and the nutrition services needed by youth, are reviewed in “Adolescent Nutrition: Trends and Critical Issues for the 1990s.” The limitations in the available data on nutrient requirements that correlate with biological events during puberty are noted. For many nutrients, recommended allowances are based on extrapolations from adult or child studies.

Groups of adolescents at highest risk for undernutrition and inadequate food intake are low-income youth, youth with chronic illnesses and handicapping conditions, heavy alcohol or drug abusers, youth in families where the primary caretaker is drug- or alcohol-dependent or mentally ill, pregnant teenagers, and chronic dieters. The actual number of adolescents at nutritional risk cannot be quantified because the consistent and ongoing monitoring of data on the health status of adolescents are extremely limited at both state and national levels.

Inadequate nutrition during adolescence may retard or stunt linear growth, lower resistance to infections and disease, impair learning ability and performance, and adversely affect the ability to function at peak physical capacity. Underweight pregnant adolescents are at risk for delivering low birthweight infants, and those who enter pregnancy in poor nutritional health with low nutrient reserves may have poorer pregnancy outcomes. Adolescents who have chronic illnesses and are undernourished may have a diminished quality of life and shorter life span.

Nutrition issues among adolescents include obesity, chronic dieting, eating dis-
orders, atherosclerosis during adolescence, and dental caries. There is concern that certain dietary habits among adolescents—particularly dietary excesses involving calories, sugar, fat, cholesterol, and sodium, common among adolescents in all income and ethnic groups—may continue into adulthood. Nutrition misinformation related to nutrition and sports is common, and the need for nutrition education for teachers, coaches, trainers, adolescents, and health professionals working with youth and parents is underscored. Recommendations are made for nutrition services in health care settings for adolescents, school-based nutrition education programs, the strengthening and improvement of school food services for adolescents, and parent and family involvement in nutrition education efforts.

Children with Special Health Care Needs. The paper “Children with Special Health Care Needs” describes the nutrition concerns and nutrition service needs of infants, children, and youth with, or at risk for, physical or developmental disability, or with a chronic medical condition caused by or associated with genetic/metabolic disorders, birth defects, prematurity, trauma, infection, or perinatal exposure to drugs. These children, who make up approximately 10–15 percent of the pediatric population, are often at risk for inadequate nutrient intake, impaired nutrient absorption or utilization, or increased nutrient excretion. The developmental needs of children with special health needs may also differ substantially from those of other children. Developmentally delayed children may not progress normally in reaching the milestones leading to independence in feeding.

Assessing and meeting the nutrition needs of children with chronic disabling conditions or illnesses is complex, and the need for individualized nutrition care planned by a qualified nutritionist/dietitian and involving input from an interdisciplinary team is stressed. Growth retardation, altered energy and nutrient requirements, and drug-nutrient interactions are nutrition concerns in children with special health care needs. In addition, feeding problems and eating disorders with multiple etiologies (e.g., structural defect and/or neuromuscular dysfunction, developmental delay) can lead to nutrient inadequacy or failure to thrive, and can cause serious disruption in the daily life of the child’s family. These complex conditions require individualized nutrition management that meets the emotional and functional needs of the child and family.

Clinical nutrition services for these children could be strengthened by implementing the use of appropriate nutrition screening and referral tools to identify and refer children at risk, and the use of standardized protocols to assure the quality of nutrition screening, assessment, intervention, and monitoring services. Linkages with community programs which can contribute to a comprehensive, coordinated, community-based, family-centered system of care should be expanded, and effective referral mechanisms between tertiary care centers and community-based providers should be developed. School food services should strive to better meet the needs of these children.

The authors identify the competencies critical to effective nutrition/dietetic practice with children with special health needs. There is a need to upgrade the knowledge and skills of dietitians/nutritionists in the nutrition-related aspects of services for special needs children, and to increase the numbers of dietitians/nutritionists who have this training. Undergraduate and graduate nutrition programs should include content and/or
field experiences which address the needs of such children, and inservice and continuing education opportunities should be expanded.

New legislation, a changing population of children, home health care, high technology treatment, multiagency involvement, and the focus on family-centered, community-based delivery of services have resulted in new opportunities for providing nutrition services in the context of comprehensive health care. Nutrition services available for children with special health needs could be strengthened and expanded by improving the documentation of need, resources, and procedures for such services; expanding access to nutrition services in all settings serving such children, including home health care programs; identifying funding sources to reimburse for nutrition services; and increasing the availability and use of nutrition personnel experienced in chronic illness and developmental disabilities for policy making, planning, program development, and provision of community-based services through local, state, and federal health, education and vocational agencies.

Seven additional background papers address the administrative aspects of the delivery of nutrition services.

**Needs Assessment, Planning, Implementation, and Evaluation of Nutrition Services.** "Needs Assessment for Nutrition Activities in Maternal and Child Health," "Planning, Implementing, and Evaluation of Nutrition Programs" and "Components of Nutrition Services" describe the systematic process for designing and implementing innovative, effective, and efficient nutrition programs.

The value of needs assessment, the first step in the planning process, in establishing priorities is emphasized so that resources and services are targeted toward those individuals or groups whose needs are the greatest and for whom it is most likely that identified problems can be resolved. Mechanisms suggested for overcoming barriers which may prevent the more widespread use of needs assessment in nutrition program planning include strengthening and expanding the collection of monitoring and surveillance data relevant to the MCH population; developing a manual on how to conduct needs assessment in maternal and child nutrition as part of the nutrition program planning process; providing adequate resources to conduct a needs assessment and for planning and evaluating outcomes; and improving the content of both graduate and continuing education training programs related to needs assessment for public health personnel.

The importance of involving nutritionists in policy planning and implementation planning is emphasized. Organizational priorities are established and programs are selected through policy planning. Implementation planning results in the design of intervention strategies expected to be effective because of their basis in science and market research. Advantages of collaborative planning by providers, clients, advocates, and related constituencies in the service network include avoiding duplication and assuring that limited resources are efficiently used. Information is presented on steps in the planning process—setting priorities, goals and objectives, analysis of alternatives, design of interventions, managing implementation, and evaluation. The need to develop uniform management information systems for nutrition services, and to improve the selection and application of evaluation methodology tailored for specific management purposes, is highlighted.

The specific components of nutrition services—screening for nutrition prob-
problems, assessment of nutrition status, and planning and implementation of nutrition care—that need to be carried out in a systematic manner in all health care programs are described. Guidelines which define all of the components of nutrition services, how they are to be provided to individual clients, and qualifications of providers of those services should be established in all health care programs.

Quality Assurance. The paper "Quality Assurance" outlines approaches to measure and monitor the quality, efficiency, and effectiveness of nutrition care. The importance of establishing guidelines which define each component of nutrition services, and of improving the documentation of nutrition services and their outcomes, is emphasized. There is a need to standardize the methodology for quality assurance, update existing quality assurance criteria, and formulate criteria for newer high-risk conditions such as maternal and pediatric HIV infection and drug abuse.

Personnel. "Personnel for Delivery of Nutrition Services" describes the various health professional and paraprofessional personnel who are qualified to provide nutrition care for mothers and children in health care settings and their roles, responsibilities, and training. The major roles of the public health nutritionist are assessing the community and its population; policymaking; planning and evaluating; and coordinating, consulting, educating and managing nutrition services for a community. The direct care nutritionist usually works on a one-to-one basis and counsels patients, caregivers, teachers, and children about appropriate diet for optimum growth and development.

In addition to public health nutrition personnel and registered dietitians, the role of other health personnel (e.g., physicians and nurses) who arrange for or provide nutrition care for mothers and children in the community should be recognized. Among issues related to the use of other health personnel are the quantity and quality of their training in MCH nutrition and their level of understanding of the role and contributions of qualified nutritionists and dietitians in health services for mothers, children and families.

Physicians, nurses, and teachers need much more preservice and inservice education in nutrition, as well as continuing consultation from a qualified nutritionist, if they are to participate actively in the delivery of nutrition services for mothers, infants, and children. The importance of implementing standards for MCH nutrition in the curriculum of educational programs for physicians, nurses, and other health practitioners is emphasized.

Data are presented which indicate that about 2,000 public health nutritionist positions are budgeted in state and local public health agencies. It is estimated that this is less than one-half of the number needed. In addition to insufficient numbers and maldistribution of qualified public health nutritionists, other major issues concerning nutrition personnel in public health agencies are the overdependence of official health agencies on a single funding source, primarily the WIC program which serves only WIC-eligible pregnant, postpartum and lactating women, infants, and children up to age 5; and the need to improve the availability and utilization of other funding sources (e.g., MCH Block Grant, Medicaid, and P.L. 99-457) to support nutrition services for the MCH population. Among problems facing maternal and child health programs is the lack of availability of both public health nutritionists and direct care nutritionists to provide services for preconceptional health care, for those pregnant, postpartum and lactating women, infants, and
children who are not eligible for WIC, and for such programs as child day care, school health, adolescent health and children with special health care needs.

**Financing Nutrition Programs.** "Financing Nutrition Programs" discusses obtaining and utilizing public and private funding sources for nutrition services, including grants, contracts, third-party reimbursement, and payments for products and services. Policymakers and nutrition providers should be better informed about funding resources available for nutrition services and how to access them, and about gaps in resources and how to overcome or fill them, including accessing third-party reimbursement from public and private insurance programs.

In recent years, reimbursement for nutrition services by public and private third-party payers has become an important source of financing for local nutrition services. While coverage varies from payer to payer and from state to state, sources for reimbursement for nutrition services for the MCH population include Medicaid/Early and Periodic Screening, Diagnosis, and Treatment (EPSDT), Blue Cross/Blue Shield, Supplemental Security Income, state programs for children with special health care needs, workmen's compensation and commercial carriers.

Recent changes in the Medicaid legislation have enhanced prenatal care services and expanded income eligibility for infants and pregnant women. At least 24 states provide Medicaid reimbursement for nutrition counseling to pregnant women. EPSDT provides another opportunity for reimbursement for nutrition services since EPSDT rules now require states to cover all services allowed under Medicaid to correct or ameliorate defects discovered by screening services. Since many policy decisions regarding reimbursement for nutrition services through Medicaid/EPSDT are now made at the state level, it is essential to work with state agencies to advocate for and take advantage of all possible resources for nutrition services.

**Economic Analysis of Nutrition Care.** The paper, "Economic Analysis of Nutrition Care Within Maternal and Child Health Services," explores the economic information needs of decision-makers, reviews the process of policy analysis from the economic perspective, and discusses the relationships between a system of quality nutrition care and economic benefits. To strengthen the financing and economic analysis of nutrition services, the availability (documentation), use and dissemination of nutrition-related cost data including cost-effectiveness and cost-benefit aspects, should be improved. Since planners, providers, consumers and payers all make choices about nutrition services, they need to be informed about the relationship of nutrition to the economic health of mothers and children. Nutrition professionals have an important role in interpreting and disseminating information learned from economic analyses.

**Workshop Plenary Sessions**
Speakers at the workshop with particular expertise in and knowledge of maternal and child health and collaboration among organizations stimulated participants to use a coordinated and cooperative approach to follow-up action.

The keynote address by the Honorable John D. Rockefeller IV set the tone for the conference and provided an overview of the major problems, needs, and trends in maternal and child health with some focus on the nutritional aspects. Senator Rockefeller noted that the benefits to children and families of prenatal care, proper nutrition, and access to basic health care
are well documented. He indicated that America must face the challenge to bring about the day when every child in this country has access to basic, affordable health care and when every pregnant woman gets early prenatal care. The other necessary ingredients of good health for children must be provided—proper vaccinations, adequate nutrition, regular exercise, and a life that is free of tobacco, drugs, and other preventable and very real dangers. Mobilizing around the goals of reducing infant mortality and vastly improving child health, and working together to transfer our commitment and determination to political leaders, communities, and everyone else, are important, he said, underscoring the fact that the future of our nation depends on the health of our children.

Participants on a reaction panel discussed their views on the issues and recommendations presented in the workshop background papers. Frank Witter, representative of the American College of Obstetricians and Gynecologists, discussed the need to focus more attention on prenatal health care services in this country. He noted that there is widespread agreement that prenatal care is a major factor in the prevention of infant morbidity and mortality, is strongly and clearly associated with improved pregnancy outcome, and is cost effective. He recommended that prenatal care not be viewed as just a medical examination, but rather as an opportunity for education in nutrition, wellness, and parenting skills. Breastfeeding promotion should also be an integral part of prenatal care. More research is needed, he urged, on the cost-effectiveness of prenatal nutrition services in order to establish additional mechanisms to pay for these services.

William Haskins, vice president of programs, the National Urban League, described the current disparity with respect to infant mortality rates and other indicators of health status among low-income and culturally diverse populations. He indicated that African Americans experience complex health disadvantages which are exacerbated by a combination of poverty, racial bias, ignorance, and lack of access to quality health care. During the next decade, the nation must face the challenge of providing affordable, high quality health care for all its citizens through the development of universal health care access reflective of the needs of unserved and underserved populations. He recommended that steps be taken to improve the nutrition and health of African Americans, including developing culturally specific educational programs to better inform the African American population of the importance of the special health problems it confronts and of measures that can be taken to improve its health; eliminating barriers to access to health care systems; and including an outreach component for all service delivery programs to assure the participation of African Americans.

A representative from the Federation for Children with Special Needs: CAPP National Parent Resource Center, Barbara Popper, presented the parents' perspective on nutrition services for mothers, children, and families. She stated that parents seek care that is family centered, community based, comprehensive, and delivered with cultural sensitivity and competence. They would like health care providers to be advocates for their children, and they want realistic, practical, and specific advice on nutrition that takes into account the appropriate setting for the delivery of services. They feel it is important to receive a consistent message about nutrition and health from all health care team members, and they are con-
cerned about cost and about who will pay for nutrition services. She suggested that health care providers be encouraged to increase their efforts to involve parents in planning, coordinating, and evaluating the outcome of programs and services.

In the plenary session, "Building Coalitions," Lori Cooper, the executive director of Healthy Mothers, Healthy Babies, addressed the advantages of forming coalitions as a means of extending limited resources, exchanging or coordinating information, solving or monitoring problems, advocating for legislation, and/or putting on special events. She identified the steps in forming a coalition as: Conducting a needs assessment and a strategies assessment to identify an area of mutual need and to determine what has been done before; identifying all key individuals or organizations that should be included; defining the coalition's mission and setting clear goals; determining the best means of communication for the coalition; and clearly defining leadership roles and setting terms of service. She stressed that it is important to build in checkpoints to stop and identify what has been accomplished, what has been the cost, and what has changed as a result. If a coalition succeeds, do not be afraid to call it a success and disband it; but also do not be afraid to continue to explore the power of cooperation and collaboration in tackling new problems or aspects of the original problem around which the coalition formed.

In the plenary session, "Dynamics of Change," David McCullum, deputy director at the Center for Risk Communication, Columbia University, promoted an integrated approach to changing eating behaviors that considers all factors that affect food choices. Organizations can join forces and capitalize on their combined energy and resources to identify gaps and coordinate efforts in policy and program development in nutrition services for mothers, children, and families, he noted. Organizations can advocate for nutrition programs for mothers, children, and families that are based on an integrated approach and that are self-sustaining. They can also advocate for legislation and regulations that promote good nutrition information to support consumer choices. Organizations can form coalitions with businesses to market healthy eating and healthy food products, and can recognize the power of the media and use it to promote their goals.

Accomplishments of the workshop and ways in which the goals and activities of their associations related to the implementation of the work groups' recommendations were discussed by members of a panel, Organizations and Opportunities for Action. They challenged the participants to take leadership roles in their organizations to implement recommendations and to support an integrated approach to problem-solving and program development in maternal and child nutrition. The following points were suggested by each panel member.

Nancy Wellman, representative from the American Dietetic Association, described the current association activities which offer opportunities for implementing many of the workshop recommendations. She explained that through its Alliance Program, ADA is actively working to strengthen its ties with other associations. ADA's Division of Government Affairs works on legislation affecting mothers and children. Its committee on Nutrition Services Payment Systems is developing guidelines for reimbursement for nutrition services. The network of ADA members who serve as media spokespersons provides a mechanism to communicate information on maternal
and child nutrition to the public. ADA's position statements on maternal and child health issues provide a vehicle to influence policy and service delivery, and its standards for academic training and practice in clinical nutrition, food service management, and community dietetics improves the quality of MCH nutrition service. Through its annual meetings, workshops, the Journal of the American Dietetic Association, other continuing education publications, and the 22 practice groups related to specialty areas, ADA has many mechanisms for providing continuing education and for communicating with its membership. The ADA representative indicated that the association will study the workshop recommendations and strategies for action and will explore opportunities to join with other organizations for action on behalf of mothers and children through better nutrition.

Richard Nelson, the president of the Association of Maternal and Child Health Programs, whose membership includes directors of state agencies who administer the Title V maternal and child health activities, encouraged organizations to become involved in state MCH planning as a means of implementing the workshop recommendations. He noted that the 1989 legislative changes in the Title V program give new emphasis to the role of state programs in assuring that a system of services appropriate to the health care needs of women and children is available and accessible. This assurance can include the recruitment of providers, the development or emphasis of standards of care to improve the quality of services, the identification of persistent or emerging needs for services, and the provision of services when those services would otherwise not be available. Since the nutrition of women and children is an integral component of their health, assuring access to nutrition services should be a component of a comprehensive system of health care services. The planning process for allocation of state maternal and child health resources involves establishment of spending or staffing priorities. If the priorities developed in this workshop related to improving nutrition services statewide are to be realized, he emphasized, organizations must participate actively in state MCH planning.

Terry Hatch, representative from the American Academy of Pediatrics' Committee on Nutrition, expressed the academy's commitment to the attainment of optimal physical, mental, and social health for all infants, children, adolescents, and young adults. He noted that members of the academy participate in activities related to professional education, advocacy for children and youth, public education, and research at the local, state, and national levels. There are many recommendations from this workshop, he promised, that AAP will review in looking for opportunities to collaborate with other organizations in implementing strategies for action. Access to medical care, advocacy for breastfeeding, the training of health professionals, promotion of interdisciplinary care, and increasing the involvement of consumers in the planning and development of programs and services are among the issues the academy continues to support. He concluded by saying that AAP looks forward to responding to the opportunities presented to improve nutrition services for the MCH population.

Recommendations and Strategies for Action

Interactive work group sessions were organized to give participants an opportunity to learn more about the missions, programs, and activities of the organizations represented and to reinforce the need for
and advantages of integrated and collaborative action. Each work group focused on a major area of MCH nutrition; deliberated on the needs, issues, and recommendations outlined in the background papers; and identified additional ones for consideration. From this composite list, up to six priorities were selected, and specific action steps or strategies to address them were outlined. Organizations and agencies which should be involved in implementation were also identified. During a plenary session, the workshop participants had an opportunity to react and to comment on the selected priorities and action steps from the work groups.

The priority recommendations and strategies for action resulting from the work group sessions and plenary sessions follow. The first set of recommendations and action strategies, categorized as "crosscutting," includes those recommendations which were more generic, were identified by several work groups, and appeared to have implications for several groups of the MCH population. The other recommendations and action strategies are categorized according to the major areas of maternal and child nutrition services. Although the recommendations and strategies for action are numbered to assist in identification, the numbering system does not represent ranking of importance. Listed at the end of each category are the additional needs, issues, and recommendations which were identified by the work groups for which no strategies for action were developed.

Throughout this document, the term nutrition services refers to services which include screening, assessment, counseling, education, and referral to food assistance programs and appropriate community resources, as well as the administrative aspects of program planning and evaluation. The term MCH population includes all women of reproductive age, infants, children, and adolescents, including children with special health care needs due to chronic or disabling conditions. The recommendations and strategies for action should be considered in the context of families, communities, and resource implications. Implementation of strategies for action should be culturally competent and sensitive, and should involve the client's family as well as representatives of target populations.

The recommendations and strategies for action generated at this workshop will be disseminated in both the public and the private sectors to stimulate interest and to support collaborative planning and cooperation from all who can make a difference in the nutrition of mothers, children, and families. It is envisioned that organizations and agencies will "join hands" in collaborative efforts to implement recommendations and strategies identified at this workshop and promote a coordinated and cooperative approach to policy and program development in maternal and child nutrition.
Recommendation 1

Aggressively support nutrition services as an essential component of emerging national health care plans.

Strategies for Action/ Organizations and Agencies with Potential for Collaborative Action

1.1 Define a package of nutrition services which should be part of any national health care plan for children, adolescents, and adults.

1.2 Base recommendations on cost-benefit studies of nutrition services and related research as much as possible. Disseminate cost-benefit information to key individuals and groups involved in developing national health care plans.

1.3 Circulate the proposed package to any and all interested nutrition groups for endorsement.

1.4 Meet with all organizations known to be working on national health care plans, including AAP, AMA, Physicians for National Health Insurance, and others.

1.5 Meet with staff and members of appropriate congressional committees: the House of Representatives Committees on Ways and Means and Energy and Commerce, and the Senate Committees on Finance, Education, and Labor.

1.6 Meet with appropriate staff in the executive branch, especially DHHS/HCFA.

1.7 Meet with other appropriate organizations to participate in discussions related to national health care plans.

Recommendation 2

Enhance financial resources available to support nutrition services for women of reproductive age, infants, children, and adolescents.

Strategies for Action/ Organizations and Agencies with Potential for Collaborative Action

2.1 Improve coverage of nutrition services in public/private agencies at national, state, and local levels by identifying and advocating for sources of funding, and by educating current and prospective providers and payers of nutrition services about the value of nutrition providers and the benefits of nutrition services.
**Recommendation 2 (Cont’d)**

2.2 Convene a task force of national organizations representing the providers of nutrition services to review current payment policies covering nutrition services on a state-by-state basis, identify priority needs for payment of nutrition services, and develop a report which can be distributed to states for their use in advocating for financial resources.

2.3 Provide training for nutritionists and other health care providers on sources of payment and successful billing methods.

2.4 Encourage nutrition providers to take steps to obtain Medicaid and insurance payments for nutrition services, including intensive nutrition counseling provided by qualified professionals.

2.5 Establish advocacy programs and advocacy training for nutrition service providers to generate appropriate payment for nutrition services (using AAP and ADA advocacy models).

2.6 Promote more collaboration between state health and welfare agencies in order to improve the use of resources and quality of services.

2.7 Revise the policy regarding payment of EPSDT services to include administrative costs of planning, consultation, and training for nutrition services and disseminate to health care providers.

2.8 Inform all health care providers about the current EPSDT regulations which allow payment for treatment, such as nutrition counseling for diagnosed conditions.

2.9 Explore the possibility of accessing Medicaid funds for oral rehydration therapy.

2.10 Encourage the integration of early nutrition intervention services into P.L. 99-457-funded programs, and develop strategies for improving access to these funds for nutrition services for families of children with special health care needs.

- ADA, AFGPPHN, AMCHP, APHA, ASTPHND, DHHS/HCFA and MCHB, HIAA, NGA, NAWD, and SNE

2.11 Analyze existing data, encourage more research on cost-effectiveness and cost-benefit analysis of nutrition services, and disseminate data to policymakers.

- ADA, AFGPPHN, AMCHP, APHA, ASTPHND, DHHS/HCFA/Office of Research and Demonstrations and MCHB, NAWD, and SNE

**Recommendation 3**

*Increase the availability and accessibility of comprehensive nutrition services, including nutrition education, that are family centered, culturally sensitive, and developmentally appropriate for all women of reproductive age, infants, children, adolescents, and families.*

**Strategies for Action/ Organizations and Agencies with Potential for Collaborative Action**

3.1 Request federal and state agencies, industry, insurers, and other funding sources to make funds available to assure that nutrition services are an integral part of their programs. This would include support for training, consultation, monitoring, and program development.
3.2 Develop a national strategy and public/private/voluntary partnerships to implement this recommendation.

- ADA, AFGPPHN, AMCHP, APHA, ASTPHND, DHHS/MCHB, NACHC, NAWD, SNE, USDA/FNS and the Cooperative Extension Service, and representatives of industry including the insurance industry

3.3 Improve access to care by simplifying and standardizing eligibility applications for services, including WIC, Food Stamps, and Medicaid.

- RHIHS/HCFA and MCHB, NAWD, NASW, and USDA

3.4 Mobilize coalitions to advocate for funding for comprehensive nutrition services.

- ADA, AFGPPHN, AMCHP, APHA, ASTPHND, HMBH, ICEA, NAWD, and SNE

3.5 Advocate for more MCHB nutrition leadership positions at the federal (MCHB and regional offices) level and also in state health departments; provide for increased nutrition consultation; and encourage nutritionists to participate in the MCH Leadership Institute.

- ADA, AFGPPHN, AMCHP, APHA, ASTPHND, HMBH, ICEA, NAWD, and SNE

3.6 Pilot some approaches for developing a community-based nutrition program which targets women of reproductive age, infants, children, and adolescents at greatest risk. Such approaches should consider needs assessment, program development, implementation, and evaluation.

- ADA, AFGPPHN, AMCHP, APHA, ASTPHND, DHHS/MCHB, NACHC, NAWD, SNE, USDA/FNS and the Cooperative Extension Service, and representatives of industry including the insurance industry

3.7 Expand nutrition status monitoring efforts to other settings such as Head Start, schools, and early intervention programs.

- ADA, AFGPPHN, AMCHP, APHA, ASTPHND, DHHS/MCHB, NACHC, NAWD, SNE, USDA/FNS and the Cooperative Extension Service, and representatives of industry including the insurance industry

**Recommendation 4**

Increase the number and improve the quality of personnel (professional and paraprofessional) providing nutrition services.

**Strategies for Action/ Organizations and Agencies with Potential for Collaborative Action**

4.1 Disseminate information about the shortage and maldistribution of personnel providing nutrition services to a broad range of organizations, agencies, and groups such as key congressional committees concerned with health resources and access to care, ADA, AFGPPHN, AMCHP, APHA, ASTPHND, ASTHO, ATMCH, NACHC, NAWD, the National Health Council, and consumer groups such as the Center for Black Women’s Wellness, and the Federation for Children with Special Needs—CAPP National Resource Parent Center.

- AFGPPHN, ASTPHND, DHHS/BHP and MCHB

4.2 Continue the surveys supported by federal agencies, national professional organizations, and others regarding the numbers and distribution of qualified professionals providing nutrition services.

- AFGPPHN, ASTPHND, DHHS/BHP and MCHB
Recommendation 4 (Cont’d)

4.3 Implement standards for MCH nutrition in the curricula of educational programs for physicians, nurses, health educators, health administrators, public health nutritionists, registered dietitians, dietetic technicians, childbirth educators, and other professionals and paraprofessionals who will be involved in nutrition care delivery. The curricula should address the need for improved nutrition counseling skills and development of more effective educational strategies and materials for women, children, and adolescents from varied ethnic, class, regional, and age backgrounds, and should include training in social and behavioral sciences.

AAP, AAMC, AAP, AAUP, ABMS, ACNM, ACOG, ADA, AHA, AHEA, AIN, AMA, ANA, APHA, ATMCH, Center for Black Women’s Wellness, COSSMHO, DHHS/IHA, MCHB, and NIH/Office of Research on Women’s Health, ICEA, La Leche League, Migrant Resource Program, MDBDF, NAACOG, NASW, NAWD, NLN, NUL, SFAA, SNE, SOPHE, and USDA

4.4 Provide more incentives to attract and recruit students, increase minority representation, and retain employees in careers in nutrition and dietetics. Increase awareness of the need to take advantage of existing alternate routes to certification/registration of nutrition professionals. Efforts should be made to enhance salaries of those working in public health settings, develop expanded career ladders for professionals and paraprofessionals, and investigate other ways to attract and recruit students and retain them in the profession.

ADA, AFGPPHN, AHEA, AMCHP, APHA, ASTPHND, NAWD, and SNE

4.5 Expand and/or revise graduate training programs in public health nutrition to reflect changing needs, and implement an “approval or certification” mechanism which can be used to identify and certify such programs.

AFGPPHN, CEPH and DHHS/MCHB

4.6 Increase the number of MCHB-funded training programs and continuing education opportunities, particularly in geographic areas without them. Expand the number of clinical nutrition programs funded by the National Institutes of Health.

ADA, AFGPPHN, AMCHP, APHA, ASTPHND, NAWD, and SNE

4.7 Establish faculty qualifications and funding mechanisms to support faculty of graduate training programs in public health and MCH nutrition. This should include funding opportunities to maintain direct public health agency experience, upgrade training of MCH faculty in nutrition, train new faculty, and support public health experience for current faculty.

ADA, AFGPPHN, AMCHP, APHA, ASTPHND, ATMCH, DHHS/MCHB, NAWD, and SNE

4.8 Develop and strengthen the training of health professionals in the area of public policy. Include the development of case studies and articles on nutrition policy for distribution to health care organizations and staff of public health training programs. Explore various means of disseminating such material (e.g., through the network of the Washington Business Group on Health).

ADA, AFGPPHN, AMCHP, APHA, ASTPHND, ATMCH, DHHS/MCHB, NAWD, and SNE

4.9 Design, test, and evaluate varied approaches to public health nutrition training, with emphasis on off-campus/satellite programs to reach current practitioners.

AFGPPHN, ASTHO, ASTPHND, ATMCH, DHHS/BHP and MCHB
Recommendation 5

Educate and train all health care providers, both professional and paraprofessional, working with or planning to work with pregnant women, infants, children, adolescents, and families on sound infant and child feeding practices, including breastfeeding.

Strategies for Action

Organizations and Agencies with Potential for Collaborative Action

5.1 Assess the content of curriculum as well as of registration and licensure examinations for appropriate infant and child feeding practice information, including information on breastfeeding. Develop ways in which such information can be incorporated into the curricula and credentialing of health care professionals (e.g., pediatricians, nurses, dietitians, nurse midwives, obstetricians, family practitioners, and nurse practitioners).

- AAFP, AAP, ACNM, ACOG, ADA, AFGPHN, AHA, AHEA, APHA, DHHS/MCHB, MDBDF, NAACOG, NAWD, and USDA

5.2 Increase the number and availability of short-term training courses for registered dietitians and other providers involved in nutrition services for high-risk infants and children. Such courses should provide specialized breastfeeding and infant and child feeding guidelines for those at high risk.

- AAFP, AAP, ACNM, ACOG, ADA, AFGPHN, AHA, AHEA, APHA, DHHS/MCHB, MDBDF, NAACOG, NAWD, and USDA

5.3 Develop ongoing nutrition training and provide appropriate educational materials relating to breastfeeding and infant and child feeding guidelines to child care centers, family day care homes, foster care providers, and maternity homes.

- AAP, ADA, AFGPHN, AMCHP, APHA, ASTPHND, ASTHO, DHHS/MCHB, ICEA, NAWD, SNE, USDA, and state health and welfare agencies
Additional Crosscutting Recommendations

+ Improve the comprehensiveness and quality of maternal and child health nutrition services by establishing and validating standards for qualifications and for numbers and ratios of nutrition personnel required to deliver quality nutrition services; developing nutrition standards of practice for early intervention services; and recognizing that the family is the constant in the child's life and including the parent as a respected partner in any team serving the family.

+ Improve needs assessment in maternal and child health services by identifying barriers in the needs assessment process, including cultural and language issues; including children with special health care needs in national nutrition monitoring and other state and national data systems; and improving data bases, paying special attention to specific examples related to infant morbidity and mortality.

+ Inform policymakers, providers, and families about funding resources available for nutrition services and how to access them, and about gaps in resources and how to overcome or fill them, including accessing third-party reimbursement from public and private insurance programs.

+ Improve the capacity for delivery of local nutrition services by providing additional resources (e.g., personnel, facilities, educational materials).

+ Incorporate oral health in a specific way in all aspects of nutrition care; promote fluoridation of water.

+ Encourage nutritionists to be involved in policy planning of maternal and child health at the state level.

+ Provide methods of improving the use of nutrition services (marketing, behavioral modification, etc.).

+ Explore ways to address and modify the role of the media in determination of food consumption.

+ Recognize the family as the focus of change and emphasize settings in which the family is the focus of nutrition services.
Women's Nutrition for Optimal Reproductive Health

Recommendation 6
Increase awareness of the importance of preconceptional care among all health care providers and among all women of childbearing age. Give more emphasis in health care delivery to preventive approaches throughout the preconceptional period in order to optimize women's nutritional reserves and well-being, reduce nutrition risk factors, and support optimal pregnancy outcomes.

Strategies for Action/
Organizations and Agencies with Potential for Collaborative Action

6.1 Develop recommendations for the nutrition component of preconceptional care. These recommendations should specifically mention the importance of nutrition assessment, including weight and height monitoring at all health care encounters.

- AAFP, AAP, ACNM, ACOG, ADA, ANA/MCH Division, ASCN, DHHS/MCHB and NIH, NAACOG, SAM, and USDA/FNS and HNIS

6.2 Disseminate these recommendations to all professionals who provide health care to women of child-bearing age, and support their efforts to educate women about the importance of nutrition as a component of preconceptional care.

- AAFP, AAP, ACNM, ACOG, ADA, ANA/MCH Division, APHA, DHHS/MCHB, HMHB, ICEA, NAACOG, SAM, USDA/HNIS, and other groups responsible for the education of health professionals

6.3 Develop a record for the client to carry to enable her to share information about her nutritional status with all of her health care providers.

- Committee on Nutritional Status During Pregnancy and Lactation/IOM/NAS

Recommendation 7
Provide all pregnant and lactating women with access to appropriate, acceptable, and family-centered nutrition services as basic components of perinatal care. Emphasis should be given to providing incentives and using practical approaches which encourage continuous participation in health care.

Strategies for Action/
Organizations and Agencies with Potential for Collaborative Action

7.1 Support and advocate for the funding of WIC at a level which assures the availability of food supplementation and nutrition education to all WIC-eligible pregnant and postpartum women.

- AAP, ACOG, ADA, AMCHP, APHA, ASTPHND, FRAC, NASW, and NAWD

7.2 Advocate and provide support for Medicaid to include nutrition counseling and education as reimbursable services and to provide for nutrition counseling and education for pregnant women. These nutrition services should extend for one year postpartum.

- AMCHP, ASTPHND, DHHS/HCFA and MCHB, HMHB, NASW, NAACOG, and the Medicaid Technical Advisory Group

7.3 Support and advocate for adequate Title V MCH block grant funding for the
Recommendation 7 (Cont’d)

Employment of state and local public health nutrition staff to provide nutrition counseling for pregnant and postpartum women.

7.4 Promote and support the availability of health insurance or other means necessary to ensure access to comprehensive health care for all women. Payment for nutrition services should be available through all health insurance plans.

7.5 Advocate for food stamp benefits to be based on the Low-Cost Food Plan rather than the Thrifty Food Plan.

7.6 Advocate for eligibility for public assistance (e.g., Aid to Families with Dependent Children and general welfare) to be at or greater than 100 percent of the federal poverty level.

7.7 Initiate and implement incentive programs that involve participants and encourage the continuing use of nutrition services and perinatal care by providing coupons, child care, transportation, skill development, a user-friendly environment, and the like.

Recommendation 8

Promote breastfeeding among all women to achieve the Year 2000 National Health Promotion and Disease Prevention Objectives for breastfeeding, and establish breastfeeding as the societal norm for infant feeding.*

Strategies for Action/
Organizations and Agencies with Potential for Collaborative Action

8.1 Promote breastfeeding as the preferred method of infant feeding to the memberships of all health professional organizations.

8.2 Continue efforts to develop more effective strategies to promote breastfeeding through hospitals, MCH programs, WIC and other food assistance programs, industry, and other worksites, including federal agencies.

8.3 Explore ways to promote breastfeeding through community programs, such as the EFNEP, food stamps, and other community-based interventions.

* Recommendation 8 is repeated under Infant Nutrition as Recommendation 11.
Executive Summary: Women's Nutrition for Optimal Reproductive Health Recommendations

8.4 Encourage federal agencies to serve as models for providing support of breastfeeding women in the federal workplace.

- ADA, AGFPPHN, AMCHP, APHA, ASTPHND, DHHS (all appropriate units), NAWD, SNE, and USDA (all appropriate units)

8.5 Assure that health care professionals who interact with pregnant women, including hospital personnel, communicate breastfeeding as the norm.

- AAP, ACNM, ACOG, ADA, AHA, AMCHP, ASTPHND, DHHS, ICEA, La Leche League, NAWD, and USDA

8.6 Continue to develop and implement ways to support and provide incentives for breastfeeding in the WIC program. This should include a review of the contents of the WIC food package for breastfeeding women and an exploration of ways to enhance incentives for breastfeeding, such as inclusion of breast pumps, bras, and pads.

- AAFP, AAP, ACNM, ACOG, ADA, AGFPPHN, AHA, AHEA, APHA, DHHS/MCHB, MDBDF, NACOG, NAWD, and USDA

8.7 Include specific methods of supporting breastfeeding in the standards of practice for health professionals.

- AAFP, AAP, ACNM, ACOG, ADA, AGFPPHN, AHA, AHEA, APHA, DHHS/MCHB, MDBDF, NACOG, NAWD, and USDA

8.8 Provide lactation management training to all health care professionals who interact with pregnant and breastfeeding women to enhance their ability to support breastfeeding, and involve hospitals in networking for the promotion of breastfeeding.

- AAP, ACNM, ACOG, ADA, AHA, ASTPHND, DHHS, ICEA, La Leche League, NAWD, and USDA

Additional Women's Nutrition for Optimal Reproductive Health Recommendations

- Promote the adoption and implementation of standardized procedures for obtaining and recording anthropometric measurements to serve as a basis for classifying women according to weight-for-height and for setting weight gain goals over the course of pregnancy.

- Support efforts to screen all women for nutritional risk and to assure that all high-risk women during the preconception, prenatal, and interconceptional periods have access to affordable, satisfactory, and individualized nutrition services.

- Improve nutrition intervention efforts for pregnant women, including assessment, monitoring, and individualized, culturally sensitive nutrition counseling and supplemental foods.
Infant Nutrition Recommendations

Recommendation 9
Assure the availability of infant nutrition services targeted to pre-parent, parent, and surrogate caregivers. These services should be adapted to the economic, cultural, social, ethnic, and other circumstances of the family. Coordinate and maximize existing delivery systems, and develop infant nutrition services systems where they are not available.

Strategies for Action/
Organizations and Agencies with
Potential for Collaborative Action

9.1 Convene linkage meetings at a national level, involving agencies which administer health, food, and nutrition programs serving infants and families as lead agencies.
→ DHHS/MCHB and USDA/FNS

9.2 Organize formal linkages among organizations representing nutrition service providers at state and local levels in order to share and disseminate effective educational messages, materials, teaching methods, and protocols, and to determine the most appropriate messengers.
→ AAFP, AAP, ADA, AHA, USDA Cooperative Extension Service, and state and local health departments

9.3 Expand the Maternal and Child Health Interorganizational Nutrition Group to include all organizations representing nutrition service providers.
→ AAFP, AAFP, AAUAP, ACCH, ACOG, AHA, NAACOG, and NAPNAP

Recommendation 10
Provide information to the public that empowers people to take charge and assume responsibility for their own health and that of their families and to provide appropriate feeding practices for their infants.

Strategies for Action/
Organizations and Agencies with
Potential for Collaborative Action

10.1 Conduct research to determine population views of appropriate feeding practices as a basis for social marketing.

10.2 Conduct market research at the community level with high-risk groups to develop instructional strategies on breastfeeding and appropriate infant feeding practices, including oral rehydration therapy.

10.3 Expand activities of health, social, and food assistance programs to provide training in appropriate infant feeding practices.

10.4 Develop peer support groups to help the population.

10.5 Eliminate the baby bottle as a symbol for the baby.

10.6 Explore more use of mass media for public education related to infant nutrition.
→ Health care professional organizations such as AAFP, AAP, ADA, and SNE; state health, welfare, and education agencies; mass media organizations; industry; and community-based organizations such as women's groups, churches, EFNEP, NACHC, La Leche League, lactation consultants, and ICEA
Recommendation 11

Promote breastfeeding among all women to achieve the Year 2000 National Health Promotion and Disease Prevention Objectives for breastfeeding, and establish breastfeeding as the societal norm for infant feeding.*

Strategies for Action/
Organizations and Agencies with
Potential for Collaborative Action

11.1 Promote breastfeeding as the preferred method of infant feeding to the memberships of all health professional organizations.

=> AAP, ACNM, ACOG, ADA, AHA, APHA, ASTPHND, DHHS, ICEA, La Leche League, NAWD, and USDA

11.2 Continue efforts to develop more effective strategies to promote breastfeeding through hospitals, MCH programs, WIC and other food assistance programs, industry, and other worksites, including federal agencies.

=> AAP, ACNM, ACOG, American Dental Association, ADA, AHA, APHA, ASTPHND, AMCHP, ATMCH, DHHS, NAWD, SNE, USDA, and labor and industry organizations

11.3 Explore ways to promote breastfeeding through community programs, such as the EFNEP, food stamps, and other community-based interventions.

=> DHHS and USDA (all appropriate units)

11.4 Encourage federal agencies to serve as models for providing support of breastfeeding women in the federal worksite.

=> ADA, AFSP/PHN, AMCHP, APHA, ASTPHND, DHHS (all appropriate units), NAWD, SNE, and USDA (all appropriate units)

11.5 Assure that health care professionals who interact with pregnant women, including hospital personnel, communicate breastfeeding as the norm.

=> AAP, ACNM, ACOG, ADA, AHA, AMCHP, ASTPHND, DHHS, ICEA, La Leche League, NAWD, and USDA

11.6 Continue to develop and implement ways to support and provide incentives for breastfeeding in the WIC program. This should include a review of the contents of the WIC food package for breastfeeding women and an exploration of ways to enhance incentives for breastfeeding, such as inclusion of breast pumps, bras, and pads.

=> AAFP, AAP, ACNM, ACOG, ADA, AFSP/PHN, AHA, AHEA, APHA, DHHS/MCHB, MDBDE, NACOG, NAWD, and USDA

11.7 Include specific methods of supporting breastfeeding in the standards of practice for health professionals.

=> AAFP, AAP, ACNM, ACOG, ADA, AHA, ASTPHND, DHHS, ICEA, La Leche League, NAWD, and USDA

11.8 Provide lactation management training to all health care professionals who interact with pregnant and breastfeeding women to enhance their ability to support breastfeeding, and involve hospitals in networking for the promotion of breastfeeding.

=> AAFP, ACNM, ACOG, ADA, AHA, ASTPHND, DHHS, ICEA, La Leche League, NAWD, and USDA

*Recommendation 11 is repeated under Recommendations for Women’s Nutrition for Optimal Reproductive Health as Recommendation 8.
Recommendation 12
Develop a U.S. infant feeding code which positively states the responsibilities of formula and food manufacturing industries regarding their role in promoting breastfeeding and appropriate infant feeding practices.

Strategies for Action/
Organizations and Agencies with Potential for Collaborative Action
12.1 Convene a meeting of representatives from organizations/agencies and formula and food manufacturers to cooperatively develop and endorse the code.

12.2 Provide recommendations to federal agencies administering food assistance and related nutrition programs such as WIC (food packages), child nutrition programs, and food labeling.

Infant Formula Council, AAP, AAFP, ADA, AFGPPHN, AMCHP, APHA, ASTPHND, DHHS/FDA and MCHB, ICEA, NAWD, SNE, USDA/FNS, infant formula companies, and food manufacturers

Recommendation 13
Generate reliable and standardized data on infant feeding practices, including breastfeeding. Such data should provide information about service delivery as well as outcomes related to infant feeding.

Strategies for Action/
Organizations and Agencies with Potential for Collaborative Action
13.1 Convene representatives of all federal agencies and organizations that collect data, and selected agencies involved in international health, to standardize definitions used in data sets and data collection methods. Include representatives of practitioners and consumers.

13.2 Involve potential users in the development and pilot-testing of the new standardized definitions.

13.3 Disseminate definitions to states, provide training on their use, and provide coordination and technical assistance to state and local agencies that wish to augment the standard data collection.

13.4 Assure that the standardized system collects only essential data, tracks service delivery, assesses selected outcomes associated with breastfeeding and infant feeding practices, and provides feedback to contributors on a timely basis.

AHA, ASTHO, ASTPHND, DHHS/CDC, CHC, FDA, MCHB and NCHS, NAWD, PHF, and USDA/FNS
Recommendation 14
Specify priorities for research in infant nutrition and advocate for increases in research funding.

Strategies for Action/
Organizations and Agencies with
Potential for Collaborative Action

14.1 Identify and include research needs related to infant nutrition within MCH priorities for funding.
⇒ ACSN, USDA, and DHHS (all appropriate units; e.g., Child Nutrition Research Centers, CDC, MCHB, and NCHS)

14.2 Specifically encourage further research on the growth patterns of breastfed infants, formula-fed infants, and infants with special health care needs.

14.3 Improve the implementation of standard methods of obtaining anthropometric measurements from normal infants and children, and establish more adequate standards for assessing the growth of children with special health care needs.
⇒ AAP, ACSN, AGFPHN, ASTPHND, and DHHS/CDC

14.4 Develop and/or select a standardized set of nutrition status indicators for infants for use by all agencies providing infant nutrition services.
⇒ AAP, AGFPHN, DHHS/MCHB, and USDA

Additional Infant Nutrition Recommendations

+ Establish policies to improve facilities for infant feeding in worksites, day care settings, schools, public buildings such as convention or conference centers, jails, and emergency shelters.
Recommendation 15

Coordinate nutrition services with the health and safety recommendations in the Child Care and Development Block Grant.

Strategies for Action/
Organizations and Agencies with Potential for Collaborative Action

15.1 Request DHHS/OHD and MCHB, and USDA/FNS, to collaborate in the development and implementation of nutrition services resulting from the Child Care and Development Block Grant to reduce duplication of oversight costs and audits; provide technical assistance; and establish consensus on standards for nutrition, health, and safety.

15.2 Encourage designated responsible agencies at the state level (e.g., state health, welfare, and education agencies) to develop interagency agreements and other collaborative mechanisms to assure generation of nutrition standards, reduction of duplication of oversight costs and audits, and provision of technical assistance including the identification of resources for training in nutrition.

15.3 Request that DHHS/MCHB disseminate the APHA/AAP standards for nutrition in child care to state nutrition staff in departments of health, education, and social services, with a cover letter explaining the nutrition standards and the names of the federal contacts.

Recommendation 16

Provide specialized nutrition and food service management training for nutritionists/dietitians working in schools and in the child care community, including those serving children with special health care needs.

Strategies for Action/
Organizations and Agencies with Potential for Collaborative Action

16.1 Establish curriculum guidelines to improve undergraduate education and continuing education of nutritionists/dietitians working in the child care community (e.g., early childhood programs, Head Start programs, or group homes). Such guidelines should address children with special health care needs.

16.2 Provide funding for these programs and solicit universities/training centers to offer training opportunities.

16.3 Advocate for the establishment and filling of a nutrition position in the DHHS/ACYF’s Office of Human Development, to provide needed leadership, consultation, and technical assistance in nutrition.

AAP, ADA, APHA, ASFSA, ASTPHND, DHHS/OHD and MCHB, CWLA, NAFDC, NASW, and USDA/FNS.
Recommendation 17
Ensure quality nutrition education programs for school-age children and adolescents, including children with special health care needs.*

Strategies for Action/ Organizations and Agencies with Potential for Collaborative Action

17.1 Include a nutrition component in the comprehensive health education curriculum offered K–12 in all states.
  ➞ ADA, AHEA, ASHA, NASN, SAM, SNE, SOPHE, and ISDA/HNIS

17.2 Assess health curriculum for inclusion of nutrition; nutrition content description; integration of nutrition into total curriculum; and actual implementation of nutrition component.
  ➞ AAPHER, ADA, AHEA, ASHA, NASN, NET, SAM, SNE, and SOPHE

17.3 Develop and disseminate national guidelines for school-based nutrition education and fitness programs. Such guidelines should address content areas, integration into the total curriculum, strategies for behavioral change, and teaching of skills needed to make informed dietary decisions.
  ➞ AAFP, AAP, AAPHER, ACS, American Dental Association, ADA, AHA, AHEA, APHA / School Health Section and Food and Nutrition Section, ASFSA, ASHA, FRAC, National Cholesterol Education Program Coordinating Committee, NASN, NEA, NET, NPTA, SAM, SNE, and SOPHE

17.4 Obtain funding sources for development of, dissemination of, and training on the national guidelines.
  ➞ AFGPPHN, ASTPHND, DHHS/MCHB Adolescent Health Training Projects, state NET directors, state and local departments of health and education, and the USDA Cooperative Extension Service

17.5 Train teachers, food service workers, school health personnel, and coaches to implement the guidelines.
  ➞ AFGPPHN, ASTPHND, DHHS/MCHB Adolescent Health Training Projects, state NET directors, state and local departments of health and education, SNE, and the USDA Cooperative Extension Service

17.6 Use a cadre of qualified health professionals to provide growth, development, and nutrition training to coaches, school food service personnel, parents/care givers, teachers, school administrators, etc.
  ➞ ASFA, DHHS/MCHB Adolescent Health Training Projects, SAM, state adolescent coordinators (Title V), and state departments of health and education

17.7 Integrate age-appropriate, comprehensive food and nutrition education and nutrition services into school health programs.
  ➞ AHEA, DHHS/CDC and MCHB, DOE, NASN, NEA, NPTA, and USDA

17.8 Increase the use of school-based health clinics, different community settings (e.g., 4-H and EFNEP), and outlets (media channels) to deliver nutrition education to school-age children, including adolescents.
  ➞ ADA Ambassadors, Advertising Council, NASN, and the Public Relations Society of America

17.9 Advocate for the NET program to be funded at the levels authorized by Congress.
  ➞ AAMR, ADA, ASFSA, FRAC, SAM, and SNE

* Recommendation 17 is repeated under Adolescent Nutrition as Recommendation 21.
Recommendation 18
Strengthen and improve food services for children and adolescents.

Strategies for Action/ Organizations and Agencies with Potential for Collaborative Action

18.1 Develop a model nutrition policy for food served at schools that meets the U.S. Dietary Guidelines and the Recommended Dietary Allowances and includes elimination of the sale of low-nutrient foods during school hours, use of the school cafeteria as a learning laboratory for nutrition education, and implementation of strategies to increase participation in school meals.

- ADA, ASFSA, NAEYC, NEA, NPTA, SAM, SNE, Youth Advisory Councils, and minority organizations

18.2 Encourage school authorities to adopt the model nutrition policy, and assist school food service personnel to incorporate and apply it.

- ADA, ASFSA, FSMI, NEA, NET, and SAM

18.3 Propose federal regulations to require qualified personnel to direct and manage school food service programs.

- ADA, ASFSA, SAM, and USDA

18.4 Increase reimbursement for school meals so that the U.S. Dietary Guidelines and the RDAs can be met for all children.

- ASFSA and USDA

18.5 Establish or review nutrition standards for food service in child and adolescent group care facilities such as juvenile detention centers, runaway shelters and residential treatment facilities, and maternity homes or other facilities serving pregnant adolescents, and initiate action needed to improve standards.

- ADA, APHA, ASFSA, ASTPHND, CWLA, SAM, DHHS/MCHB and OHD, Department of Justice, NASW, and USDA/FNS.

† Recommendation 18 is repeated under Adolescent Nutrition as Recommendation 22.

18.6 Develop strategies to change adolescent eating patterns in school and/or other large populations, considering their specific environments.

- MCHB/Adolescent Health Training Project Faculty

Recommendation 19
Promote population-based research to (1) determine the natural history of cholesterol, obesity, and hypertension; (2) determine familial and institutional factors/interventions/strategies which influence children to have healthy eating patterns (habits); and (3) determine the most cost-effective and efficient ways to deliver nutrition services to children and their families

Strategies for Action/ Organizations and Agencies with Potential for Collaborative Action

19.1 Provide additional funds for research to federal agencies that conduct population-based research (e.g., CDC, NCHS, MCHB/DHHS and HNIS, ARS and Child Nutrition Research Center/USDA).

19.2 Encourage the inclusion of children in NHANES follow-up studies and advocate for adequate funds to support such studies.

19.3 Encourage prevention centers and other universities to include applied child nutrition research on their agendas.

19.4 Request private/voluntary agencies which have access to national nutrition data related to children to share national findings with other researchers.

- ADA, AFIPPHN, AMCHP, APHA, ASTPHND, NAWD, SNE, and DHHS/MCHB, CDC, NCHS, NICHD, and USDA/HNIS/ Agricultural Research Service/Child Nutrition Research Center
Additional Child Nutrition Recommendations

+ Promote comprehensive school health programs, and increase nutrition services for school-age (5–12) children through expansion of school-based curriculum.

+ Assist the Head Start program in improving nutrition services and meeting the nutrition component of the program performance standards.

+ Develop alternatives to fast-food vending machines as sources of income in schools, or change food choices in vending machines.
Recommendation 20

Improve the nutrition component of health services for adolescents, including pregnant adolescents and those with special health care needs.

Strategies for Action/
Organizations and Agencies with
Potential for Collaborative Action

20.1 Identify the availability and adequacy of adolescent-oriented nutrition services in various settings and the roles and responsibilities of various personnel providing such services.

20.2 Encourage state agencies to insure that coalitions are developed to advocate for improvement in nutrition policies, legislation, and service delivery for adolescents. The coalition developed in Colorado under a DHHS/MCHB grant might be used as a model to be modified or adapted to community characteristics and replicated at the local level.

20.3 Strengthen collaboration between state adolescent coordinators and state nutrition personnel.

20.4 Develop strategies for integrating nutrition services, education, and intervention into adolescent health services.

20.5 Include nutrition screening, assessment, and referral in all health assessments of adolescents.

20.6 Increase access to food assistance services (e.g., school feeding and the WIC program) and to more intensive nutrition counseling for pregnant adolescents.

Recommendation 21

Ensure quality nutrition education programs for school-age children and adolescents, including children with special health care needs.

Strategies for Action/
Organizations and Agencies with
Potential for Collaborative Action

21.1 Include a nutrition component in the comprehensive health education curriculum offered K-12 in all states.

21.2 Assess health curriculum for inclusion of nutrition; nutrition content description; integration of nutrition into total curriculum; and actual implementation of nutrition component.

21.3 Develop and disseminate national guidelines for school-based nutrition education and fitness programs. Such guidelines should address content areas, integration into the total curriculum, strategies for behavioral change, and teaching of skills needed to make informed dietary decisions.

* The Adolescent Nutrition Work Group recommends that organizations advocate for a White House Conference on children and youth.

† Recommendation 21 is repeated under Child Nutrition as Recommendation 17.
Recommendation 21 (Cont’d)

21.4 Obtain funding sources for development of, dissemination of, and training on the national guidelines.
- AFGP/PHN, ASTP/PHN, MCHB Adolescent Health Training Projects, state NET directors, state and local departments of health and education, and the USDA Cooperative Extension Service

21.5 Train teachers, food service workers, school health personnel, and coaches to implement the guidelines.
- AFGP/PHN, ASTP/PHN, MCHB Adolescent Health Training Projects, state NET directors, state and local departments of health and education, and the USDA Cooperative Extension Service

21.6 Use a cadre of qualified health professionals to provide growth, development, and nutrition training to coaches, school food service personnel, parents/caregivers, teachers, school administrators, etc.
- ASFA, DHHS/MCHB Adolescent Health Training Projects, SAM, state adolescent coordinators (Title V), and state departments of health and education.

21.7 Integrate age-appropriate, comprehensive food and nutrition education and nutrition services into school health programs.
- AHEA, DHHS/CDC and MCHB, DOE, NASN, NEA, NPTA, and USDA

21.8 Increase the use of school-based health clinics, different community settings (e.g., 4-H and EFNEP), and outlets (media channels) to deliver nutrition education to school-age children, including adolescents.
- ADA Ambassadors, Advertising Council, NASN, and the Public Relations Society of America

21.9 Advocate for the NET program be funded at the levels authorized by Congress.
- AAMR, ADA, ASPSA, FRAC, SAM, and SNE

Recommendation 22

Strengthen and improve food services for children and adolescents.

Strategies for Action/
Organizations and Agencies with
Potential for Collaborative Action

22.1 Develop a model nutrition policy for food served at schools that meets the U.S. Dietary Guidelines and the Recommended Dietary Allowances and includes elimination of the sale of low-nutrient foods during school hours, use of the school cafeteria as a learning laboratory for nutrition education, and implementation of strategies to increase participation in school meals.
- ADA, ASPSA, NAEYC, NEA, NPTA, SAM, SNE, Youth Advisory Councils, and minority organizations

22.2 Encourage school authorities to adopt the model nutrition policy, and assist school food service personnel to incorporate and apply it.
- ADA, ASPSA, FSMI, NEA, NET, and SAM

22.3 Propose federal regulations to require qualified personnel to direct and manage school food service programs.
- ADA, ASPSA, SAM, and USDA

22.4 Increase reimbursement for school meals so that the U.S. Dietary Guidelines and the Recommended Dietary Allowances can be met for all children.
- USDA

§ Recommendation 22 is repeated under Child Nutrition as Recommendation 18.
Executive Summary: Adolescent Nutrition Recommendations

22.5 Establish or review nutrition standards for food service in child and adolescent group care facilities such as juvenile detention centers, runaway shelters, and residential treatment facilities, and maternity homes or other facilities serving pregnant adolescents, and initiate action needed to improve standards.

- ADA, APHA, ASFSA, ASTPHND, CWLA, DHHS/MCHB and OHD, Department of Justice, NASW, SAM, and USDA/FNS

22.6 Develop strategies to change adolescent eating patterns in school and/or other large populations, considering their specific environments.

- MCHB/Adolescent Health Training Project Faculty

Recommendation 23

Improve the nutrition knowledge base and skills of service providers, educators, and parents/care givers.

Strategies for Action/
Organizations and Agencies with Potential for Collaborative Action

23.1 Include the developmental (psychosocial and physical) and nutrition needs and concerns unique to adolescents in the training and course curricula of medical, nursing, dental, and nutrition programs. Increase opportunities for training and continuing education in adolescent nutrition, including the needs of pregnant adolescents and those with special health care needs.

23.2 Provide training for coaches, trainers, exercise physiologists, and other sports personnel working with youth.

23.3 Provide training for parents/caregivers of adolescents by making greater use of such settings as worksites, supermarkets, and community centers to deliver nutrition education.

23.4 Provide training for teachers, educators (including special education personnel), school nurses, and school food service personnel, as well as for individuals in public, private, and voluntary organizations that may provide nutrition education to adolescents.

23.5 Provide training to staff of group care facilities for adolescents.

- AAFP, AAHPERD, AAP, ADA, AFGPPHN, ASFSA, ASTPHND, DHHS/MCHB Adolescent Health Training Projects, DOE, SAM, SNE, and USDA/FNS and Cooperative Extension Service

23.6 Develop a position paper on the need for training in adolescent nutrition. Include the role of paraprofessionals.

- ADA, DHHS/OSAP/high-risk youth programs, and SAM

Recommendation 24

Expand the research base in adolescent nutrition.

Strategies for Action/
Organizations and Agencies with Potential for Collaborative Action

24.1 Identify on a scientific basis eating patterns that result in wellness versus acute and/or chronic disease.

- AAP, ACS, ADA, American Heart Association, DHHS/CDC, MCHB, and NHLBI, SAM, and USDA/FNS

24.2 Conduct research to determine the nutrition requirements of adolescents, particularly in relation to sexual maturity, special health care needs, and substance abuse.

24.3 Study the diagnosis, assessment, and/or treatment of adolescent obesity, eating disorders, and nutrition-related risk factors for chronic diseases.
Recommendation 24 (Cont’d)

24.4 Conduct research to determine effective methods of establishing and maintaining healthy eating and exercise habits among adolescents, including those with special health care needs.


24.5 Develop a data base which includes market research data at local, state, and national levels to access and monitor the growth and the nutrition status, knowledge, attitudes, concerns, and issues related to adolescents from all socioeconomic levels, including high-risk groups of the adolescent population, such as pregnant adolescents and those with special health care needs.

⇒ DHHS/CDC, MCHB, and NCHS

Additional Adolescent Health Recommendations

+ Establish baseline data and surveillance systems at the local, state, and national levels to assess the growth and nutrition status of all adolescents, with special emphasis on the economically disadvantaged and other high-risk groups, including pregnant adolescents.

+ Build coalitions of organizations/agencies (e.g., public, private, voluntary, and professional) at local, state, and national levels to improve the nutritional health status of all adolescents and to address the needs of pregnant adolescents, those with special health care needs, and other at-risk groups.

+ Develop for adolescents basic nutrition health strategies that relate to wellness.
Nutrition for Children with Special Health Care Needs

Recommendation 25
Expand access (awareness, availability, accountability, affordability, and acceptability) to nutrition services in all settings serving children with special health care needs and their families, and ensure that these services are culturally sensitive, family centered, and community based.

Strategies for Action/
Organizations and Agencies with
Potential for Collaborative Action

25.1 Educate families, policymakers, providers, and the community about the availability, components, providers, payment sources, and benefits of nutrition services, and about gaps in these areas.

25.2 Encourage professional organizations to provide in-service education to members related to the nutrition of children with special health care needs (CSHCN), develop and disseminate materials, and sponsor and conduct workshops.

25.3 Eliminate barriers to nutrition services by including nutritionists on primary care teams and recommending expansion of state Title V and primary health care programs (e.g., community health centers) which provide for participation of nutritionists on such teams.

25.4 Increase the number of P.L. 99-457 interagency coordinating councils at the state and local levels that include nutritionists as members. Continue to inform the members of professional organizations such as ADA and AAMR about the role of nutritionists in such councils.Communicate with the lead P.L. 99-457 agency about the role and value of nutritionist participation on committees and councils, and recommend that state dietetic associations identify qualified nutritionists who can assist the lead agency with planning for P.L. 99-457.

25.5 Strengthen the level of technical knowledge and skill among all human service providers and families as they relate to the nutrition needs of CSHCN. Request that national professional organizations and their state chapters publicize existing interdisciplinary training programs to members. Utilize nutritionists as resources for nutrition information and materials, and sponsor educational programs on nutrition topics.

25.6 Expand linkages between hospitals and community-based programs contributing to a comprehensive, coordinated, community-based, culturally sensitive, family-centered system of care. Encourage agencies involved with discharge planning to seek and utilize nutrition services, and encourage information and referral services to include information about nutrition services in their data bases.

45
Recommendation 25 (Cont’d)

25.7 Include families from service populations in all levels of policy development (e.g., training, service, and research) in implementation of new and ongoing interdisciplinary programs for human service providers, and in the development, implementation, and evaluation of services. Encourage organizations and agencies to include families on their advisory committees.

- AAP, AAUAP, ADA, AFGPPHN, AMCHP, APHA, DHHS/ACYF, BHCD, and MCHB, HMHB, MDBDF, NACHC, National Dairy Council, NAPNAP, NASW, NAWD, and SNE

25.8 Provide the Medicaid agency with available data regarding costs and benefits of nutrition services for children with special needs.

- ADA, AFGPPHN, AMCHP, ASTPHND, and DHHS/MCHB

Recommendation 26

Improve the quality of nutrition services available to children with special health care needs.

Strategies for Action/
Organizations and Agencies with Potential for Collaborative Action

26.1 Increase participation of individuals interested in the nutrition of CSHCN in the MCH block grant application process. Provide guidelines on how to get involved in the grant application process, points to consider, other organizations to involve, timing, and recommendations for testimony.

- AAMR, APTA, ADA/practice groups and relevant committees, AMCHP, APHA, AOTA, American Speech-Language-Hearing Association, and ASTPHND

26.2 Advocate for every state CSHCN program to employ a state-level nutrition professional for children with special health care needs.

- AAMR, ADA, AMCHP, ASTPHND, DHHS/MCHB, and MDBDF

26.3 Advocate for a nutrition professional to be available to state department of education and special education staff (e.g., a consultant registered dietitian position similar to the existing physical therapy/occupational therapy consultant positions).

- AMCHP, ASTPHND, OSERS, and parent groups

26.4 Involve nutrition professionals in the development of the Individual Education Plan (IEP) and the Individual Family Service Plan (IFSP) process at state and local levels. Recommend models for local use, and educate nutrition professionals about IEP and IFSP processes.

- AAMR, AAUAP, ADA, state directors of special education, and parent groups

26.5 Develop a standardized screening and referral system for children with special health care needs and promote its adoption by relevant professional organizations.

- AAP, ADA, ANA, ASHA, and ASTPHND

Recommendation 27

Improve the documentation of need by establishing a nutrition data system for children with special health care needs.

Strategies for Action/
Organizations and Agencies with Potential for Collaborative Action

27.1 Include CSHCN as a group (data set) in the National Nutrition Monitoring System (NNMS) and other national and state data
Executive Summary: Nutrition for Children with Special Health Care Needs Recommendations

Recommendation 28
Improve the basic and continuing education for all personnel involved with children with special health care needs.

Strategies for Action/
Organizations and Agencies with
Potential for Collaborative Action

28.1 Include coursework and field experience related to CSHCN in the training of registered dietitians. Recommend questions related to nutrition for CSHCN for inclusion in the registration examination administered by the Commission on Dietetic Registration, and provide such questions to the ADA/Council on Education.

28.2 Request that University Affiliated Programs for Persons with Developmental Disabilities reach out to colleges and universities to provide guest lecturers and internship rotation sites. Provide options for short-term or long-term experiences in nutrition training programs, and provide necessary funding for nutrition.

28.3 Provide education on the nutrition needs of CSHCN for health and human services personnel, including day care and school food-service workers. Include parents in the planning and teaching of the curriculum. Encourage professional organizations representing providers to identify individuals who can advocate for the inclusion of nutrition for CSHCN in the training of health professionals.
Recommendation 28 (Cont'd)

28.4 Encourage state CSHCN programs to support and promote attendance of their professional staff at the advanced courses on nutrition for CSHCN which are funded by DHHS/MCHB.

⇒ AAFP, AAUAP, ADA, AFGPPHN, AMCHP, ASFSA, ASTPHND, DHHS/MCHB, and NAWD

28.5 Encourage state departments of education to use the services of state CSHCN nutritionists to provide consultation, inservice training, and technical assistance to their staff.

⇒ AAFP, AAUAP, ADA, AFGPPHN, AMCHP, ASFSA, ASTPHND, DHHS/MCHB, DOE, NAWD, and NPTA

28.6 Provide continuing education credit for registered dietitians and other professionals through multiple avenues such as attending and giving presentations on nutrition for CSHCN at national meetings of organizations interested in CSHCN, publishing articles about nutrition for CSHCN in professional journals, preparing and disseminating audiotapes and videotapes on the subject, and studying other continuing education materials published on the subject by professional organizations.

⇒ AAMR, AAUAP, ADA, AFGPPHN, AMCHP, AOTA, NCEMCH, and Pathfinders.

Additional Nutrition for Children with Special Health Care Needs Recommendations

+ Heighten the awareness of parents and service providers regarding the importance and role of nutrition in the care of children with special needs, including those with "new conditions" such as pediatric AIDS and drug exposure. Help them recognize and identify nutrition-related problems of children at risk and make appropriate referrals.

+ Improve the quality of clinical nutrition services provided for special needs children by implementing the use of appropriate nutrition screening and referral tools to identify and refer children at risk; implementing the use of standardized protocols to assure the quality of nutrition screening, assessment, intervention services, and monitoring; expanding linkages with community programs which can contribute to a comprehensive, coordinated, community-based, and family-centered system of care; and developing effective referral mechanisms between tertiary care centers and community-based providers.

+ Increase awareness and knowledge of the nutrition needs of children with special health care needs among all human services providers (including nutritionists) and families by: Including content and/or field experiences which address CSHCN in undergraduate and graduate human services programs; and developing inservice and continuing education opportunities which focus on strengthening service networks and on developing skills in delivering services in nontraditional clinical settings (e.g., homes, schools, and day care centers).

+ Expand research focused on: the role of nutrition in the etiology of growth retardation and other abnormalities; the energy and nutrient needs of children with changed activity levels and/or body mass, chromosomal abnormalities, and chronic...
Executive Summary: Nutrition for Children with Special Health Care Needs Recommendations

medications; the techniques/formulas for measuring the body composition of children with altered distribution of fat and lean body mass, and for assuring and monitoring growth in those conditions which preclude the use of standard anthropometric techniques; the role of nutrition in the treatment of infants/children with HIV infection and cancer; and the documentation of the positive effects of early nutrition intervention, including the growth and development of high-risk neonatal intensive care unit infants.

+ Address lack of community-based feeding and nutrition services for CSHCN in schools. Direct special attention to meeting the nutrition-related needs of CSHCN as more of them are mainstreamed in preschool and school settings.

+ Improve the planning, implementation, and evaluation of nutrition services for CSHCN (Title V MCH Block Grant) by assuring that a state-level nutrition professional is available for the CSHCN program; developing parent-professional collaborative efforts; and clarifying the role of the state Title V program in assuring that nutrition services are available at state and local levels.
Glossary of Acronyms

AA/BA ................................................................. American Anorexia/Bulimia Association
AAFP ................................................................. American Academy of Family Physicians
AAHPERD ....................................................... American Alliance for Health, Physical Education, Recreation, and Dance
AAMC ................................................................. Association of American Medical Colleges
AAMR ................................................................. American Academy on Mental Retardation
AAP ................................................................. American Academy of Pediatrics
AAUP ................................................................. American Association of University Affiliated Programs for Persons with Developmental Disabilities
ABMS ................................................................. American Board of Medical Specialties
ACCH ................................................................. Association for the Care of Children's Health
ACNM ................................................................. American College of Nurse Midwives
ACOG ................................................................. American College of Obstetricians and Gynecologists
ACPM ................................................................. American College of Preventive Medicine
AAMR ................................................................. American Academy of Pediatrics
AAUAP ............................................................... American Association of University Affiliated Programs for Persons with Developmental Disabilities
ABMS ................................................................. American Board of Medical Specialties
ACCH ................................................................. Association for the Care of Children's Health
ACNM ................................................................. American College of Nurse Midwives
ACOG ................................................................. American College of Obstetricians and Gynecologists
ACPM ................................................................. American College of Preventive Medicine
ACS ................................................................. American Cancer Society
ACF ................................................................. Administration for Children, Youth and Families
ADA ................................................................. American Dietetic Association
AGFPPHN ........................................................ Association of Faculties of Graduate Programs in Public Health Nutrition
AHA ................................................................. American Hospital Association
AHEA ................................................................. American Home Economist Association
AIN ................................................................. American Institute of Nutrition
AMA ................................................................. American Medical Association
AMCHP ............................................................. Association of Maternal and Child Health Programs
ANA ................................................................. American Nurses' Association
ANAD ............................................................... National Association of Anorexia Nervosa and Associated Disorders
AOTA ................................................................. American Occupational Therapy Association
APA ................................................................. American Psychological Association
APHA ................................................................. American Public Health Association
APTA ................................................................. American Physical Therapy Association
ASCN ................................................................. American Society of Clinical Nutrition
ASFSRA .......................................................... American School Food Service Association
ASHA ................................................................. American School Health Association
ASTHO ............................................................. Association of State and Territorial Health Officials
ASTPHND ........................................................ Association of State and Territorial Public Health Nutrition Directors
ATMCH ........................................................... Association of Teachers of Maternal and Child Health
BHCDA ............................................................. Bureau of Health Care and Delivery Assistance
BPH ................................................................. Bureau of Health Professions
CEPH ................................................................. Council on Education in Public Health
CDC ................................................................. Centers for Disease Control
CHC ................................................................. Community Health Centers
CNI ................................................................. Community Nutrition Institute
COSSMHO ..................................................... National Coalition of Hispanic Health and Human Services Organizations
CSWE ............................................................. Council on Social Work Education
CWLA .............................................................. Child Welfare League of America
DD/PS ............................................................... Dietetics in Developmental and Psychiatric Disorders
DHHS ............................................................... United States Department of Health and Human Services
DOE ................................................................. United States Department of Education
EFNEP ............................................................. Expanded Food and Nutrition Education Program
EPSDT ............................................................. Early and Periodic Screening, Diagnosis and Treatment
FDA ................................................................. Food and Drug Administration
FNS ................................................................. Food and Nutrition Service
FRAC ............................................................... Food Research and Action Center
FSMI .............................................................. National Food Service Management Institute
HCFA ............................................................... Health Care Financing Administration
HIAA ............................................................... Health Insurance Association of America
HMO ............................................................... Healthy Mothers, Healthy Babies Coalition
HCW ............................................................... Health Maintenance Organization
HNIS ............................................................... Human Nutrition Information Service
ICEA ............................................................... International Childbirth Education Association
IHS ................................................................. Indian Health Service
IOM ............................................................... Institute of Medicine
MCH ............................................................... Maternal and Child Health
MCHB ............................................................ Maternal and Child Health Bureau
MCHING ........................................................ Maternal and Child Health Interorganizational Nutrition Group
Glossary of Acronyms (Continued)

MDBDF: March of Dimes Birth Defects Foundation
NAACOG: Nurses Association of the American College of Obstetricians and Gynecologists
NACHC: National Association of Community Health Centers
NACHRI: National Association of Children's Hospitals and Related Institutions
NAEYC: National Association for the Education of Young Children
NAFDC: National Association for Family Day Care Child Care Child Development Programs
NAPNAP: National Association of Pediatric Nurse Associates and Practitioners
NAS: National Academy of Sciences
NASN: National Association of School Nurses
NASW: National Association of Social Workers
NAWD: National Association of WIC Directors
NCEMCH: National Center for Education in Maternal and Child Health
NCHS: National Center for Health Statistics
NEA: National Education Association
NET: Nutrition Education and Training
NGA: National Governors Association
NHLBI: National Heart, Lung, and Blood Institute
NICHD: National Institute of Child Health and Human Development
NIMH: National Institute of Mental Health
NLN: National League for Nursing
NPTA: National Parents and Teachers Association
NUL: National Urban League
OHD: Office of Human Development
OSAP: Office for Substance Abuse Prevention
OSERS: Office of Special Education and Rehabilitative Services
PHF: Public Health Foundation
PPO: Preferred Provider Organization
SAM: Society for Adolescent Medicine
SFPA: Society for Applied Anthropology
SNE: Society for Nutrition Education
SPHR: Society for Public Health Education
SPRANS: Special Projects of Regional and National Significance
UCPA: United Cerebral Palsy Association
USDA: United States Department of Agriculture
WIC: Special Supplemental Food Program for Women, Infants and Children
Organizations Represented at Workshop

Administration for Children, Youth and Families
American Academy of Family Physicians
American Academy of Pediatrics, Committee on Nutrition
American Association of University Affiliated Programs for Persons with Developmental Disabilities
American College of Nurse-Midwives
American College of Obstetricians and Gynecologists
American Dental Association
American Dietetic Association
American Hospital Association
American Occupational Therapy Association, Inc.
American Public Health Association
American School Food Service Association
American School Health Association
American Society for Clinical Nutrition
Association for the Care of Children's Health
Association of Faculties of Graduate Programs in Public Health Nutrition
Association of Maternal and Child Health Programs
Association of State and Territorial Health Officials
Association of State and Territorial Public Health Nutrition Directors
Association of Teachers of Maternal and Child Health
Bureau of Health Care Delivery Assistance, HRSA, DHHS
Center for Black Women's Wellness
Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control
Federation for Children with Special Needs: CAPP National Parent Resource Center
Food and Drug Administration
Health Care Financing Administration, DHHS
Healthy Mothers, Healthy Babies National Coalition
Henry J. Kaiser Family Foundation
Indian Health Service
Institute for International Studies in Natural Family Planning
International Childbirth Education Association
March of Dimes Birth Defects Foundation
Maternal and Child Health Bureau, HRSA, DHHS
National Academy of Sciences Food and Nutrition Board
National Association for the Education of Young Children
National Association of Children's Hospitals and Related Institutions
National Association of Community Health Centers, Inc.
National Association of County Health Officials
National Association of Pediatric Nurse Associates and Practitioners
National Association of Social Workers
National Association of WIC Directors
National Center for Education in Maternal and Child Health
National Center for Health Statistics, Centers for Disease Control
National Conference of State Legislators
National Commission to Prevent Infant Mortality
National Migrant Resource Program, Inc.
National Parents and Teachers Association
National Urban League, Inc.
Nurses Association of the American College of Obstetricians and Gynecologists
Office of Disease Prevention and Health Promotion, DHHS
Office of Special Education and Rehabilitative Services, U.S. Department of Education
Region I: Public Health Service, DHHS
Region III: Public Health Service, DHHS
Region IV: Public Health Service, DHHS
Region V: Public Health Service, DHHS
Region VI: Public Health Service, DHHS
Region VII: Public Health Service, DHHS
Region VIII: Public Health Service, DHHS
Region IX: Public Health Service, DHHS
Region X: Public Health Service, DHHS
Society for Adolescent Medicine
Society for Nutrition Education
Society for Public Health Education, Inc.
U.S. Department of Agriculture, Extension Service
U.S. Department of Agriculture, Food and Nutrition Service
Washington Business Group on Health