Position of the American Dietetic Association, American Society for Nutrition, and Society for Nutrition Education: Food and Nutrition Programs for Community-Residing Older Adults

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ABSTRACT

Given the federal cost-containment policy to rebalance long-term care away from nursing homes to home- and community-based services, it is the position of the American Dietetic Association, the American Society for Nutrition, and the Society for Nutrition Education that all older adults should have access to food and nutrition programs that ensure the availability of safe, adequate food to promote optimal nutritional status. Appropriate food and nutrition programs include adequately funded food assistance and meal programs, nutrition education, screening, assessment, counseling, therapy, monitoring, evaluation, and outcomes documentation to ensure more healthful aging. The growing number of older adults, the health care focus on prevention, and the global economic situation accentuate the fundamental need for these programs. Yet far too often food and nutrition programs are disregarded or taken for granted. Growing older generally increases nutritional risk. Illnesses and chronic diseases; physical, cognitive, and social challenges; racial, ethnic, and linguistic differences; and low socioeconomic status can further complicate a situation. The beneficial effects of nutrition for health promotion, risk reduction, and disease management need emphasis. Although many older adults are enjoying longer and more healthful lives in their own homes, others, especially those with health disparities and poor nutritional status, would benefit from greater access to food and nutrition programs and services. Food and nutrition practitioners can play a major role in promoting universal access and integrating food and nutrition programs and nutrition services into home- and community-based services. (*J Nutr Educ Behav*. 2010;42:72-82.)

POSITION STATEMENT

Given the federal cost containment policy to rebalance long-term care away from nursing homes to home- and community-based services, it is the position of the American Dietetic Association, the American Society for Nutrition, and the Society for Nutrition Education that all older adults should have access to food and nutrition programs that ensure the availability of safe, adequate food to promote optimal nutritional status. Appropriate food and nutrition programs include adequately funded food assistance and meal programs, nutrition education, screening, assessment, counseling, therapy, monitoring, evaluation, and outcomes documentation to ensure more healthful aging. The growing number of older adults, the health care focus on prevention, and the global economic situation accentuate the fundamental need for these programs.

For 60 years, the United Nation's *Universal Declaration of Human Rights*[1] has had an enduring relevance. In Article 25.1, this document states:

> *Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing, and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.*

Greater attention to older persons in food assistance programs, food safety initiatives, health-promoting nutrition education and intervention services, as well as nursing home

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diversion and transition programs, will help improve nutritional status and successful aging.[2] Of particular concern are the widespread under-recognition of the importance of nutrition for more healthful aging and the historic underfunding of some programs. Diet quality and quantity play major roles in preventing, delaying onset, and managing chronic diseases associated with aging.[3] Escalating health care costs are largely related to chronic diseases in which nutrition interventions have proven effective. About 87% of older adults have diabetes, hypertension, dyslipidemia, or a combination of these chronic diseases.[3] These costly conditions, as well as their roles as predisposing factors for nursing home placement, may be ameliorated with appropriate nutrition services.

Since the mid-1970s, funding has not kept pace with inflation and the dramatic growth in aging populations. Shifting federal and state funding priorities, especially in recessionary times, regularly threaten eligibility criteria and service availability. To maximize older adult participation in such programs, special consideration is needed to address the diverse reasons for nonparticipation (ie, benefit underestimation, welfare stigma, burdensome application processes, and lack of outreach and program awareness, as well as confusing eligibility requirements).

The 37 million US residents aged 65 years and older account for 12.6% of the total population. They are living longer and growing in absolute numbers, with those aged 85 years and older the fastest-growing segment.[4] Projections for 2030 estimate an increase to 72 million or 20% of the population.[4,5] The American Dietetic Association position paper on nutrition across the spectrum of aging details the importance of nutrition for successful aging, including relationships to health and disease.[6] This position paper focuses on access to safe and adequate food in communities.

Health care costs are a major consideration today. Food assistance programs may help reduce these costs by helping people stay in their homes. The cost of 1 day in a hospital equals the cost of 1 year of Older Americans Act Nutrition Program meals, based on 2007 reported total expenditures and number of home-delivered meals provided by states.[7] Although skilled nursing facilities provide comprehensive health care services beyond a noon meal, it is interesting to note that the cost of 1 month in a nursing home equals that of providing midday meals 5 days a week for about 7 years.[8] On average, Medicaid can support three older adults and adults with disabilities in home- and community-based settings for every person in a nursing facility.[9] Enabling older adults to remain at home is public policy at federal and state levels and home- and community-based care is replacing institutional care.[10] The federal government established the Home- and Community-Based Service (HCBS) waiver program under Section 1915(c) of the Social Security Act. While HCBS may include home-delivered meals and nutrition counseling, only 29 states have chosen to do so as part of the Medicaid waiver program.

With 95% of health care spending for those aged 65 years and older attributable to chronic conditions,[11] an opportunity exists to expand the benefits of health promotion programs to them. Evidence-based health promotion programs show cost savings.[12] The American Dietetic Association position on health promotion and disease prevention identifies primary prevention as the most cost-effective course of action for preventing and reducing risk for chronic disease throughout the life cycle.[13] There is evidence that older adults benefit from health promotion and nutrition education.[14] Food and nutrition practitioners need to advocate for funding and expansion of nutrition services for older adults in community programs and policy initiatives.

Those working with older adults often do not understand the effect of adequate food and nutrition on older adults' ability to remain at home with a good quality of life. Food and nutrition programs for children and adolescents have improved dietary intakes, reduced low-birth-weight incidence, and provided useful information to families at risk.[15] Their success is attributable in part to increases in funding over time. This has enabled programs to keep pace with increased demand, evolve appropriately to meet diverse nutrition needs, and evaluate effectiveness at achieving outcomes. The same funding support is needed for food and nutrition programs for older adults.

With limited information on food insecurity of older adults in other position papers,[6,16] this paper addresses issues related to food insecurity, hunger, and malnutrition as well as food and nutrition programs serving older adults in community settings.

PREVALENCE OF FOOD INSECURITY, HUNGER, AND MALNUTRITION

The US Department of Agriculture (USDA) describes the degree of food security in the United States as high, marginal, low, or very low. There is no mention of hunger and its association with food insecurity.[17] However, the Institute of Medicine clearly makes a distinction between hunger and food insecurity[18]:

> *…hunger should refer to a potential consequence of food insecurity that, because of a prolonged, involuntary lack of food due to lack of economic resources, results in discomfort, illness, weakness, or pain that goes beyond the usual uneasy sensation.*

The Institute of Medicine suggests research to find an appropriate national assessment of the hunger of individuals rather than the hunger of households.

Food Insecurity

Nearly 10% of older adults live below poverty and 26% are considered low-income.[4,19] The lowest quintile annual income is $11,519, including 8% from public assistance. With 32% of income going to housing, 17% to transportation, 13% to food, and 11% to health care, it is understandable that the poorest of the oldest have inadequate means to meet their food and nutrition needs.[4] Their decreased earning potential and lack of access to food leaves the already vulnerable at increased risk.[20] Those experiencing food insecurity have lower intakes of micronutrients and energy, more health problems, and functional limitations related to loss of

independence.[21] Marginal food insecurity is equivalent to being 14 years older.[22]

About 11% of all older Americans are marginally food insecure, 6% are food insecure, and 2% are very low food secure. This translates into about 2.5 million at risk for hunger and about 750,000 suffering from hunger due to financial constraints.[21] Nearly 28% of households in the lowest economic group (incomes ≤130% of poverty guidelines) experience low or very low food security. The 35% of food insecure older adults with incomes >130% of poverty guidelines are ineligible for some food and nutrition assistance programs.[21] Based on the Healthy Eating Index,[23] 83% of older adults do not consume a good quality diet and those in poverty have lower scores than those not in poverty.

Many factors affect food insecurity in older adults. Those most likely at-risk of hunger are those aged 60 years and older, living at or below poverty, high school drop outs, African Americans or Hispanics, divorced or separated or living with a grandchild, and renters.[21] Living alone is associated with food insecurity in older men and women.[17] Fifty-eight percent of lower-income women aged ≥65 years live alone and thus are at greater nutrition risk.[24,25] However, eating with a spouse, friend, or caregiver improves energy intake and lowers nutrition risk.[24]

In 2007, 8% of those aged ≤65 years were African American, 7% Hispanic, and 3% Asian.[19] Diversity in the older population is increasing.[4] Eliminating health disparities along with increasing quality and years of healthy life are goals of Healthy People 2010.[26,27]

Special communication needs must also be considered. Low levels of health literacy are often complicated by basic literacy challenges.[4] For some, language and/or cultural barriers are issues for effective nutrition care. Low-income minority older adults may also have disabilities that may make accessing food assistance and other support programs more difficult. Among low-income, minority, older women with disabilities in Baltimore, only 19% receive food stamps, 3% receive home-delivered meals, and 5% receive congregate meals.[28]

Risk of Malnutrition

Because malnutrition is a multifactorial condition, the following highlights only some aspects. Nutritional status is influenced by physiological changes of aging.[6] Loss of body fat and decreased energy intake are associated with problems such as nutrient deficiencies, frailty, more frequent hospital admissions and longer lengths of stays, increased falls and fractures, and increased morbidity and mortality rates.[29,30] Gastrointestinal problems in hospitalized older adults are more often fatal than among younger individuals.[31]

Undernutrition places additional demands on older adults, such as increased infections, pressure ulcers, imbalance in electrolytes, altered skin integrity, and overall weakness and fatigue.[21] Although there is no agreed-upon definition, underweight occurs when intake is less than adequate to sustain health as evidenced by a body mass index (BMI) of ≤18.5.

At the other end of this spectrum, obesity and overweight are common among older adults.[32] Nearly 30% are obese. Expenditures projections are for 34% higher Medicare costs for obese vs nonobese older adults.[33] Relationships between BMI and mortality form a U-shaped graphic distribution, with the greatest risk for poor functional outcomes at the lowest and highest BMIs.[34]

Older adults eating convenient low nutrient-dense foods have higher energy and lower nutrient intakes.[35] One explanation for the greater prevalence of obesity in low-income households is that less-expensive foods (typically energy-dense, nutrient-poor) are more commonly eaten. Access to healthful foods is limited in poorer neighborhoods because stores are less likely to carry nutritious foods[36] and those for special dietary needs. In addition, physical disability, transportation problems, and limited finances contribute to food insecurity and lower nutrient intake.[20,21] Caregivers' role in ensuring adequate intakes of nutrient dense foods is crucial.[37] Obesity and physical limitations may lead to earlier nursing home admissions.[38]

Sarcopenia, the age-related loss of skeletal muscle mass, is most often associated with underweight. But sarcopenic obesity can be more severe as muscle loss may be greater due to immobility in addition to increasing age.[39] In both weight situations, sarcopenia affects strength and accelerates functional decline.

Polypharmacy increases the risk for malnutrition. Many medications directly affect food intake due to side effects. Food–drug interactions can be problematic for those taking vitamins, minerals, and other supplements with medications.[40] Some medications also increase the need for specific nutrients.

Problems in the oral cavity are a nutrition risk indicator. Declining weight and subsequent increased morbidity and mortality can result from periodontal disease and other oral problems. Effective screening, education, and intervention programs can enable older adults to maintain their health, enjoy food, and have a higher quality of life.[41]

Functionality has a direct effect on food security, diet quality, weight status, and ultimately independence and nursing home placement. Inability to do physical tasks necessary for shopping and food preparation increases the likelihood of inadequate food intake. These functional limitations affect 42% of people aged 65 years and older.[4] Older adults' independence may progressively decline as measured by diminished abilities in activities of daily living or instrumental activities of daily living.[34]

Psychosocial issues and mental and cognitive impairment can lead to undernutrition, overnutrition, food insecurity, and dependence. Depression due to social isolation, financial difficulties, loss of autonomy, or impaired cognition is common and often leads to a loss of motivation to eat or to eat healthful meals.[42] Treatment of depression is one of the most effective means of achieving weight improvements in older adults with anorexia.[42] Decreased food intake and associated weight loss can also result from bereavement of a spouse, alcoholism, late-life paranoia or mania, abuse, pain, use of multiple medications, and even nursing home admission.[43]

Malnutrition and chronic illnesses can depress the immune system and increase susceptibility to infection and foodborne illness. Unsafe food handling contributes to infirmity in

older adults. Compared to younger adults, mortality rates are higher for older adults who come in contact with *Listeria monocytogenes*, particularly when immune function is impaired.[31] Invasive *Salmonella* infections cause the highest hospitalization and death rate among older adults.[31] Those living in their own homes are also at risk for foodborne illnesses as 13% admit to not washing their hands or cutting boards after touching raw meats, with men and individuals living alone having significantly worse food-handling skills.[31]

OVERVIEW OF FOOD AND NUTRITION PROGRAMS FOR OLDER ADULTS

The Figure summarizes current features and funding levels of federal food and nutrition assistance programs. Each program is further described below.

US Department of Health and Human Services

The Older Americans Act (OAA) Nutrition Program. The purpose of the OAA is:

> *…to reduce hunger and food insecurity; to promote socialization of older individuals; and to promote the health and well-being of older individuals by assisting such individuals to gain access to nutrition and other disease prevention and health promotion services to delay the onset of adverse health conditions resulting from poor nutritional health or sedentary behavior.*[44]

The OAA Nutrition Program is the largest national food and nutrition program specifically for older adults. The US Administration on Aging is responsible for policy development, planning, and funding the delivery of supportive home and community-based services to older persons and their caregivers. The US Administration on Aging works through an Aging Network[45] to deliver an array of supportive services including transportation, protection of vulnerable elders, and nutrition. This national network consists of 56 state units on aging, providing services through 655 area agencies on aging; 241 tribal and Native American organizations representing 244 American Indian and Alaskan Native tribal organizations and two organizations serving Native Hawaiians; and thousands of service providers, which include adult care centers, caregivers, and volunteers and an estimated 12,000 senior centers throughout the nation. Programs and services are targeted to low-income, minority, and rural older adults.[44]

Under Title IIIC of the OAA, adults aged 60 years and older are eligible for congregate or home-delivered meals, nutrition screening, nutrition education, counseling, and other health services. Meals must provide at least one third of the Dietary Reference Intakes for older adults and must meet the most recent Dietary Guidelines for Americans.[46] The program is not means-tested (eligibility is not based on income), and participants may make voluntary confidential donations for meals.[47] At present, about 236 million congregate and home-delivered meals are served to 2.6 million older adults annually. The OAA Nutrition Program reaches less than one third of older adults in need of its program and services and those served receive on average only three meals per week.[44] Those receiving congregate or home-delivered meals are twice as likely to live alone than those not receiving them. A larger proportion of participants are minorities compared with nonparticipants of the same age. Participants tend to have two to three chronic health problems. BMIs of participants are two thirds more likely to be abnormal than nonrecipients, with those able to leave the home more likely to be overweight or obese and those who are homebound more likely to be underweight.[48]

The Title VI OAA program provides nutrition, supportive services, and caregiver support services to Native American, Alaskan Native, and Native Hawaiian elders.[44] These programs help reduce the need for costly institutional care and medical interventions. They are responsive to the cultural diversity of Native American communities and represent an important part of the communities' comprehensive services.

Ryan White Comprehensive AIDS Resources Emergency Act. This 1990 act was created to help states, communities, and families cope with the growing human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) epidemic. Although HIV/AIDS is considered a disease of the young, older Americans make up >10% of the HIV/AIDS cases. The Centers for Disease Control and Prevention report that from 2001-2004 the number of people aged ≥65 years living with HIV/AIDS increased 60%, from 6,674 to 10,861.[49] Nutrition services include clinical services (medical nutrition therapy, education, and counseling) and food assistance (home-delivered meals, groceries, food vouchers, and liquid nutritional and other dietary supplements).

USDA

Supplemental Nutrition Assistance Program (SNAP). SNAP is the largest federal food assistance program. Through this entitlement program, eligible participants receive electronic benefit transfer cards to buy food at 152,500 authorized stores nationwide. There are few restrictions on food purchases, but alcohol, tobacco, and other nonfood items are excluded. Eligibility requires that gross monthly income not exceed 130% of the federal poverty guidelines and meet assessed limits.[50] Each state has the option to provide nutrition education to participants regarding food choices, but guidance does not specify targeting older adults.[51] State and local governments share in program cost and administration. Historically, the primary SNAP goal was to decrease hunger in the United States.

One measure of SNAP's success is determined by the number of eligible participants who make use of the benefits. Historically, fewer than three of 10 eligible older adults receive benefits.[52,53] Compared to all demographic groups, older adults have the lowest participation rates. Among those eligible under age 60 years, participation rates are 67%. Only 5% of all recipients receive the minimum $14 per month and 89% of these households include older adults or individuals with disabilities. Older adults living alone on average receive $65 per month and $152 per month if they live with others.[54]

Program	Purpose	Appropriation	Target population	Services	Participation	Eligibility	Eligible older adults served
US Department of Health and Human Services—Administration on Aging							
Older Americans Act Titles I-VII	Grants to state, tribal, and community programs on aging (eg, research, demonstration projects)	$1.49 billion total Fiscal Year (FY) 2009	Age ≥60 y in greatest economic and/or social need, with particular attention to low-income minorities, those in rural areas, those with limited English proficiency	Nutrition, array of other supportive and health services, protection of vulnerable older Americans	9.5 million older adults FY 2006	Age is sole requirement (see also Target population column)	18.5%
Older Americans Act Titles I-VII	Title III Nutrition services to older adults	$649 million FY 2009	Age ≥60 y; age ≥60 y and disabled living in elderly housing, disabled living at home and eating at congregate sites or receive home delivered meals with older adults, volunteers during meal hours	Congregate and home-delivered meals; nutrition screening, assessment, education, counseling	2.6 million older adults 236 million meals FY 2007	Same as above but only homebound eligible for home-delivered meals	5.1% of all eligible older adults
Older Americans Act Titles I-VII	Title VI Tribal and native organizations for aging programs and services	$36 million FY 2009	Age requirement determined by Tribal organizations or Native Hawaiian Program	Congregate and home-delivered meals; nutrition screening, education, counseling; array of other supportive and health services	70,000 older adults 4 million meals FY 2006	Age is sole requirement	Not available
Nutrition Services Incentive Program	Provides proportional share to states and tribes of annual appropriation based on number of meals served prior year	$161 million FY 2009	Same as Title III	Cash and/or commodities to supplement meals		Same as Title III	Not available
US Department of Agriculture—Food and Nutrition Service							
Supplemental Nutrition Assistance Program	Assists low income families to buy food that is nutritionally adequate	$40 billion FY 2008	US citizens and legal residents who are most in need, gross income ≤130% federal poverty level; up to $2,000 countable resources, $3,000 if age 60+ y or disabled	Coupons or electronic benefits to purchase breads, cereals, fruits, vegetables, meats, fish, poultry, dairy products; Seeds and plants that produce food for households	28.4 million (67%) 51% children 41% adults 8% age ≥60 y FY 2008	≤130% of the federal poverty guidelines	30% of eligible older adults participate; 75% of these live alone. 8% of all Supplemental Nutrition Assistance Program participants are older adults
Commodity Supplemental Food Program	Food and administrative funds to states and tribes to supplement diets. Available in 33 states and two tribes	$140 million FY 2008	Pregnant and breastfeeding women, mothers up to 1-y postpartum, infants, children up to age 6 y	Participants receive a monthly food package	466,180 FY 2007 433,000 older adults 33,000 women, infants, children 92% of those are age 60 y and older	Age ≥60 y, ≤130% federal poverty guidelines women, infants, children ≤185% federal poverty guidelines	Not available
Seniors' Farmers Market Nutrition Program	Grants to states and tribes to provide fresh foods and nutrition services while providing the opportunity for farmers to enhance their business	$20 million FY 2008	Low income older adults: at least aged 60 y and who have household incomes of not more than 185% federal poverty	Coupons or vouchers to be exchanged for fresh fruits and vegetables at local farmers markets	46 agencies FY 2006 825,691 older adults FY 2006	≤185% federal poverty guidelines	Not available
Child and Adult Care Food Program	Healthy, Nutritious meals for children and adults in day centers	$2.4 billion FY 2008	Children <12 y, Homeless children, migrant children <15 y. Disabled citizens regardless of age. Age ≥60 y; functionally impaired; reside with family members	Nutritional meals and snacks	1.9 billion meals FY 2008 2.9 million children, 86,000 older adults FY 2007	≤185% federal poverty guideline	Not available

Figure. Summary of federal food and nutrition assistance programs for older adults.

Reasons for low participation rates include the belief that the benefit amount will be significantly smaller than the trouble it takes to apply, feeling stigmatized as a welfare recipient, mistrusting electronic benefit transfer cards, lack of outreach, feeling the process is overly intrusive, and confusion regarding eligibility.[55,56] USDA

pilot tested three approaches to reduce application barriers and encourage food stamp participation among eligible persons aged 60 years and older. When eligibility determination rules were simplified, there was a 20% increase; when one-on-one application assistance was offered, a 31% to 37% increase; and when a commodity alternative was offered, a 36% increase. Thus small procedural changes can affect large changes in benefit use.[55]

Commodity Supplemental Food Program. This food distribution program provides nutritious commodity foods to those aged 60 years and older with incomes ≤130% of poverty. Eligibility for others is determined by state and local agencies. Food and nutrition education is provided at local levels. Nutrition education is intended to improve dietary intake and health while preventing nutrition-related problems. Explanations regarding the importance of eating the supplemental foods must be included in the education as well as sensitivity to the special needs of participants possibly residing in a home without running water, electricity, or limited cooking and refrigeration facilities. Local agencies determine how and by whom the nutrition education is provided. They are not required to employ registered dietitians (RDs) or nutrition educators for educational purposes.[57] Though limited in variety, foods include cereal, canned fruits and vegetables, nonfat dry and evaporated milk, cheese, juices, rice, pasta, egg mix, peanut butter, dry beans or peas, and canned meat, poultry, or tuna. This program operates in a limited number of states, so the benefits are not available to older adults in all areas of the country. A limitation of this program has been the awkwardly large package sizes for one- to two-person households.[58]

Senior Farmers' Market Nutrition Program. This nutrition and education program provides fresh fruits and vegetables from farmers markets, community-supported agriculture programs, and roadside stands to older adults with incomes ≤185% of the poverty level. Grants are made to states, territories, and recognized Indian Tribal Organizations. Funding nationally varies greatly and benefits are available only during harvest seasons. The program helps farmers enhance their business by creating a nontraditional customer base of community-residing and homebound older adults who may not normally frequent these markets. This program increases the number of fruits and vegetables consumed by older adults for a few months a year and taps into novel markets through the coordination of community agencies.[59] Unfortunately, the nutrition benefit of this program is unknown. With an average monetary benefit of $25 per year per participant during a limited growing season, the Senior Farmers' Market Nutrition Program's impact on diets and food security is also unknown.

The Emergency Food Assistance Program. Food is distributed to individual states with allocations dependent on numbers of low-income and unemployed residents. States administer distribution of foods to local food banks, soup kitchens, and food pantries. Eligibility criteria is set by each state using information regarding consumption, income standards, and participation in other existing federal, state, or local food programs.[60]

The Child and Adult Care Food Program. This program provides nutritious meals and snacks to eligible adults aged 60 years and older at ≤130% of the poverty level who are enrolled in adult day centers. Community-residing adults who live with family members are also targeted. To participate, a center must be licensed to provide day care and sign an agreement with a sponsoring organization. Low-income older adults may receive free meals; there is an income-dependent sliding scale for meals for others. Meal patterns vary depending on participant age and type of meal served but all meals must meet federal dietary guidelines.[61] In fiscal year 2008, the Child and Adult Care Food Program served 86,000 older adults.[62]

DISCUSSION OF FEDERAL FOOD AND NUTRITION ASSISTANCE PROGRAMS

A poignant comparison can be made between two food and nutrition programs begun in the 1970s. Congress recognized the urgent unmet nutritional needs of special populations and authorized the OAA Nutrition Program and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), with initial appropriation levels being $125 million and $20.6 million, respectively. As of 2008, WIC funding has grown to $6.20 billion, a 332-fold increase, whereas OAA funding is currently $784 million, a sixfold increase over the same time period. WIC serves more than 60% of the needy women and children, 98% of eligible infants, or 45% of all babies born in the United States, whereas OAA Nutrition Program reaches <5% of all older adults. Among OAA Nutrition Program participants, some need multiple meals daily, weekend meals, dietary supplements, and nutrition education or counseling. These needs are often unmet in part due to insufficient funding and/or transferring Title III-C funds into other program services. As a result, functions such as nutrition service needs assessment, planning and development, as well as nutrition education and assessment, goal setting, and evaluation, are minimal.

WIC has a strong emphasis on targeted and effective nutrition education; the direct provision of nutritious foods and essential resource information for health care and other needed support. With sufficient funding, WIC has become a model nutrition intervention program able to demonstrate effectiveness through systematic evaluation and reporting. RDs and trained nutritionists throughout the WIC network provide quality care, along with the essential documentation necessary to ensure future funding.[44]

The Aging Network employs few RDs and nutritionists. Most state units on aging do not employ an RD or qualified nutritionist to provide technical support and guidance to the Area Agencies on Aging and local providers. Although some Area Agencies and providers have staff RDs or nutritionists, many rely on consultants whose time is often limited to menu development. As a result, functions such as nutrition education, assessment, and counseling, as well as goal setting and evaluation, are minimal.[2]

Although nutrition education is recommended in most federal food

and nutrition programs for older adults, it is not routinely offered nor is its effectiveness well documented. The availability of food and nutrition practitioners, including Extension agents in USDA programs (other than WIC), varies considerably. States have the option of providing nutrition education to SNAP participants, being reimbursed for 50% of the allowable costs. Nutrition educators teach participants about healthful food choices on a budget and how to follow the 2005 Dietary Guidelines for Americans.[44] However, SNAP nutrition education generally does not focus on diseases. This may limit the effectiveness of these educational programs for older adults in that about nine in 10 (87%) have nutrition-related chronic conditions.[3] For some USDA programs, little or no data are available on older participants regarding their nutritional status, food security, and need for nutrition-related services. Whereas older adults may need less total energy, food costs are not necessarily lower because they need more nutrient-dense foods and these can be more costly, especially given the rising cost of foods overall. Also their physical limitations (eg, stamina, vision, and immune function) may require buying pre-prepared foods or having food delivered—both of which are more costly.

FOOD AND NUTRITION IN HOME- AND COMMUNITY-BASED SERVICES

US Department of Health and Human Services Centers for Medicare and Medicaid Services

Federal policy today seeks to ensure that individuals in need of long-term care (LTC) have access to a wide range of noninstitutional options. To rebalance Medicaid's reliance on nursing homes, the Deficit Reduction Act of 2005 was amended to add new community-based LTC options and to offer states financial incentives to move Medicaid-enrolled individuals back into the community.[10] This change was based on almost 25 years of experience in the Medicaid Waiver program wherein nursing home appropriate older adults were provided HCBS. Medicaid Waivers, established under Section 1915(c) of the Social Security Act in 1981, were a means for states to prevent or decrease nursing home or LTC institutionalization.

Medicaid, the country's single largest purchaser of LTC, paid more than $101 billion for LTC in 2005.[63] The one third of older Medicaid LTC enrollees accounted for 86% of all Medicaid spending on older adults. Of the 1.9 million older Medicaid beneficiaries using LTC services, two thirds used institutionalized services and averaged $38,780 annually per enrollee. The remaining who used Medicaid HCBS waivers averaged less than half this amount ($17,176).[64] Each state determines what needs are most urgent and allows the waiver of rules for an array of HCBS based on broad national guidelines.[65] For those at or near poverty relying on the government to subsidize their income, cost containment measures and decreases in benefits have had serious consequences.[66] Adequate and sustained support for these programs and services is essential if older adults are to remain healthy and in their own homes for as long as possible.

The Social Security Act of 1965 created the Medicare program to cover the health care costs of those aged 65 years and older and persons with disabilities. Medicare has traditionally not covered primary prevention services, such as community-based and outpatient nutrition services. The 2003 Medicare Prescription Drug, Improvement, and Modernization Act shifted this strategy and addressed the importance of preventive care by providing coverage of diabetes and nondialysis kidney disease counseling by RDs. The Medicare Improvements for Patients and Providers Act of 2008[67] improves beneficiary access to preventive services and leads the way to expanding the medical nutrition therapy considered reasonable and necessary for prevention of an illness or disability.

RATIONALE FOR INCREASED ACCESS, INTEGRATION, AND RESEARCH

Older adults deserve access to a healthful diet, yet not all are afforded this right. Growing older generally increases nutrition risk; illnesses and diseases; physical, cognitive, and social challenges; racial, ethnic, and linguistic differences; and low socioeconomic status can further complicate the situation. Equally important are beneficial effects of nutrition for health promotion, risk reduction, and disease management.[3] Although many older adults are enjoying longer, more healthful lives in their own homes, others, especially those with health disparities and poor nutritional status, would benefit from greater access to food and nutrition programs and services.

Nutritional status affects functionality, independence, and quality of life.[3,4] Active life expectancy is used to determine the number of years that older persons can expect to live without functional limitations.[68,69] Eating foods in a social, comfortable, safe, and stable environment enhances not only food intake but health-related quality of life.[24,25] Healthy People 2010 defines health-related quality of life as "factors that affect the physical or mental health of individuals or communities."[27]

Inappropriate energy and inadequate nutrient intakes and health problems associated with malnutrition in homebound persons is related to nutrition-related chronic diseases and higher food insecurity.[70] Food assistance program participation reduces or prevents poor outcomes of food insecurity and improves older adults' quality of life, saves on health care expenses, and helps to meet nutrition needs.[71] Older adults receiving home-delivered meals have higher daily intakes of key nutrients compared to those who do not.[72] Their reported weekday nutrient intake is significantly higher than their weekend intake when meals are not provided. Improvement in nutritional status by eating a nutrient-dense breakfast was shown in homebound older adults.[73] A two-meal program decreases risk of malnutrition and improves depression symptoms in homebound persons.[73]

Public health resources for health promotion, risk reduction, and disease management should target older adults.[74] Screening and referral systems, culturally appropriate educational materials, behavioral strategies, and comprehensive care management

are needed to improve outcomes. Yet, few intervention programs include nutrition care despite the fact that many older participants in community programs have nutrition-related chronic conditions.[3] Establishment of an effective screening and referral system is particularly timely as coverage of individualized nutrition counseling becomes more available through Medicare and Medicaid.

CONCLUSIONS

Regardless of how successful aging is defined, poor nutritional status and poor health status are detrimental and costly. They lead to loss of independence, lower quality of life, increased morbidity and mortality, increased caregiver burden, and greater health care utilization.

Malnutrition, underweight, overweight, obesity, food insecurity, and hunger are linked to decreased quality of life, increased morbidity, and premature mortality.[6] Because an inability to achieve and maintain good nutritional status places older adults at risk for numerous poor outcomes, access to food and nutrition assistance programs and nutrition services in home and community-based services must be a high priority for federal, state, and local governments and championed by food and nutrition practitioners.

Roles and Responsibilities of Food and Nutrition Practitioners

Roles and responsibilities of food and nutrition practitioners regarding older adults are similar to those working with younger populations.[14] They include:

Advocate for:

- inclusion of food and nutrition services in federal, state, and local efforts to rebalance LTC through home- and community-based services;
- establishment of screening and referral systems for medical nutrition therapy in home- and community-based services; and
- adequate and sustained funding for food and nutrition programs at local, state, and federal levels, as well as for surveillance efforts to document the need for and effectiveness of these publicly funded programs for older adults.

Participate in:

- programs that provide food assistance, meals, nutrition education, nutrition screening, nutrition therapy, and care management for older adults;
- efforts to provide technical assistance to food and nutrition programs to improve cost-effectiveness and efficiency;
- the provision of routine nutrition assessments that include weight status, food security, meal preparation skills, and dietary and fluid intakes, and advocate for routine assessment of functional status, cognitive status, depression, oral health, and polypharmacy;
- development and implementation of nutrition education programs designed specifically for older adults and caregivers and that emphasize the importance of nutrition for health, risk reduction, and disease management; and
- outcomes research regarding the effectiveness of food and nutrition programs for older adults.

Educate:

- physicians, discharge planners, and other health/social service professionals, agencies, and organizations that provide services to older adults regarding the importance of food and nutrition for healthful aging; and
- older adults on nutrition and food safety to promote health, reduce risk, and manage diseases, which in turn will improve/maintain health, independence, and quality of life.

Recommendations

To promote healthful aging and optimal nutritional status, the following recommendations are made regarding access to food and nutrition programs and services in home and community services, and the availability of a safe, adequate, healthful food supply:

Rectify the lack of:

- food and nutrition services in most home- and community-based programs, as well as in many social service, health care, public health, food safety, and food security systems serving older adults;
- practice guidelines for food and nutrition practitioners providing home- and community-based services; and
- lack of cultural competency among those working with older adults given the increasing diversity of the aging population.

Increase the:

- nutrition capacity (staff, infrastructure) in all food and nutrition programs, especially the OAA Nutrition Program;
- general awareness about successful aging through nutrition, food safety, and food security in relation to independence, quality of life, functionality, and disease management; and
- funding for basic and translational nutrition and aging research.

Document the:

- effects of food and nutrition services, including home-delivered meals, as a part of an individualized package of HCBS that can help older adults remain at home; and
- program outcomes on food and nutrient intakes, food security, health care utilization, health status, and quality of life on specific groups of frail, disabled older adults.

Continue to:

- oversample older adults and analyze nutrition-related data using more discrete older age categories in all program evaluations and in national surveys such as the National Health and Nutrition Evaluation Surveys.

Through the life span, dietary intake, health, and quality of life are interrelated. Food and nutrition programs are important safety nets. Our resource-rich nation should support the dignity and health of all its citizens. Older adults should have access to food and nutrition programs that promote successful aging. As our nation shifts from institutional care for older adults to home and community care, nutrition services, including meals, must become integral parts of home- and community-based services.

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