Nutrition and Aging Resource Center

Consumer Needs Assessment Report

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Executive Summary

Older Americans Act (OAA) Title III-C senior nutrition programs (SNPs) (e.g., congregate and home-delivered meals) offer beneficial services that promote the health and well-being of older adults (ACL, 2022). Yet, data suggests a large gap between participation and individuals who may be able to benefit from SNPs (GAO, 2024). For these programs to stay relevant and maximize impact, it is important to gather data on the characteristics, attitudes, practices, and preferences of applicable audiences.

To contribute to this topic, the Nutrition and Aging Resource Center conducted a nationwide survey among 1) older adults (aged 60 years and older), 2) middle-aged adults (aged 40 to 59 years old), and 3) informal caregivers of older adults and adults with disabilities. A 125-item Qualtrics™ survey was distributed through Qualtrics™ market research panels. The survey investigated topics such as awareness and utilization of community-based food and nutrition programs; programming needs and preferences; and other population characteristics. There was a total of 476 respondents (208 adults aged 60+; 94 adults aged 40-59, and 174 caregivers). The data was analyzed for descriptive statistics. This report shares the combined findings from all three audiences. Specific data from each population group will be shared in companion reports.

Summary of Key Findings

Awareness and Utilization of Community Food and Nutrition Programs

- **Awareness:** moderate awareness of food pantries/banks and the Supplemental Nutrition Assistance Program (SNAP); very low/low awareness of congregate meals, home-delivered meals, and other community-based food and nutrition programs
- **Utilization:** one-third reported utilization of SNAP and food pantries/banks and mostly low utilization for SNPs and other community-based food and nutrition programs
- **Top reasons for congregate meal use:** affordable meal, nutritious meal, convenience
- **Top reasons for home-delivered meal use:** affordable meal, functional need

Attitudes and Perceptions of Senior Nutrition Programs

- **General Attitudes Toward SNPs:** agree that adequate funding should be allocated to support SNPs, and moderately agree that SNPs promote health and wellbeing, promote socialization, and reduce hunger and food insecurity
- **Perspectives of SNP Recipients:** moderately agree that recipients are more likely to be friendly, unemployed/retired, low income, and have a functional impairment or disability

Community Programming Needs and Preferences

- **Factors Likely to Increase SNP Participation:** affordable meal, delicious/tasty meals, nutritious meals, convenience
- **Programming Interests:** vouchers to eat at local restaurants; fresh, locally grown food; frozen or shelf stable meals; grab and go/drive-thru meals
- **Preferred Meals Tailored to Dietary Needs:** heart healthy, high protein, diabetes friendly
- **Preferred International or Regional Cuisine Meals:** Mexican, Chinese, Asian, Latin American/Hispanic, Soul Food

Informational Needs, Preferences, and Practices

- **Topics of Interest:** nutrition/healthful eating, grocery shopping, physical activity, chronic disease prevention, community food and nutrition programs
- **Preferred Education Methods:** online lessons, written materials, in-person individual sessions
- **Preferred Methods of Hearing About Programs:** email announcements, social media, community-based newsletters
- **Typical Food and Nutrition Information Sources:** websites, medical visits, Facebook
- **Top General Media Use:** email, internet, computer, texting, social media
- **Top Social Media Use:** Facebook, YouTube, Instagram

Summary of Key Recommendations:

- Increase marketing of congregate and home-delivered meals
- Offer and spread awareness on programming attributes of interest
- Tailor meals to meet dietary preferences
- Provide education/information via preferred formats

Introduction

Older Americans Act (OAA) Title III-C programs, such as congregate and home-delivered meals, make a significant contribution to the health and well-being of older adults and adults with disabilities. Participants have reported being able to eat more nutritious meals, improve their health, socialize more, and continue to live independently as a result of their participation in these services (ACL, 2022).

Despite these benefits, it is estimated that only ~5.8% of older adults with low income (<185% federal poverty guideline) receive home-delivered meals, and only ~4.3% receive congregate meals (GAO, 2024). This data suggests a substantial gap between participation and individuals of greatest economic need, which OAA programs are intended to target. This is not only true for OAA senior nutrition programs (SNPs) but also extends to one of the most well-known food assistance programs, the Supplemental Nutrition Assistance Program (SNAP). It is estimated that ~22% of older adults with low income receive SNAP (GAO, 2024).

To better understand opportunities to reduce gaps between participation and eligibility, the Nutrition and Aging Resource Center conducted a nationwide needs assessment survey among 1) older adults (aged 60 years and older), 2) middle-aged adults (aged 40 to 59 years old), and 3) informal caregivers of older adults and adults with disabilities. Specifically, the survey investigated the following:

- Awareness and utilization of community-based food and nutrition programs
- Attitudes and perceptions of senior nutrition programs
- Nutrition and wellness programming needs and preferences
- General population characteristics including health status, quality of life, food behaviors, food/nutrition security status, nutritional risk, healthcare coverage, sociodemographics

Gathering data on the characteristics, attitudes, practices, and preferences of current older adults and middle-aged adults is essential for guiding future OAA programming and innovation efforts that are most relevant to these populations. Informal caregivers were included due to their direct role in connecting eligible participants to SNPs.

The National Resource Center on Nutrition and Aging (NRCNA), also known as the Nutrition and Aging Resource Center, provides resources to OAA Title III-C SNPs across the U.S. and technical assistance to Innovation in Nutrition Grantees. The findings from this needs assessment can inform strategies for the NRCNA, as well as SNPs, to better engage with these audiences, with the ultimate goal of connecting more eligible participants to OAA programs and fulfilling the purpose of these services to:

1. reduce food insecurity, hunger, and malnutrition,
2. enhance socialization, and
3. promote the health and well-being of older adults.

This report will focus on the combined findings from all three audiences. Specific data from each population group (adults aged 60+, adults aged 40-59, and informal caregivers) will be shared in separate companion reports.

Methods

A 125-item Qualtrics™ survey was developed to assess attributes of interest (outlined on page 10) and underwent several rounds of content and face validity checks by NRCNA and Administration for Community Living (ACL) staff. When completing the survey, respondents were prompted to answer between 75-101 questions based on their responses. This report summarizes findings from 97 questions, excluding questions pertaining to ageism and caregiver-specific data; the latter of which will be shared in a separate caregiver companion report.

Validated tools were incorporated into the survey to evaluate the following measures:

- **Quality of Life:** PROMIS Scale v1.2 – Global Health (PROMIS Health Organization, 2016)
- **Physical Health:** PROMIS Scale v1.2 – Global Health (PROMIS Health Organization, 2016)
- **Mental Health:** PROMIS Scale v1.2 – Global Health (PROMIS Health Organization, 2016)
- **Social Health:** PROMIS Scale v1.2 – Global Health (PROMIS Health Organization, 2016)
- **Food Security**: U.S. Household Food Security Survey Module: Six-Item Short Form (Blumberg et al., 1999)
- **Food Availability:** Food Store Perceived Limited Availability, Food Pantry Perceived Limited Availability (Calloway et al., 2023)
- **Nutrition Security:** Brief Nutrition Security Screener (Calloway et al., 2022)
- **Ability to Choose Healthful Foods:** Brief Healthfulness Choice Screener (Calloway et al., 2022)
- **Nutritional Risk:** Dietary Screening Tool (Bailey et al., 2007; Bailey et al., 2009; Ventura Marra et al., 2018)

Surveys by Harmon & Maretzki (2006) and Fordham & Baldrige (n.d.) inspired some of the wording of the survey questions related to attitudes toward senior nutrition programs.

Survey Category Descriptions and Number of Questions

Respondent Information (34)

- Sociodemographic attributes including age, education, race, ethnicity, marital status, employment status, location, household, income, healthcare coverage; caregiver characteristics; initial eligibility questions

Respondent Health Characteristics (6)

- Health status, chronic conditions, quality of life

Community-Based Food and Nutrition Program Awareness and Utilization (19)

- Awareness and utilization of community-based food and nutrition programs

Perceptions Senior Nutrition Programs (8)

- Attitudes, perceptions, and understanding toward congregate and home-delivered meal programs

Programming Needs and Preferences (14)

- Factors likely to increase SNP participation, programming interests, relevant topics of interest, preferred educational and marketing formats, media use

General Food Behaviors (40)

- Food source, utilization, food security, nutrition security, nutritional risk

Aging Perspectives (4)

- Aging stereotypes, age discrimination, positive aging views

Personnel at Qualtrics™ managed the recruitment and data collection process through their market research panels, groups of individuals who have consented to be approached for survey participation. U.S. adults 40 years and older, and informal caregivers of older adults or adults with disabilities were targeted for participation. An informal caregiver was defined as "those who provide unpaid care to a relative/friend 60 years or older OR to an adult (18+) with a disability." Goal sample sizes were determined by available funding; 310 adults aged 40+ and 150 caregivers. The ISU research team worked with Qualtrics™ to recruit a varied, representative sample.

Survey distribution occurred October 11, 2023, through November 6, 2023. Survey responses were reviewed by Qualtrics and NRCNA staff for quality standards throughout data collection. Quality criteria included speed of completion, completion rate, "straight lining" or providing the same answers repeatedly in a matrix question, and eligibility based on survey responses (i.e., not selecting that they care for an adult 60+ or adult with a disability).

The final dataset included a total of 476 respondents: 302 adults aged 40+ years, and 174 caregivers. Descriptive analyses were conducted using SPSS v.29 statistical software.

Findings

Respondent Demographic Characteristics

A total of 476 respondents completed this survey; 208 adults aged 60+years, 94 adults aged 40-59 years old, and 174 caregivers of at least one older adult or adult with a disability (Table 1). Many respondents identified as white (62%), non-Hispanic (78%), and had acquired at least some college education or higher (73%).

Nearly one-half of respondents were located in suburban areas (46%), currently married (44%), and reported an average income of less than $40,000 per year (Table 2). The adults aged 40-59 and caregivers were more likely to have a full-time job (42-52%), while a majority of the adults 60+ were retired (63%) (Table 1). The most common sources of healthcare coverage included Medicare (42%), employment-based private insurance (25%), and Medicaid (24%).

Table 1.

Sociodemographic Characteristics of Survey Respondents (n=476)

Characteristic	Adults 40-59 (n=94)	Adults 60+ (n=208)	Caregivers (n=174)	Total (n=476)
Education				
Less than high school	7 (7%)	2 (1%)	5 (3%)	14 (2.9%)
High school	27 (29%)	37 (18%)	48 (28%)	112 (24%)
Some college	25 (27%)	66 (32%)	56 (32%)	147 (31%)
Bachelor's degree	20 (21%)	64 (31%)	36 (21%)	120 (25%)
Some post-graduate or advanced degree	14 (15%)	38 (18%)	29 (17%)	81 (17%)
Prefer not to answer	1 (1%)	1 (0.5%)	-	2 (0.4%)
Spanish, Hispanic, or Latino/a				
No	57 (61%)	185 (89%)	129 (74%)	371 (78%)
Yes	36 (38%)	21 (10%)	45 (26%)	102 (21%)
Prefer not to answer	1 (1%)	2 (1%)	-	3 (0.6%)
Race[a]				
American Indian/Alaskan Native	6 (6%)	6 (3%)	8 (5%)	20 (4%)
Asian	11 (12%)	27 (13%)	11 (6%)	49 (10%)
Black or African American	32 (34%)	31 (15%)	44 (25%)	107 (22%)
Native Hawaiian/Pacific Islander	1 (1%)	1 (0.5%)	1 (1%)	3 (0.6%)
White	40 (43%)	139 (67%)	114 (66%)	293 (62%)
Not Listed	7 (7%)	5 (2%)	3 (2%)	15 (3%)
Do not wish to answer	1 (1%)	4 (2%)	3 (2%)	8 (1.7%)
Home Location				
Rural	24 (26%)	46 (22%)	41 (24%)	111 (23%)
Suburban	38 (40%)	102 (49%)	79 (45%)	219 (46%)
Urban	32 (34%)	59 (28%)	54 (31%)	145 (30%)
No response	-	1 (0.5%)	-	1 (0.2%)
Marital Status				
Currently Married	44 (47%)	91 (44%)	73 (42%)	208 (44%)
Divorced, Separated, or Widowed	24 (26%)	78 (38%)	43 (25%)	145 (30%)
Never Married	26 (28%)	35 (17%)	57 (33%)	118 (25%)
Other	-	2 (1%)	1 (1%)	3 (0.6%)
Prefer not to answer	-	2 (1%)	-	2 (0.4%)
Income[b]				
≤$20K	22 (23%)	46 (22%)	49 (28%)	117 (25%)
Over $20K to $40K	23 (24%)	46 (22%)	50 (29%)	119 (25%)
>$40K	40 (43%)	95 (46%)	61 (35%)	196 (41%)
No response	9 (10%)	13 (6%)	9 (5%)	31 (7%)
Prefer not to answer	-	8 (4%)	5 (3%)	13 (3%)

Characteristic	Adults 40-59 (n=94)	Adults 60+ (n=208)	Caregivers (n=174)	Total (n=476)
Employment				
Full-time	49 (52%)	41 (20%)	73 (42%)	163 (34%)
Full-time student	-	-	5 (3%)	5 (1%)
Homemaker	4 (4%)	4 (2%)	8 (5%)	16 (3%)
Part-time	10 (11%)	15 (7%)	22 (13%)	47 (10%)
Retired	9 (10%)	131 (63%)	40 (23%)	180 (38%)
Unemployed	18 (19%)	9 (4%)	18 (10%)	45 (9%)
Other	4 (4%)	7 (3%)	5 (3%)	16 (3%)
Prefer not to answer	-	1 (0.5%)	3 (2%)	4 (0.8%)
Health Insurance Coverage[a]				
Charity Care	3 (3%)	-	3 (2%)	6 (1%)
COBRA or Temporary Insurance	-	1 (0.5%)	3 (2%)	4 (0.8%)
Medicaid	24 (26%)	35 (17%)	54 (31%)	113 (24%)
Medicare	22 (23%)	125 (60%)	55 (32%)	202 (42%)
Private: Direct Purchase	12 (13%)	23 (11%)	22 (13%)	57 (12%)
Private: Employer	30 (32%)	50 (24%)	41 (24%)	121 (25%)
Tricare or VA Coverage	5 (5%)	10 (5%)	2 (1%)	17 (4%)
Uninsured	8 (9%)	6 (3%)	17 (10%)	31 (7%)

[a]Respondents were able to select more than one

When asked about the status of their household, a majority indicated that they live with at least 1 other person (71%) who was their spouse (62%) (Table 2). Among those who lived with others, many did not have any children living with them (68%).

Survey respondents were asked questions related to their health (Table 3). Nearly one-half of the adults aged 40+ self-reported that their health status was “good” (47%), and that they have been diagnosed with 1-2 chronic health conditions (47%). Additionally, most shared that they had at least “good” quality of life overall (78%), and in the areas of physical (75%), mental (82%), and social health (74%). On average, quality of life scores were highest for mental health (3.5/5) and lowest for physical health (3.2/5).

Table 2.

Household Characteristics of Survey Respondents (n=476)

Characteristic	Adults 40-59 (n=94)	Adults 60+ (n=208)	Caregivers (n=174)	Total (n=476)
Live Alone				
Yes	17 (18%)	75 (36%)	47 (27%)	139 (29%)
No	77 (82%)	133 (64%)	126 (72%)	336 (71%)
No response	-	-	1 (0.6%)	1 (0.2%)
# of People in Household (including self) [a]				
1-2	30 (39%)	97 (73%)	66 (52%)	193 (57%)
3-4	35 (45%)	28 (21%)	48 (38%)	111 (33%)
5 or more	12 (16%)	8 (6%)	12 (10%)	32 (10%)
# of Adults Living in Household (including self)[a]				
1-2	56 (73%)	102 (77%)	94 (75%)	252 (75%)
3-4	16 (21%)	25 (19%)	29 (23%)	70 (21%)
5 or more	5 (6%)	6 (5%)	3 (2%)	14 (4%)
# of Children Living in Household[a]				
0	35 (45%)	114 (86%)	79 (63%)	228 (68%)
1-2	33 (43%)	18 (14%)	41 (33%)	92 (27%)
3-4	9 (12%)	1 (1%)	4 (3%)	14 (4%)
5 or more	-	-	2 (2%)	2 (0.6%)
Household Members[a,b]				
Spouse	49 (64%)	87 (65%)	71 (56%)	207 (62%)
Children	43 (56%)	32 (24%)	46 (37%)	121 (36%)
Relatives	10 (13%)	15 (11%)	32 (25%)	57 (17%)
Domestic Partner	7 (9%)	8 (6%)	6 (5%)	21 (6%)
Other	2 (3%)	12 (9%)	9 (7%)	23 (7%)

[a]Out of 336 total respondents; 77 adults 40-59, 133 adults 60+, 126 caregivers

[b]Respondents were able to select more than one

Table 3.

Health Characteristics of Survey Respondents (n=476)

Characteristic	Adults 40-59 (n=94)	Adults 60+ (n=208)	Caregivers (n=174)	Total (n=476)
Health Status[a]				
Excellent	9 (10%)	16 (8%)	-	25 (8%)
Very Good	16 (17%)	46 (22%)	-	62 (21%)
Good	50 (53%)	91 (44%)	-	141 (47%)
Fair	17 (18%)	47 (23%)	-	64 (21%)
Poor	2 (2%)	8 (4%)	-	10 (3.3%)
# of Chronic Conditions[a]				
5 or more	1 (1%)	8 (4%)	-	9 (3%)
3-4	18 (19%)	50 (24%)	-	68 (23%)
1-2	41 (44%)	100 (48%)	-	141 (47%)
0	34 (36%)	50 (24%)	-	84 (28%)
Quality of Life				
Excellent	11 (12%)	23 (11%)	24 (14%)	58 (12%)
Very Good	19 (20%)	63 (30%)	48 (28%)	130 (27%)
Good	39 (41%)	84 (40%)	65 (37%)	188 (39%)
Fair	20 (21%)	29 (14%)	29 (17%)	78 (16%)
Poor	5 (5%)	9 (4%)	8 (5%)	22 (5%)
Physical Health				
Excellent	10 (11%)	16 (8%)	17 (10%)	43 (9%)
Very Good	19 (20%)	51 (25%)	53 (30%)	123 (26%)
Good	46 (49%)	85 (41%)	61 (35%)	192 (40%)
Fair	17 (18%)	46 (22%)	36 (21%)	99 (21%)
Poor	2 (2%)	10 (5%)	7 (4%)	19 (4%)
Mental Health				
Excellent	12 (13%)	58 (28%)	35 (20%)	105 (22%)
Very Good	21 (22%)	67 (32%)	54 (31%)	142 (30%)
Good	36 (38%)	61 (29%)	45 (26%)	142 (30%)
Fair	21 (22%)	15 (7%)	35 (20%)	71 (15%)
Poor	4 (4%)	7 (3%)	5 (3%)	16 (3%)
Social Health				
Excellent	8 (9%)	39 (19%)	32 (18%)	79 (17%)
Very Good	21 (22%)	62 (30%)	44 (25%)	127 (27%)
Good	37 (39%)	57 (27%)	50 (29%)	144 (30%)
Fair	22 (23%)	30 (14%)	35 (20%)	87 (18%)
Poor	6 (6%)	20 (10%)	13 (7%)	39 (8%)

[a]Out of 302 total respondents (208 adults aged 60+ and 94 adults aged 40-59). The caregivers were not asked these questions to mitigate survey burden from additional caregiving questions

Awareness and Utilization of Community Food and Nutrition Programs

Awareness is likely to impact current and future participation in community food and nutrition programs, as well as the likelihood of individuals to recommend services to others who could benefit. Most respondents had at least a moderate awareness of food pantries/banks (72%) and the Supplemental Nutrition Assistance Program (SNAP) (69%) (Figure 1). However, between 53% to 67% had *very low/low* awareness of the other community food and nutrition programs listed. Notably, 60% of respondents had *low/very low* awareness of the congregate meal program, and 47% had *very low/low* awareness of OAA funded home-delivered meals. This highlights an important opportunity to increase the marketing of senior nutrition programs.

The community food and nutrition program utilization data shared in this report does not include caregivers. Caregivers were asked about program utilization among those they are a caregiver for, which will be shared in a separate companion report. About two out of every five respondents reported never using one of the community food and nutrition programs listed. Following similar trends to the awareness data, around one-third of the 40+ respondents reported that they have utilized SNAP and food pantries/banks (Figure 2). Utilization was less than 12% for the rest of the programs.

Figure 1.

Awareness of Community-based Food and Nutrition Programs (n=476)

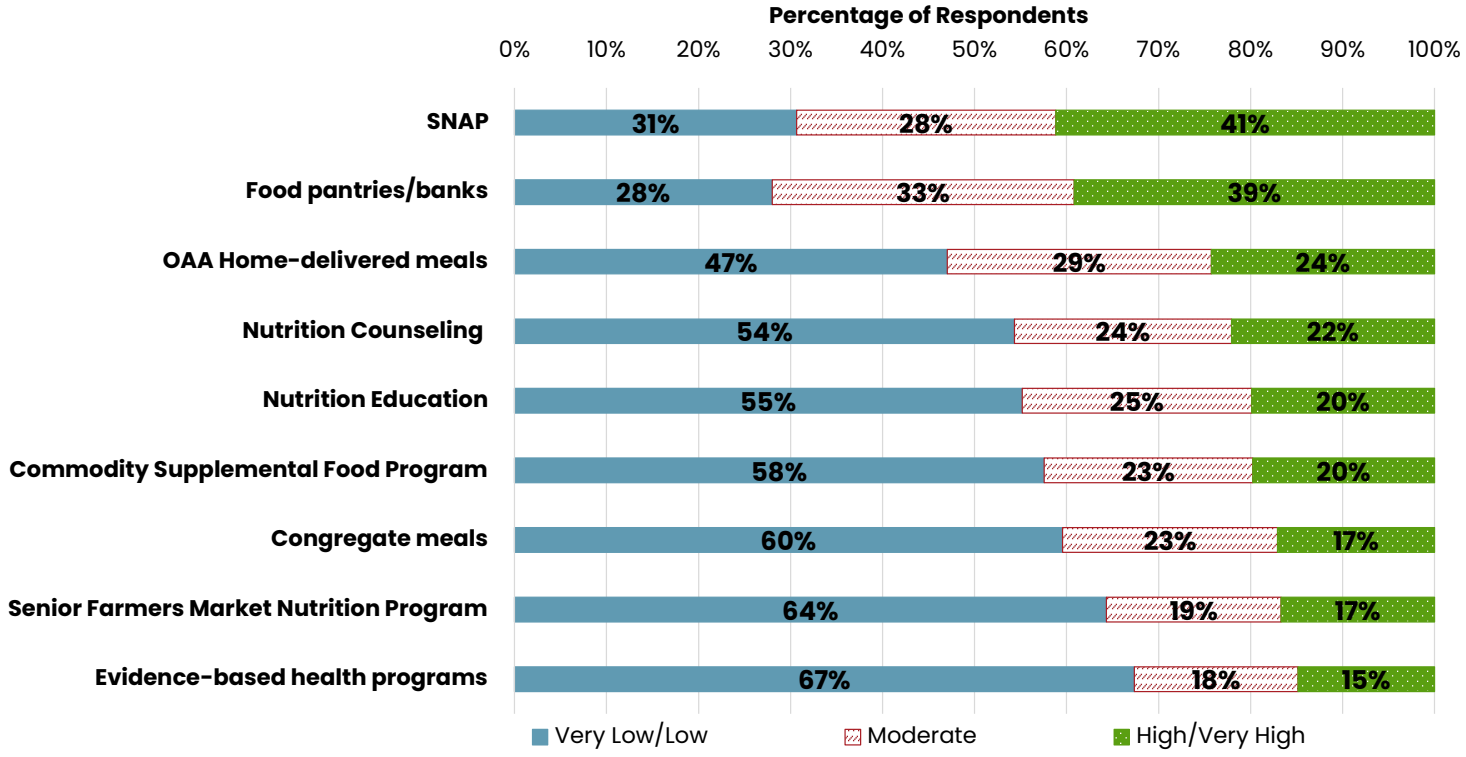
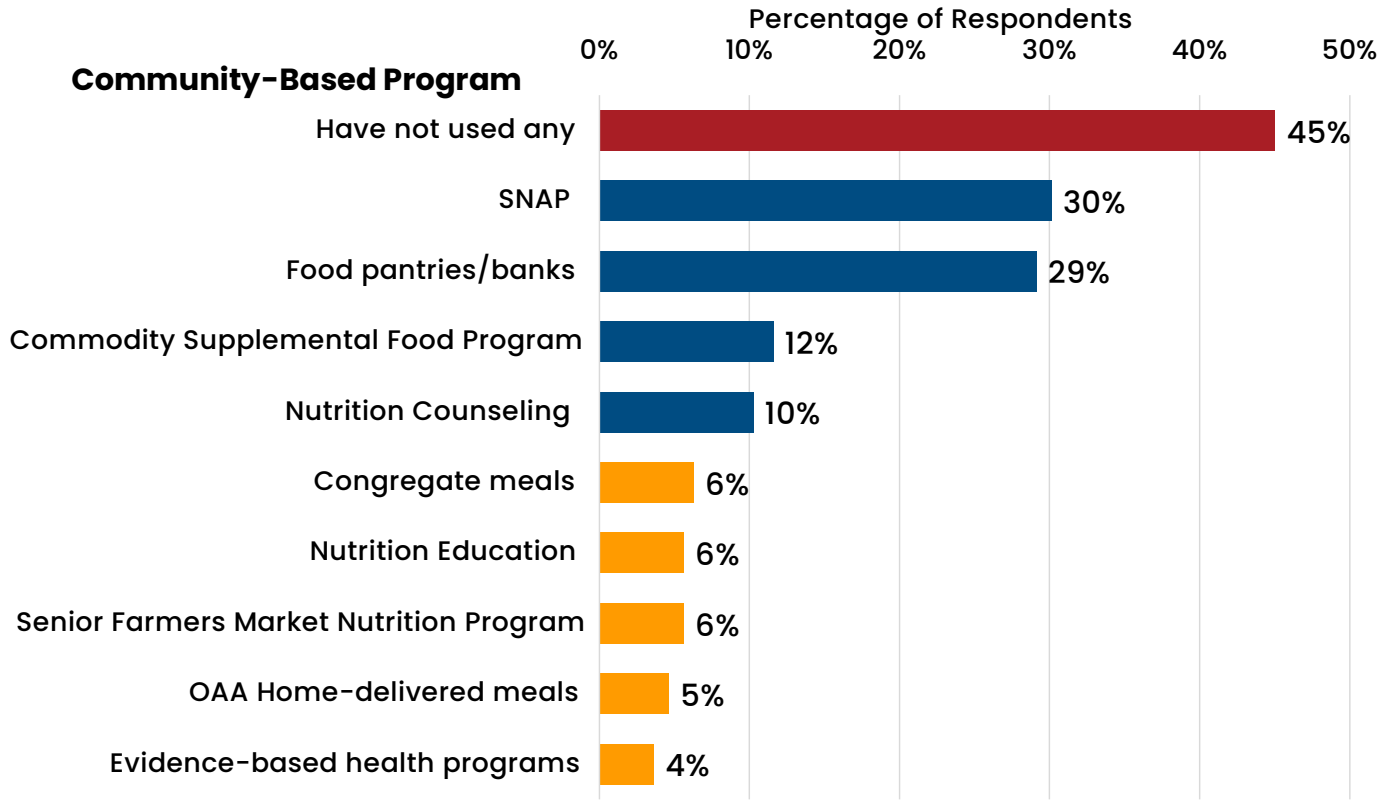


Figure 2.

Utilization of Community-based Food and Nutrition Programs (n=302)



Congregate Meal Program Utilization

Among survey respondents who have attended a congregate meal program (*n*=19), a majority indicated that they have been attending for less than 2 years (63%). The top reasons they shared for attending a congregate meal program were to get an affordable meal (74%), a nutritious meal (53%), convenience (53%), and for socialization (47%) (Table 4).

Table 4.

Reasons for Attending a Congregate Meal Program (n=19)

Attendance Reason[a]	Number	Percentage (%)
An affordable meal	14	74
A nutritious meal	10	53
Convenience	10	53
Socialization	9	47
Nice meal site environment	7	37
To reduce food waste at home	7	37
Welcoming environment	7	37
Delicious and tasty meals	6	32
Ability to age in place	5	26
Choice and variety of meal options	5	26
Functional need	4	21
Programs and activities	4	21
Don't know	1	5
Other	-	-

[a]Respondents were able to select more than one

Home-Delivered Meal Program Utilization

Among survey respondents who have utilized a home-delivered meal program (*n*=14), duration of use varied. The top reasons they shared for utilizing a home-delivered meal program included affordability (57%), a functional need (57%), and an inability to prepare or cook their meals independently (57%) (Table 5).

Respondents were asked questions about their home-delivered meal consumption due to concerns that there are users who may be using the one meal for two meals and thus may not be receiving adequate nutrition since each OAA-funded meal is required to provide at least one-third of an individual's nutrient needs (OAA, 2020). Over one-half shared that they *"often"* eat the provided meal in one sitting (54%), while 46% shared that they *"sometimes"* consume the provided food for two meals.

Table 5.

Reasons for Utilizing a Home-Delivered Meal Program (n=14)

Utilization Reason[a]	Number	Percentage (%)
An affordable meal	8	57
Functional need	8	57
Unable to prepare or cook meals independently	8	57
Ability to age in place	7	50
A nutritious meal	7	50
Convenience	7	50
Unable to purchase meals/groceries independently	7	50
Choice and variety of meal options	6	43
Friendly staff	5	36
Socialization with delivery driver	5	36
To reduce food waste at home	5	36
Programs and activities offered online	4	29
Other	1	7

[a]Respondents were able to select more than one

Nutrition Counseling and Education Utilization

Within the survey, nutrition counseling was defined as "*one-on-one personalized [nutrition] assessment and goal setting with a registered dietitian nutritionist*" and nutrition education was defined as *"group [nutrition] education, does not include individual or personalized counseling."* Among survey respondents who have participated in **nutrition counseling** (*n*=31), only 39% participated in 1-2 sessions, while 19% have participated in 11-15 sessions. Among those who have participated in **nutrition education** (*n*=17), 29% have participated in 1-2 sessions, 24% in 6-10 sessions, and 24% in 11-15 sessions. The top reasons they shared for participating in nutrition counseling and/or nutrition education included general health and wellness (46%), chronic disease prevention and management (38%), and weight management (32%) (Table 6).

Table 6.

Reasons for Participating in Nutrition Counseling and/or Nutrition Education (n=37)

Utilization Reason[a]	Number	Percentage (%)
General health and wellness	17	46
Chronic disease prevention or management	14	38
Weight management (gain or loss)	12	32
Encouragement of family, friends, or partner	10	27
Help with eating on a budget	10	27
Referral from a healthcare provider	9	24
Manage nutrient deficiencies	7	19
Support with meal plans/preparation	6	16
Ability to age in place	5	14
Disordered eating	5	14
Gastrointestinal/digestion concerns	4	11
Manage feeding tube or total parenteral nutrition	4	11
Optimize sports or physical activity performance	4	11
Don't know	1	3
Other	-	-
Manage allergies, intolerances, or sensitivities	-	-

[a]Respondents were able to select more than one

Attitudes and Perceptions of Senior Nutrition Programs

Understanding the attitudes and perceptions individuals have toward SNPs can offer insight into their likelihood to participate or recommend them to others. Respondents were asked about their general perceptions toward: (1) senior nutrition programs, (2) individuals that use the programs, and (3) eligibility requirements. Only respondents who had at least a moderate awareness of congregate meals (*n*=192) and home-delivered meals (*n*=251) were asked questions about their attitudes toward these specific programs.

Positive and Negative Attitudes

On average, respondents "*somewhat agreed*" that senior nutrition programs promote health and wellbeing, enhance socialization, and reduce hunger and food insecurity (Table 7). These perceptions align with the purpose of OAA Title III-C senior nutrition programs (OAA, 2020). On the other hand, on average, respondents "*somewhat agreed*" that 1) the programs are suitable for people like them or the individual(s) they are a caregiver for, and 2) they do not make people more dependent on assistance programs (Table 8). These results suggest generally positive perceptions toward congregate and home-delivered meal programs.

Table 7.

Attitudes Toward Senior Nutrition Programs

	Average Likert Score (1-7) Congregate Meals	**Average Likert Score (1-7) Home-Delivered Meals**
Positive Attitudes	**Average Likert Score (1-7) Congregate Meals**	**Average Likert Score (1-7) Home-Delivered Meals**
Promote health and wellbeing	5.48	5.48
Promote socialization	5.49	5.13
Reduce hunger and food insecurity	5.64	5.65
Negative Attitudes	**Average Likert Score (1-7) Congregate Meals**	**Average Likert Score (1-7) Home-Delivered Meals**
Not for people like me	3.68	3.74
Make people more dependent	3.81	3.49

Perceptions of Who is Using Senior Nutrition Programs

When asked about characteristics of individuals who utilize congregate meal programs, on average respondents "*somewhat agreed*" that they are more likely to be friendly, unemployed/retired, and low income (Figure 3). On average, respondents "*somewhat disagreed or disagreed*" that they are more likely to be lacking education. Similar results were found related to their perception of home-delivered meal recipients (Figure 4). However, respondents also "*somewhat agreed*" that home-delivered meal recipients were more likely to have a functional impairment or disability.

Figure 3.

Perspectives About Congregate Meal Participants (n=192)

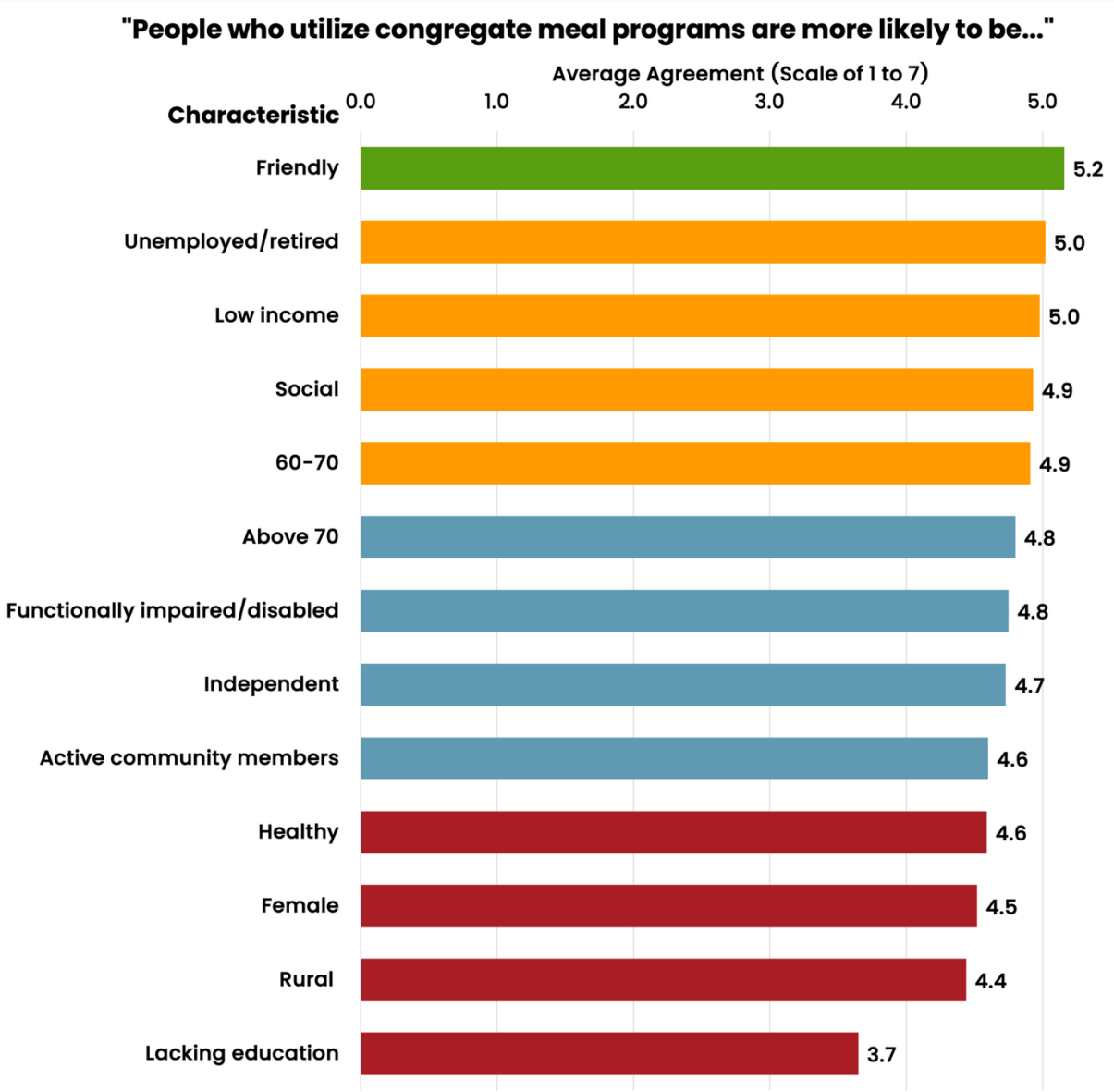
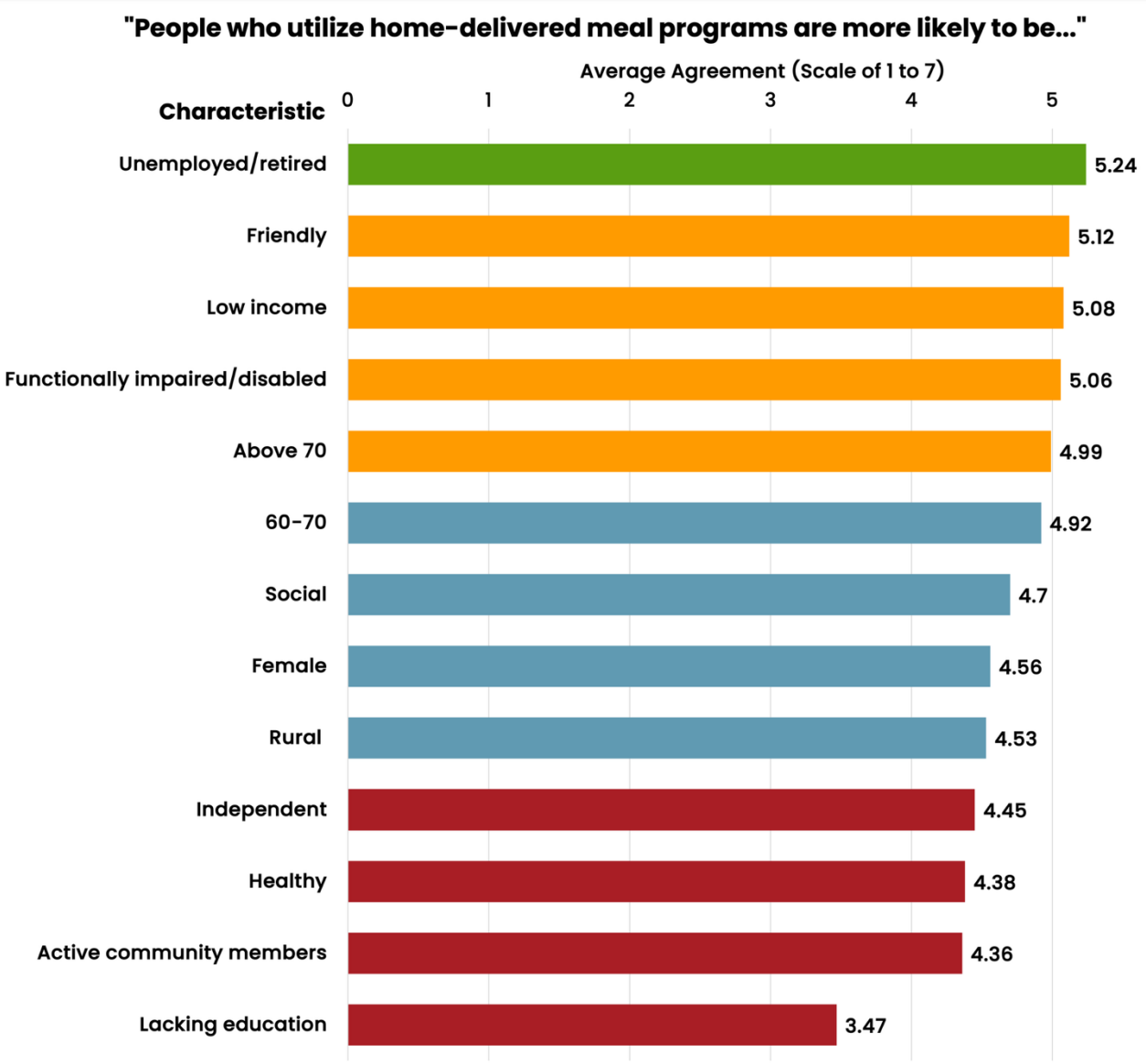


Figure 4.

Perspectives About Home-Delivered Meal Participants (n=251)



Perceived OAA Senior Nutrition Program Eligibility

Misunderstanding eligibility requirements can be another potential barrier to utilization of senior nutrition programs. Individuals who receive OAA Title III-C programs must be at least 60 years of age at the time of service (OAA, 2020). Spouses of eligible individuals regardless of age can also receive meals. In some cases, adults with disabilities and meals service volunteers may be eligible (OAA, 2020). While not a strict eligibility requirement, the programs are intended to prioritize individuals with greatest social need and greatest economic need.

About two out of every three respondents (66-69%) selected age as an eligibility requirement to receive congregate and home-delivered meals (Table 8). Additionally, many respondents indicated that having a disability or functional impairment (59%), chronic disease/health status

(59%), and food/nutrition insecurity status (56%) are requirements to receiving home-delivered meals. Around one-half perceived that living situation was an eligibility requirement for participation in both programs. While this data reflects a general understanding of who the programs are prioritized towards, there is opportunity to educate that many of these characteristics are not requirements.

Table 8.

Perceived Congregate and Home-Delivered Meal Eligibility Requirements (n=192)

Eligibility Requirement[a]	Congregate Meals (n=192)	Home-Delivered Meals (n=251)
Age	132 (69%)	165 (66%)
Living situation	100 (52%)	125 (50%)
Disability or functional impairment	91 (47%)	149 (59%)
Chronic disease or health status	85 (44%)	147 (59%)
Food/nutrition insecurity status	82 (43%)	140 (56%)
Specific income requirements	79 (41%)	120 (48%)
Nutritional risk status	71 (37%)	106 (42%)
Age of partner/spouse	46 (24%)	62 (25%)
No requirements	9 (5%)	-

[a]Respondents were able to select more than one

Programming Needs and Preferences

Respondents from the adult 40+ group were asked questions related to their programming needs and preferences. These findings can be used to guide the efforts of senior nutrition program providers, as well as other community-based services targeted toward these populations. Individuals who reported that they have **not** accessed a congregate meal program (*n*=283) or home-delivered meal program (*n*=288) were asked about the factors that would increase their likelihood of participating (Table 9). Similar to the top reasons identified by individuals who utilize these services (Tables 4-5), the most popular factor was affordability (57-59%) (Table 9). Around one-half of the non-users further indicated that delicious/tasty meals, nutritious meals, and the convenience of using the programs would increase their likelihood of participating.

Similarly, the chief factor likely to increase participation in nutrition counseling or education among non-users (*n*=271) was affordability (61%), followed by accessibility/convenience (48%), ability to age in place (45%), and insurance coverage (42%) (Table 10).

Table 9.

Factors Likely to Increase Likelihood of Participation in SNPs

Programming Factors of Interest	Congregate Meals (n=283)	Home-Delivered Meals (n=288)
Affordable meal	168 (59%)	164 (57%)
Delicious and tasty meals	143 (51%)	138 (48%)
Nutritious meals	133 (47%)	137 (48%)
Convenience	131 (46%)	143 (50%)
Accessible location	130 (46%)	N/A
Ability to age in place	123 (43%)	134 (47%)
Financial need	123 (43%)	132 (46%)
Choice and variety of meal options	114 (40%)	109 (38%)
Welcoming environment	97 (34%)	N/A
Reliable, accessible transportation	90 (32%)	N/A
Flexible meal times	89 (31%)	103 (36%)
Meal site environment	86 (30%)	-
Functional need	80 (28%)	99 (34%)
Friendly staff or volunteers	N/A	89 (31%)
Information about options available	70 (25%)	77 (27%)
Opportunity to socialize	65 (23%)	N/A
Reduce food waste at home	62 (22%)	59 (20%)
Offered at site that isn't restricted for older adults	55 (19%)	N/A
Restaurant style meals	53 (19%)	N/A
Programs and activities offered	53 (19%)	34 (12%)

Programming Factors of Interest	Congregate Meals (n=283)	Home-Delivered Meals (n=288)
Attendance alongside friends/family	46 (16%)	N/A
Common interests/similarities with others	42 (15%)	N/A
Encouragement or invitation from friends/family	41 (14%)	42 (15%)
None- would never participate	33 (12%)	30 (10%)
Other	4 (1%)	4 (1%)

[a]Respondents were able to select more than one

Table 10.

Factors Likely to Increase Likelihood of Participation in Nutrition Education or Counseling (n=271)

Programming Factors of Interest[a]	Number (Percentage)
Affordability	166 (61%)
Accessibility/convenience	129 (48%)
Ability to age in place	121 (45%)
Insurance coverage	113 (42%)
Information about the options available	90 (33%)
Support with eating on a budget	87 (32%)
Flexible session times	85 (31%)
More options available in my area	75 (28%)
Support with meal ideas or preparation	74 (27%)
A nutrition counseling provider similar to me	66 (24%)
Supportive, trusting nutrition counseling provider	55 (20%)
None- would never participate	54 (20%)
Option for online participation	51 (19%)
Healthcare provider referral	50 (18%)
Receiving lab results indicating the need	47 (17%)
Attendance alongside friends, family, or partner	39 (14%)
Lack of judgement or criticism	39 (14%)
Development of GI concerns	37 (14%)
Development of food allergies, intolerances, or sensitivities	35 (13%)
Encouragement of friends, family, or partner	31 (11%)
Receiving chronic disease diagnosis	23 (8%)
Optimize sports or physical activity	22 (8%)
Options in my preferred language	20 (7%)
Other	4 (1%)

[a]Respondents were able to select more than one

The survey inquired about the respondents' interest in other community-based programs and services. A majority were "*moderately/very interested*" in vouchers to eat at local restaurants (73%), fresh, locally grown food and meals (73%), frozen or shelf stable meals (58%), grab and go or drive-thru meals (58%), mobile truck meals (57%), and free health assessments (56%) (Figure 7).

Around one-half of respondents indicated "*moderate/very high*" interest in meals tailored to their dietary needs. As a follow-up, these individuals were asked what specific types of meals they would be interested in to meet their dietary needs. The most popular meals included heart healthy (69%) and high protein (64%) (Table 11). Separately, 44% of respondents reported "*moderate/very high*" interest in international or regional cuisine (Figure 7). When asked what specific types of meals they would be interested in, the ones of greatest interest were Mexican (78%), Chinese (71%), and Asian (69%) (Table 11).

All survey participants, including caregivers, were asked about educational topics of interest; current engagement with social media, technology and health information; and preferences for obtaining information. A majority noted a "*moderate/high*" interest in learning more about nutrition/healthful eating (62%), grocery shopping (59%), physical activity (58%), chronic disease prevention (58%), and community-based food and nutrition programs (55%) (Figure 8). Preferred methods of receiving education included online lessons (44%), written materials (42%), and in-person individual sessions (32%) (Table 12). Preferred ways to learn about available wellness, nutrition, or food safety programs and resources were email program announcements (47%), social media (35%), and community-based newsletters (34%) (Table 12).

Figure 5.

Other Programs/Services of Interest (n=302)

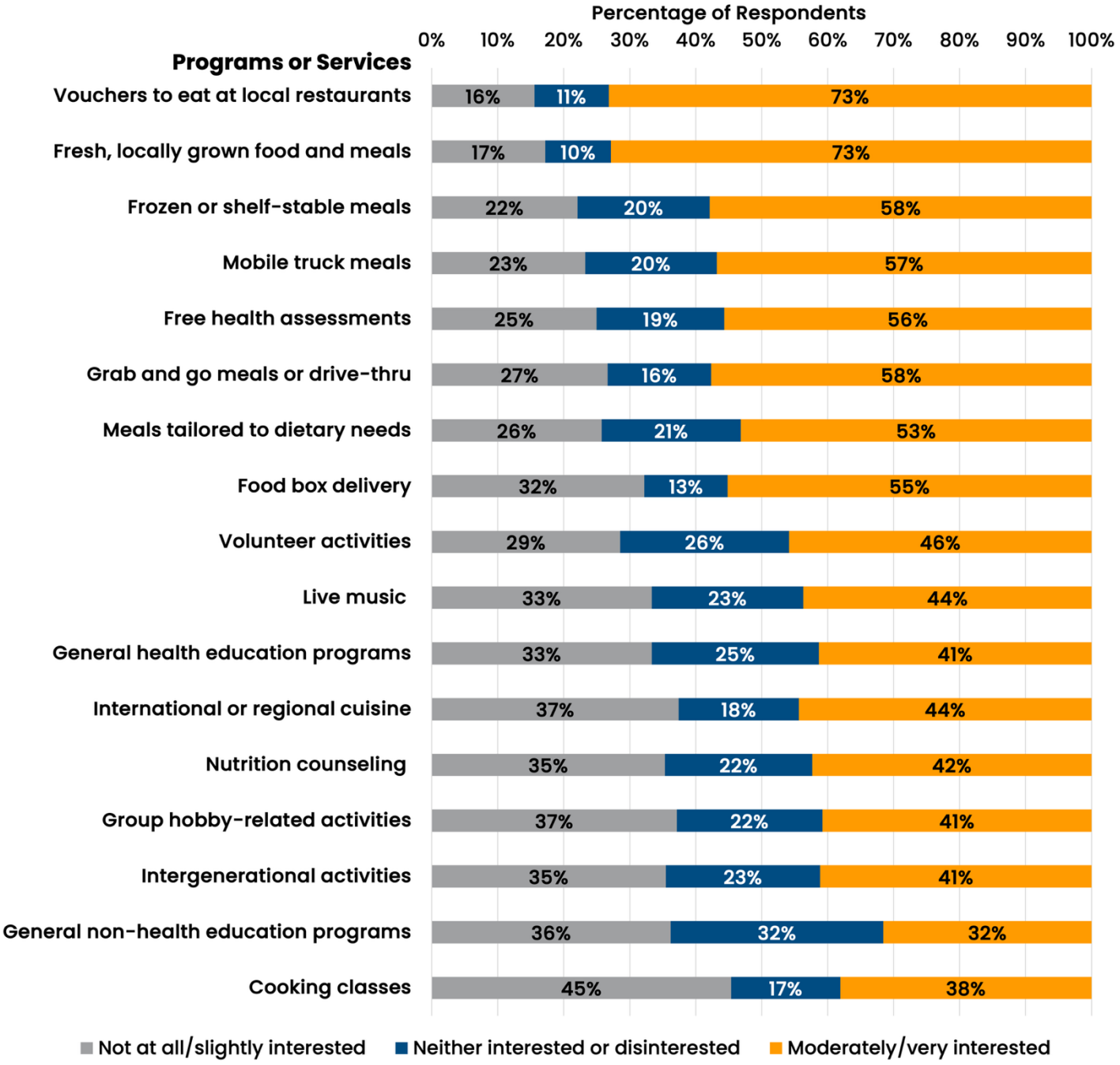


Table 11.

Meals of Interest

	Number	Percentage (%)
Meals Tailored to Dietary Needs[a] (n=299)		
Heart healthy	109	69%
High protein	101	64%
Diabetes friendly	63	40%
Gluten-free	40	25%
Free of a major allergen	34	21%
Vegetarian	32	20%
Kosher	23	14%
High calorie	21	13%
Soft	21	13%
Halal	16	10%
Vegan	15	9%
Liquid	12	8%
Renal	8	5%
Other	7	4%
International or Regional Cuisine Preferences[a] (n=302)		
Mexican	105	78%
Chinese	95	71%
Asian	93	69%
Latin American/Hispanic	76	57%
Soul Food	74	55%
Japanese	68	51%
Caribbean	67	50%
European	60	45%
Central American	51	38%
Indian	50	37%
African	49	37%
Native American	43	32%
Middle Eastern	41	31%
Criollo	19	14%
Other	5	4%

[a]Respondents were able to select more than one

Figure 6.

Educational Topics of Interest (n=476)

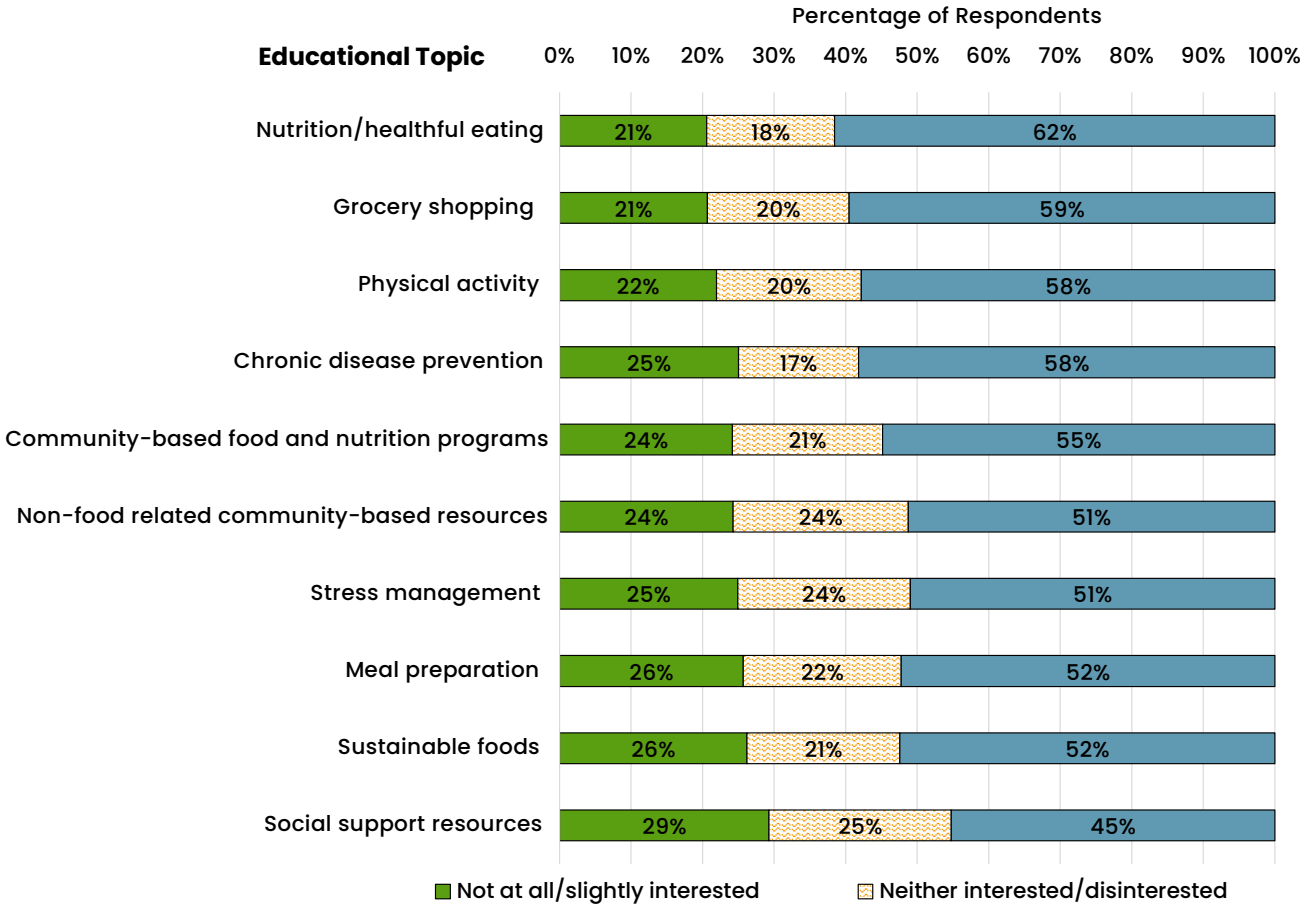


Table 12.

Preferred Programming Features (n=476)

	Number	Percentage (%)
Preferred Methods for Education[a]		
Online lessons	211	44
Written materials	201	42
Individual session, in-person	154	32
Group session in-person	121	25
Individual session, online	121	25
Group session, online	117	25
Live webinar	117	25
Interactive app	110	23
Podcast	86	18
Preferred Program Marketing[a]		
Email program announcements	222	47
Social media	168	35
Community-based newsletters	163	34
Word of mouth	146	31
Local newspaper	122	26
Personal invitation	122	26
Local radio	84	18
Flyers around town	77	16
I do not wish to learn about	39	8
Other	10	2

[a]Respondents were able to select more than one

The primary source of wellness or nutrition information for respondents were websites (38%), medical visits (37%), and Facebook (25%) (Figure 9). Most shared that their technology use includes email (61%), the internet (60%), their computer (56%), and texting (53%) (Table 13). Around half reported that they utilize social media (49%), particularly Facebook (91%), YouTube (85%), and Instagram (48%) (Table 13). Many indicated that they use Facebook (69%) and YouTube (56%) frequently. Lastly, most respondents selected that they were very comfortable (42%) or somewhat comfortable (41%) with using technology for educational purposes (Table 13).

Figure 7.

Typical Food and Nutrition Information Sources (n=476)

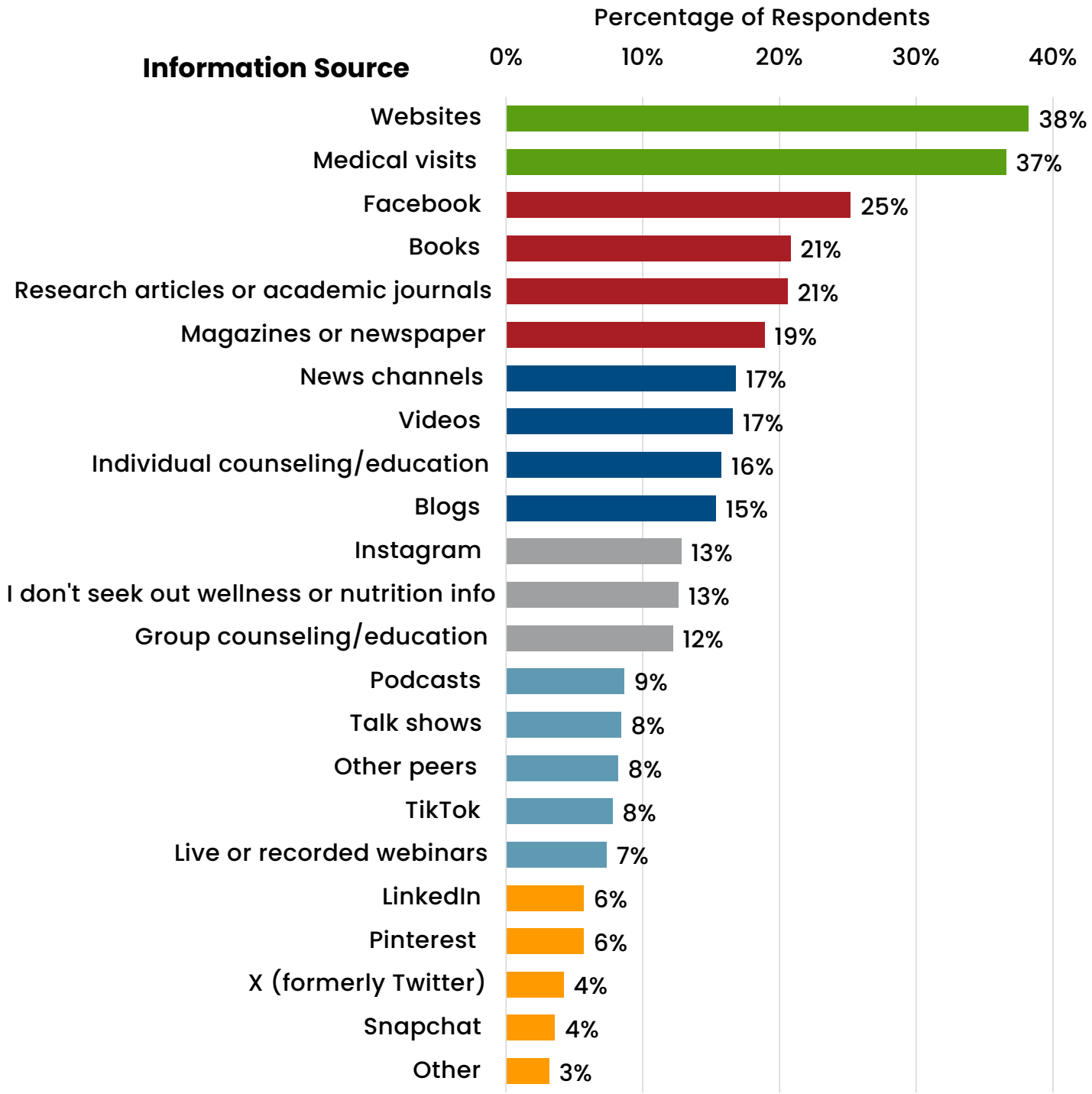


Table 13.

Media Utilization and Comfort with Technology Use

	Number	Percentage (%)
General Media Use[a] (n=476)		
Email	292	61
Internet	285	60
Computer	267	56
Texting	251	53
Social media	231	49
Tablet	157	33
Video calls	146	31
Landline	114	24
Social Media Use[a] (n=231)		
Facebook	210	91
YouTube	197	85
Instagram	111	48
LinkedIn	94	41
Pinterest	82	35
X	73	32
TikTok	61	26
Snapchat	27	12
Technology Comfort (n=475)		
Very comfortable	199	42
Somewhat comfortable	194	41
Not comfortable	67	14
I refuse to use technology-based education	15	3

[a]Respondents were able to select more than one

Food Source Utilization, Food/Nutrition Security, Nutritional Risk

This portion of the survey aimed to gather data on food source utilization, food/nutrition security, and nutritional risk. The data can be used to guide areas for intervention and ultimately enhance the nutritional health and wellbeing of U.S. adults 40+ and caregivers.

Respondents reported accessing food at supermarkets (86%); discount or big box stores (58%), and restaurants, cafeterias, fast food places, or similar (43%) (Table 14).

Table 14.

Food Source Utilization (n=476)

Food Source	Number (Percentage)
Supermarket	407 (86%)
Discount or big box store	277 (58%)
Restaurant, cafeteria, fast food, or similar	206 (43%)
Dollar store, 99 cent store, or similar	183 (38%)
Wholesale club	180 (38%)
Food banks, food pantries, religious sites, 'Meals on Wheels,' or other places or programs that offer free food	133 (28%)
Convenience store	110 (23%)
Farmer's market	105 (22%)
Food donated from friends, family, neighbors, or other people	96 (20%)
Food grown or harvested, and/or hunting/fishing for food	84 (18%)
Produce store or fruit/vegetable stand	64 (13%)
Found discarded food to eat	30 (6%)

The average survey respondent food security rating was "*low food security*," which indicates many respondents experience some challenges accessing reliable, adequate sources of food (Table 15).

On average, respondents indicated relatively "*high*" availability (1.3 out of 3) of high quality, healthful foods that they liked at the food stores they shopped at (Table 16). However, among those who obtain food from free or low-cost food sources such as food banks and pantries, respondents, on average, reported a "*moderate*" availability (2.0 out of 3) of healthful foods and foods that meet their preferences (Table 15).

Based on the "one-item" screeners, many respondents, on average, had "*high nutrition security*", or did not often worry that the foods they were able to eat would hurt their health and wellbeing (0.34 out of 1). Additionally, nearly one-half reported "*low healthfulness choice*" or an inability to control whether the foods they were able to eat were good for their health and wellbeing (47%) (Table 15).

Table 15.

Food/Nutrition Security Measures

	Average (Score Range)
USDA-Six Item Food Security Survey (n=459)	1.9 (0-6)[a]
Food Store Perceived Limited Availability (n=475)	1.3 (0-3)[b]
Food Pantry Perceived Limited Availability (n=133)	2.0 (0-3)[b]
Nutrition Security One-Item Screener (n=476)	0.34 (0-1)[c]
Healthfulness Choice One-Item Screener (n=476)	0.47 (0-1)[c]

[a] ↑ score indicates lower food security; 0-1 high or marginal food security, 2-4 low food security, 5-6 very low food security

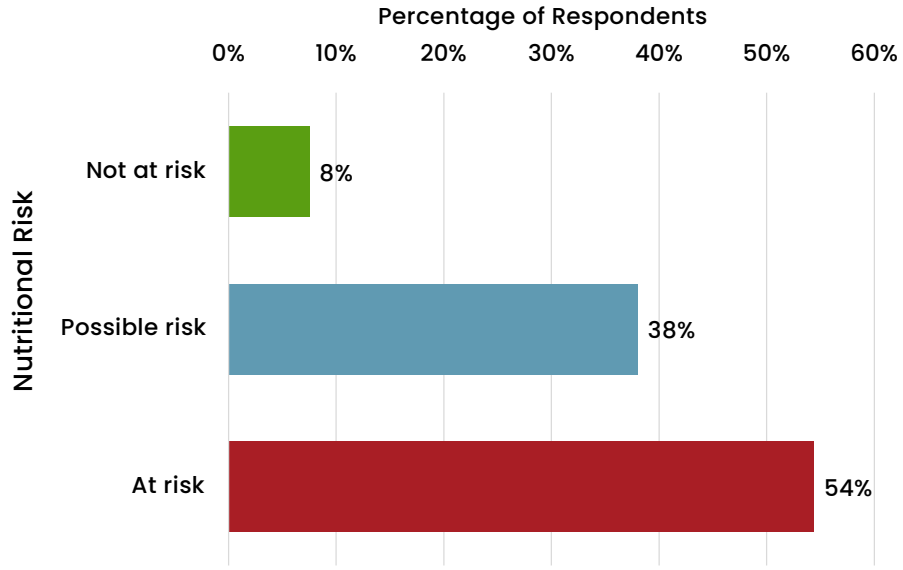
[b] ↑ score indicates lower availability of healthful foods and foods that meet their preferences

[c] ↑ score indicates lower nutrition security or healthfulness choice; 0 high security/choice, 1 low security/choice

Over one-half of the survey respondents were at "*high*" nutritional risk (54%), and 38% were at "*possible*" nutritional risk at the time of this survey (Figure 10).

Figure 8.

Nutritional Risk (n=318)



Conclusions

These needs assessment findings offer a range of insights that Older Americans Act Title III-C SNPs, and other community-based food and nutrition programs, can use to guide programming efforts. In particular, **the data identifies a need to address the substantial gap in awareness of SNPs and other community-based food and nutrition programs among adults 40+ and informal caregivers of older adults and adults with disabilities**. While attitudes about SNPs were fairly positive, there is room to grow average attitudes from "*somewhat*" to "*strong*" positive perceptions of these services. Information on the programming preferences of adults 40+ can be used to develop or maintain offerings that are of interest to the current and future generation of aging adults. Future companion reports will include detailed findings from each population group to provide more targeted guidance.

Recommendations

Based on the findings from this needs assessment, the aging network may consider the following:

- **Increase Marketing of Congregate and Home-Delivered Meals.** Over one-half of survey respondents reported "*low/very low*" awareness of congregate and home-delivered meals. The aging network can work to address this gap by providing information through a wide variety of communication channels including email announcements, social media, and community-based newsletters. These were identified as top methods respondents prefer to learn about wellness, nutrition, or food safety programs and resources. Marketing tips and guides can be found at the NRCNA website.
- **Offer and Spread Awareness on Programming Attributes of Interest.** Respondents who were users and non-users of SNPs were most interested in the affordability of the meals. This highlights an opportunity to market this programming feature to potential clients. Other desired features that SNPs can incorporate, or market include the nutritional content of meals, taste, and convenience. Additional opportunities to offer services of interest include local restaurant vouchers; fresh, locally grown food; frozen or shelf-stable meals; and grab and go meals. Guides and best practices for incorporating innovative ideas such as these can be found at the NRCNA website.
- **Tailor Meals to Meet Dietary Preferences:** Over one-half of respondents expressed interest in meals tailored to their dietary needs and 44% in international or regional cuisine. SNPs can aim to offer meals of greatest interest such as heart healthy, high protein, Mexican, Chinese, and Asian. Resources on international/regional cuisine menu planning can be found at the NRCNA website.

- **Provide Education/Information via Preferred Formats:** When providing education to adults aged 40+ and informal caregivers, the aging network shoulder explore utilizing preferred formats such as online lessons, written materials, and in-person individual sessions. For sharing food and nutrition information, websites and Facebook were identified as common sources where respondents are accessing this information. Additionally, the aging network can provide information on topics of interest such as nutrition/healthful eating, grocery shopping, and chronic disease prevention.

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