Position of the Academy of Nutrition and Dietetics: Child and Adolescent Federally Funded Nutrition Assistance Programs

**ABSTRACT**
It is the position of the Academy of Nutrition and Dietetics that children and adolescents should have access to safe and healthy foods that promote physical, cognitive, and social growth and development. Federally funded nutrition assistance programs, such as food assistance, meal service, and nutrition education, play a vital role in ensuring that children and adolescents have access to the foods they need and in improving the overall nutrition and health environments of communities. Federally funded nutrition assistance programs help to ensure that children and adolescents receive safe, healthy foods that provide adequate energy and nutrients to meet their growth and development needs. These programs provide access to adequate food supplies to combat hunger and food insecurity; provide healthy foods to children and adolescents who have nutritional or medical risk factors, such as iron deficiency anemia; and provide nutrition education. In addition, federally funded nutrition assistance programs serve as a means to prevent or reduce obesity and other chronic diseases. It is important that permanent and full federal funding be provided for these programs, which have been consistently shown to have a positive impact on child and adolescent nutrition and health outcomes. Registered dietitian nutritionists and nutrition and dietetic technicians, registered—trained in food science, nutrition, and food systems to implement programs to monitor, evaluate, and improve the nutritional status of children and adolescents—are preeminently qualified to implement and evaluate nutrition assistance programs for children and adolescents.

**POSITION STATEMENT**
It is the position of the Academy of Nutrition and Dietetics that children and adolescents should have access to safe and healthy foods that promote physical, cognitive, and social growth and development. Federally funded nutrition assistance programs, such as food assistance, meal service, and nutrition education, play a vital role in ensuring that children and adolescents have access to the foods they need and in improving the overall nutrition and health environments of communities.

**RATIONALE FOR CHILD AND ADOLESCENT FEDERALLY FUNDED NUTRITION ASSISTANCE PROGRAMS**
Among all children and adolescents residing in the United States in 2015,
more than 40% (30.6 million) were living in households with low income* and 21% were living below the federal poverty line. According to the National Center for Children in Poverty, young children are more likely to live in households with low income than older children and adolescents. In 2015, almost 45% of children under age 3 years were living in households with low income as compared with 39% of adolescents ages 12 to 17. In the same year, 12% of white children and adolescents and 14% of Asian children and adolescents lived in households with low income, compared with 32% of Hispanic children and adolescents and 37% of black children and adolescents. In addition, in 2015 children and adolescents residing with married parents were less likely to live in households with low income as compared with those residing with a single parent. This is of concern, because living in households with low income is associated with food insecurity, meaning that these children and adolescents at times do not have access to adequate and safe foods to meet their energy and nutrient needs.

In 2016, an estimated 6.5 million (8.8%) children and adolescents in the United States lived in households with low income in which at least one child or adolescent was food insecure. Of these, 298,000 (0.8%) households experienced very low food insecurity where children or adolescents were hungry, skipped a meal, or had no food for a whole day. Consistent with national poverty statistics, the prevalence also varied by demography and other household characteristics. It was higher than the national average (12.3%) in households with children (16.5%), households with children headed by a single woman (31.6%) or a single man (21.7%), and households headed by black non-Hispanics (22.5%) and Hispanics (18.5%).

Children and adolescents living in households that experience food insecurity may be predisposed to increased cardiometabolic risks, overweight or obesity, or mental health problems. Although it is difficult to establish a causal relationship between food insecurity and health status, increased intake of calories and plausible inadequate nutrient intake among children and adolescents experiencing food insecurity are possible factors that can explain their increased risk of chronic health conditions. National estimates of food and nutrient intakes of children and adolescents highlight the need for strengthening federally funded nutrition assistance programs. Although there was a decrease in estimated energy intake between 1999 and 2010 for all children and adolescents, the percentage of calories from total fat for this group remained the same over this period. According to the 2015-2020 DGA, average consumption of saturated fat by children and adolescents ranges from 11.1% to 12.6% of total calories per day. Their average intake of added sugars as a percentage of calories per day is higher than the recommended 10% of total calories per day. Consumption is particularly high among children and adolescents aged 9 to 18 and accounts for nearly 20% of total calories per day consumed by this age group. Much like children’s and adolescents’ average intake of saturated fat and sugar, their average intake of sodium has remained consistently high from 2,000 mg to 4,500 mg per day, particularly among children aged 6 to 11 years from households with low income. Moreover, positive linear relationships between intake of calories, sugar, and fat with increasing food insecurity levels have been reported. On the other hand, higher food insecurity levels in children have been negatively associated with vegetable intake.

Participation in federally funded nutrition assistance programs helps to ensure children’s and adolescents’ adequate nutritional intake and to combat hunger and food insecurity by increasing access to healthy food and reducing the risk of nutrient deficiencies. In addition, programs focusing on nutrition education strengthen participants’ nutrition knowledge and skills related to making healthy dietary choices. In these ways, these programs help to prevent or reduce chronic diseases in children and adolescents. Registered dietician nutritionists (RDNs) and nutrition and dietetics technicians, registered (NDTRs) are preeminently qualified to provide nutrition screening and assessment, education, and developmentally appropriate anticipatory guidance for children and adolescents in accordance with national health recommendations, as well as monitor nutrition assistance program compliance with local, state, and national regulations.

**OVERVIEW OF CHILD AND ADOLESCENT FEDERALLY FUNDED NUTRITION ASSISTANCE PROGRAMS**

Since the mid-1940s, the US government has been committed to eradicating hunger and nutrient deficiencies among its population. Federally funded nutrition assistance programs were developed to subsidize food served to children and adolescents in schools and other organizations in which they receive instruction or care. In fiscal year 2015 (most recent data available), the US Department of Agriculture (USDA) spent approximately $104.1 billion on 15 domestic nutrition assistance programs. Some of these programs include the Supplemental Nutrition Assistance Program (SNAP), NSLP, SBP, WIC, SFSP, and CACFP. More detailed descriptions of nutrition assistance programs targeting children and adolescents are presented next.

**Supplemental Nutrition Assistance Program**

SNAP provides the opportunity for individuals to select healthy meals, promotes nutritional status, and helps to reduce food insecurity in families with low incomes. According to SNAP rules, all recipients must meet work requirements unless they are exempt because of age, disability, or other specific reasons. Collaborative efforts between states, nutrition educators (including RDNs), and neighborhood and faith-based organizations provide resources to ensure that individuals eligible for the program are aware of the benefits of the program and the application process.

SNAP-Ed is an evidence-based nutrition program that teaches people using food assistance about good nutrition, health, food handling, and personal development. The goal of the SNAP-Ed program is to improve the likelihood that
SNAP recipients will make healthy food choices within their limited budget and choose active lifestyles consistent with the DGA. The SNAP-Ed program is addressed in federal laws, including the Healthy, Hunger-Free Kids Act (HHFKA) of 2010 and Agricultural Act of 2014. Increased emphasis on evidence-based projects and interventions was a major change identified in the HHFKA of 2010, with focus on nutrition education, obesity-prevention interventions, and innovative approaches.19

National School Lunch Program and School Breakfast Program
NSLP and SBP are the two largest federally funded school meals programs. NSLP was established in 1946 and SBP was established in 1975.24 These programs were implemented to help address problems of hunger, food insecurity, and poor nutrition by establishing federal guidelines for providing healthy, safe meals in school.23 The federal school meals standards are based on the DGA.24 Approximately 30.5 million children and adolescents participate in NSLP and 65% of all participants receive free meals, 7% receive reduced-price meals, and 28% pay full price for meals. Approximately 14 million children and adolescents participated in SBP each school day in fiscal year 2015. Nearly 80% of all participants in SBP received free meals, 6% received reduced-price meals, and 15% paid full price for meals.23

The HHFKA of 2010 authorized funding and set policy to revise the previous 30-year-old federal mandates for the USDA’s core child nutrition assistance programs: NSLP, SBP, WIC, SFSP, and CACFP.12 The HHFKA of 2010 charged the USDA to update the school breakfast and lunch meals and to establish standards for competitive foods—foods sold to children in schools (during the school day) other than through the school meals programs.19 In addition, implemented under the Richard B. Russell National School Lunch Act, and included in the HHFKA, federal school meals programs must include a written food safety program that complies with hazardous analysis and critical control points principles.24 Also, schools meals programs are required to obtain a food safety inspection conducted by a state or local governmental agency responsible for food safety inspections, at least twice during each school year.24

Since the full implementation of the HHFKA of 2010, schools have significantly improved the nutritional quality of school meals. A study based on national data with 792 middle schools and 751 high schools participating in the NSLP reports that meaningful improvements have been made in the nutritional content of NSLP meals offered to US secondary students; these improvements have reduced prior NSLP meal disparities associated with school characteristics, particularly school size and student body race and ethnicity.25 Moreover, several studies that examined the diet quality of NSLP participants after HHFKA implementation (after 2010) found significant improvements with respect to intake of nutrient-dense entrees, fruits, and vegetables.26

Over the past 70 years, federal school meal programs have provided free or reduced-price meals to students from families with low income with the opportunity to select safe, healthy meals.27 In addition, school nutrition professionals, including RDNs and NDTRs, have been instrumental in creating school-based and community coordinated (wellness) health education programs. “Comprehensive school nutrition services include the following key components: nutrition education and promotion, food and nutrition programs available on the school campus, school-home-community partnerships, and nutrition related health services.”27 Some examples of activities illuminating the contributions of federal school meal programs to the overall coordinated school health program and nutrition education include:

- implementing mandated school wellness programs;
- participating in volunteer federal initiatives that include nutrition and physical activity;
- utilizing the cafeteria as a nutrition education classroom;
- providing healthy breakfast, lunch, and supper meals;
- serving breakfast in the classroom;
- providing healthy meals to children and adolescents with special health care needs;
- planting school gardens; and
- procuring local agricultural products.22,28

Farm to school programs strive to strengthen “the connection communities have with fresh, healthy food and local food producers by changing food purchasing and education practices at schools and early care and education settings.”29 The USDA reports that in 2015, over 42,000 schools were bringing the farm to school.30 Adding to existing school nutrition assistance programs, the Community Eligibility Provision was initiated by the HHFKA at

Special Supplemental Nutrition Program for Women, Infants, and Children
WIC was established in 1972 by an amendment to the Child Nutrition Act of 1966 and became a permanent program in 1975.20 WIC provides supplemental foods, nutrition education, breastfeeding education and support, and referrals to health and other social service professionals to pregnant women, women up to 6 months post-partum, women breastfeeding up to 12 months, and infants and children up to age 5 at medical or nutritional risks.20 WIC participants must have a family income below 185% of the federal poverty line.20 Unlike NSLP and SNAP, WIC is not an entitlement program, so participation in the program is limited by the availability of federal funding rather than the number of individuals meeting program eligibility criteria.

The WIC Farmers Market Nutrition Program was established in 1992 to provide fresh, nutritious, unprepared, locally grown fruits and vegetables through farmers’ markets and roadside stands to WIC participants, and to expand awareness and use of, and sales at, farmers’ markets and roadside stands.21 Farmers Market Nutrition Program participants must have a family income below 185% of the federal poverty line.22

Nutrition Assistance Programs
Since the inception of federally funded meal programs, school food authorities and CACFP providers have been required to meet specific nutrition and administrative requirements to claim a reimbursable meal.23 The federal government has taken steps to improve the nutritional standards and administrative requirements of NSLP, SBP, SFSP, and CACFP reimbursable meals.

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of 2010. The HHFKA allows schools and local educational agencies with high poverty rates and over 40% of Identified Student Percentage (percentage of students out of total students enrolled, certified for free school meals) in the previous school year to provide free meals to all students. The Community Eligibility Provision uses information from SNAP and Temporary Assistance for Needy Families to determine household eligibility, eliminating the need for households to apply for the program. It thus ensures that children from families with low income have access to school breakfast and lunch at no cost through NSLP and SBP. Another mechanism that ensures children from low-income families have access to school meals programs is direct certification. Direct certification is a process conducted by the states and by local educational agencies to certify eligible children for free meals without the need for household applications.

Child and Adult Care Food Program
In 2014, CACFP provided reimbursements for meals served to more than 3 million children each day in family day-care homes, child-care centers, and homeless shelters. CACFP is generally administered by state departments of education. Child-care homes and centers may receive reimbursement for up to two meals (breakfast, lunch, or supper) and one snack or two snacks and one meal for each eligible participant per day. Homeless shelters may receive reimbursement for up to three meals (breakfast, lunch, and supper) for each child per day.

The 2016 CACFP meal pattern requirements reflect the 2015-2020 DGA, as required by the HHFKA of 2010. Based on the 2016 requirements, centers and day-care homes participating in CACFP must serve more whole grains and a greater variety of fruits and vegetables and reduce the amount of added sugars and solid fats in the meals provided. After-school child-care programs may receive reimbursement for meals and snacks per child per day. Snacks provided through CACFP comply with USDA regulations for CACFP meals.

Summer Food Service Program
SFSP, also known as the Summer Meals Program, provides healthy meals during the summer months to children and adolescents from families with low income. Because most schools are closed during summer and do not offer NSLP, food insecurity increases in households participating in NSLP. Participation in SFSP during the summer meals months is associated with reductions in household food insecurity. SFSP is free of charge to any child or adolescent on a first-come, first-serve basis, and the program must meet federal SFSP guidelines. In addition to offering healthy meals, many SFSP sites provide education enrichment programs. Settings such as schools, residential camps, and faith-based or other nonprofit community organizations that have the ability to manage a food service program may be SFSP sponsors. The Food Research Action Center reports that in 2016 an estimated 3.04 million children and adolescents participated in the Summer Nutrition Programs (SFSP and NSLP combined) on an average day, 15 children and adolescents received summer lunch for every 100 children and adolescents from families with low income who received lunch in the 2015-2016 school year, and only one in seven children and adolescents who ate school lunch during the regular school year were reached by summer nutrition programs. According to the USDA, the Summer Meal Programs rely on innovation and collaboration to reach children and adolescents who need good nutrition when school is out of session.

Afterschool Snack Program
The Afterschool Snack Program is available to public or nonprofit private schools of high school grade or under and public or nonprofit private residential child-care institutions that participate in the NSLP and sponsor or operate an after-school care program. Entities that participate in the After-school Snack Program receive reimbursement for each snack that is served that meets federal guidelines, and the snacks must be offered to students or children that meet the income eligibility. “A site is area eligible if it is located at a school or in the attendance area of a school where at least 50% of the enrolled children are eligible for free or reduced price meals.” After-school care programs also need to provide organized, regularly scheduled activities in a structured and supervised environment, along with educational or enrichment activity, to meet eligibility criteria.

Food Distribution Programs
Federal food distribution programs provide food and nutrition assistance to children and families participating in other federally funded programs. Programs include the School/Child Nutrition USDA Foods Program, the Emergency Food Assistance Program (TEFAP), the Food Distribution Program on Indian Reservations, the Department of Defense Fresh Fruit and Vegetable Program (DODFFVP), the Disaster Assistance Program, and the Commodity Supplemental Foods Program.

The School/Child Nutrition USDA Foods Program supports child nutrition assistance programs (NSLP, CACFP, and SFSP) by providing low-cost “entitlement” foods for each lunch served, thus adding to the total funds available to schools and institutions. USDA foods include vegetables, fruits, milk and milk products, whole grains, and lean meats along with other protein options. The program provides food products with reduced sodium, sugar, and fat to participating institutions. Nearly 100,000 public and private nonprofit schools participating in NSLP and SFSP have received foods through the School/Child Nutrition USDA Foods Program.

TEFAP provides commodity foods to local food-distribution and service agencies, such as food banks, food pantries, emergency (soup) kitchens, homeless shelters, and other organizations that serve meals to individuals who are homeless or who have low income. More than half of emergency kitchens and food pantries, and 83.5%
of food banks, receive food through the Emergency Food Assistance System, of which 13.5% are distributed by TEFAP.41 DODFFVP allows schools to use USDA foods entitlement dollars to buy fresh produce. The program is operated by the Defense Logistics Agency of the US Department of Defense.38,42 It started as a pilot project in eight states in fiscal year 1994-1995 and has now expanded to 48 states, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam. The DODFFVP has also expanded to include purchases for the Food Distribution Program on Indian Reservations.42

Nutrition Education Programs and Related Initiatives

The Expanded Food and Nutrition Education Program (EFNEP) was designed to assist families with low income “in acquiring the knowledge, skills, attitudes, and changed-behavior necessary for nutritionally sound diets, and [contribute] to their personal development and the improvement of the total family diet and nutritional well-being.”43 Since its inception in 1969, the program has reached more than 32.5 families with low income. In 2015, EFNEP educators reached 377,702 children and adolescents directly and 340,000 family members indirectly.44 EFNEP employs trained para-professional educators to deliver tailored curricula and facilitate behavior change using hands-on training in families with low income. The program has helped improve diet quality by increasing participants’ ability to buy, prepare, and store foods that meet their nutrition needs.45 Program participants engage in multiple curricula and tailored experiences to educate knowledgeable parents and children.53 Participation in the programs has significantly reduced food insecurity and low food security among households with low income, controlling for other economic factors such as unemployment, nonlabor income, and labor force participation.45,46 One study that examined the longitudinal Survey of Income and Program Participation (1996, 2001, and 2004) found that SNAP participation reduced household food insecurity by 31.2%. Furthermore, SNAP participation also reduced high food insecurity by at least 20%, even after accounting for state variations of SNAP policies and other factors such as employment status, income, and non—labor force income.47 Another study using data from the National Health and Nutrition Examination Survey (NHANES) has reported similar findings.48 According to findings from the SNAP Education and Evaluation Study (2011-2013, Wave II), children participating in nutrition education programs significantly increased their daily combined fruit and vegetable intake at home by 0.24 cups to 0.31 cups. They were also more willing to try new fruits and more likely to choose low-fat or fat-free milk. At the household level, fruits and vegetable availability increased significantly.49 Participation in WIC has been shown to improve infant growth, reduce rates of failure to thrive, improve perceived health status of children, and reduce Medicaid costs.50,51 With respect to diet quality, children participating in WIC between 1999 and 2004 consumed a more nutrient-dense diet than children who were income-eligible but not participating in WIC, and their intakes were comparable to those children from families with high income.52 Other studies that examined diet quality of children participating in WIC during 1994-1996 and 1998 indicate that they were more likely than non-WIC participants who were income-eligible to consume fruits and vegetables and iron-rich foods. WIC participating children were also more likely to consume foods with fats and added sugars.53 Using data from NHANES 2003-2008 and 2011-2012, Tester and colleagues (2016) reported an increase in average Healthy Eating Index (HEI) scores among WIC participants.44 For participants, average HEI 2010 score increased from 52.4 to 58.3 between 2003 to 2012 and for non-WIC participants the score remained fairly similar throughout the period (50.0 and 52.4, respectively).54 Moreover, after the full implementation of the 2009 food package in 2011-2012, consumption of greens and bean component of the HEI score for WIC participants was also found to have increased significantly.54 These results indicate the critical role of WIC in children’s diet that may result in long-term health benefits.

Reports from the third School Nutrition Dietary Assessment Study conducted in 2005 showed that children and adolescents participating in NSLP were more likely to consume adequate amounts of micronutrients and greater quantity of fruits and vegetables at school, but fewer at home, than non-participants who were eligible for the program.55,56 More specifically, the 24-hour intakes of vitamins A, C, and B-6, as well as folate, thiamin, phosphorous, magnesium, potassium, calcium, and fiber, were less likely to be adequate among NSLP participants compared with children and adolescents who were eligible but not participating in the program.56 In addition, children and adolescents who participated in NSLP were more likely to consume milk, meat, or meat alternatives (including other dairy sources), fruit, and vegetables and less likely to consume desserts, snack foods, and beverages other than milk or 100% fruit juice compared with children and adolescents from families with low income eligible for the program who did not participate.57

Similar to the benefits of NSLP, children and adolescents attending schools offering SBP are also more likely to meet the recommended daily allowance of fiber, potassium, and iron when compared with children and adolescents not receiving SBP through schools.49 A report using NHANES data from 2007 to 2012 confirmed that children and adolescents participating in NSLP and SBP obtained 58% of their total fruit intake, 41% of their total vegetables, 52.4% of their total grains, and 70% of their total milk or milk products per day from school meals. These results indicate that children and adolescents from households with low income could meet more than half of their daily intake of important food groups by participating in NSLP and SBP.58 In addition to the nutritional benefits, participation in SBP has been linked to academic

FEDERALLY FUNDED NUTRITION ASSISTANCE PROGRAMS: BENEFITS AND RATIONALE FOR CONTINUED SUPPORT

Research on the impact of federally funded nutrition assistance programs on children’s and adolescents’ dietary intake indicates the need for continued support of these programs.
achievements in schools. Students who are income-eligible and participate in SBP are more likely to have higher test scores in math, science, and reading compared with students who do not participate.59

Unlike the other nutrition assistance programs, EFNEP specifically focuses on nutrition education. It helps improve participants’ overall nutrition knowledge and ability to make healthy food choices and provides training in food preparation, food safety, and food resource management. The majority of children and adolescents participating in EFNEP improved dietary practices by increasing fruits and vegetable intake, reducing meat intake, and selecting foods low in fat, sugar, and salt during fiscal year 2015.60 EFNEP participants also reported collective food savings, through increased skill levels in preparing low-cost nutritious meals and improved food resource management.60

A well-established body of evidence shed light on the benefits of nutrition assistance programs that lends support to efforts for permanent and full federal funding. It is important to keep in mind that children and adolescents participating in these federally funded nutrition assistance programs are most likely to be food insecure, and thus are at increased risks of long-term health consequences. These programs acting as safety nets, enhance diet quality and nutrition status of participants, decrease health care costs, improve academic achievement, and prevent and manage chronic diseases. It is thus imperative that policymakers and program administrators recognize the need and benefits of these programs and ensure permanent and full funding of federal nutrition assistance programs.

ROLES AND RESPONSIBILITIES OF RDNs AND NDTRs

RDNs and NDTRs have the competencies, knowledge, and skills to administer programs that help ensure that all children and adolescents obtain safe, nutritious, and adequate food intake for optimal nutrition and health. The roles and responsibilities of RDNs and NDTRs related to federal nutrition assistance programs include, but are not limited to, the following:

• Advocate for permanent and full funding to support individuals eligible for these programs. Such funding should support food assistance, meal service, and nutrition education programs targeted toward children and adolescents.
• Advocate for an integrated health curriculum that highlights healthy food choices and stronger school wellness plans to emphasize the importance of healthy eating and physical activity to children and adolescents from an early age.
• Participate in the development and implementation of evaluation (short-, medium-, and long-term impact) of federally funded nutrition assistance programs.
• Use evidence-based practice guidelines when providing nutrition services and developing policies relating to nutrition assistance programs and services.
• Provide technical assistance and training to professionals that offer nutrition-related services to children and adolescents in health and education settings.
• Advocate for healthy child-care and school environments that include comprehensive nutrition education coupled with the provision of meals, beverages, and snacks that meet the DGA.
• Work with school administrators, teachers, parents, and communities to ensure that all foods and beverages made available or served in child-care and educational settings contribute to the overall quality of a child’s or adolescent’s diet.
• Provide guidance on outreach and educational activities that focus on healthy food purchases and preparation to ensure that they are culturally relevant and socially acceptable.
• Support state and federal efforts that specifically include comprehensive nutrition screening and assessment, education, and developmentally appropriate anticipatory guidance.
• Provide leadership on the development and implementation of emerging public policy issues (eg, menu labeling) to promote healthy eating and active living.
• Emphasize and strengthen the provision of program planning and evaluation, communication, and public policy and legislative training in dietetics education programs to support the ability of RDNs and NDTRs to administer nutrition assistance programs in various practice settings.

CONCLUSION

Federally funded nutrition assistance programs help to ensure that children and adolescents receive safe, healthy foods that provide adequate energy and nutrients to meet their growth and development needs. Because of the need for these programs and their impact on the health and well-being of the nation’s children and adolescents, the Academy supports permanent and full funding for federal nutrition assistance programs. RDNs and NDTRs are preeminently qualified to provide nutrition screening and assessment, education, and developmentally appropriate anticipatory guidance for children and adolescents in accordance with national health recommendations, as well as to monitor nutrition assistance program compliance with local, state, and national regulations.

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