COMMONWEALTH of VIRGINIA

Department for the Aging

Julie Christopher, Commissioner

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AAA TUESDAY E-MAILING
March 6, 2007

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1610 Forest Avenue, Suite 100, Richmond, Virginia 23229
Toll-Free: 1-800-552-3402 (Voice/TTY) • Phone: 804-662-9333 • Fax: 804-662-9354
E-mail: aging@vda.virginia.gov • Web Site: www.vda.virginia.gov

COMMONWEALTH of VIRGINIA
Department for the Aging
Julie Christopher, Commissioner

MEMORANDUM

TO: Executive Directors
Area Agencies on Aging

FROM: Rochelle Clarke, Information Systems Specialist

DATE: March 6, 2007

SUBJECT: VDA Website Change

Effective March 1, 2007 the old VDA website address will no longer work. If you have bookmarked anything on our website using the old address (**www.aging.state.va.us**) you will receive a "Page Not Found" message. The Virginia Department for the Aging's official website address is **www.vda.virginia.gov**.

Please use the above link to visit the website and re-bookmark any pages needed. If you have any questions, please feel free to contact me at (804) 662-9321.

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COMMONWEALTH of VIRGINIA
Department for the Aging
Julie Christopher, Commissioner

MEMORANDUM

TO: Executive Directors
Area Agencies on Aging

AND: Nutrition Directors
Disease Prevention Coordinators

FROM: Elaine S. Smith, MS, RD
Program Coordinator

DATE: March 6, 2007

SUBJECT: National Sleep Awareness Week – March 5th-11th

National Sleep Awareness Week is an annual public education, information, and awareness campaign, now in its tenth year. The National Sleep Foundation (NSF) is the organizer and sponsor.

Nearly 100 federal and state agencies, nonprofit organizations, and associations work in support of National Sleep Awareness Week (NSAW) as co-sponsors, helping to spread the word about the importance of sleep to health, safety and well-being. Joining NSF as the 2007 Campaign Partner is the Centers for Disease Control and Prevention (CDC).

This year's theme is "Sleep: As important as diet and exercise (Only easier!)".

A number of excellent resources pertaining to sleep and older adults are available at the following link:
http://www.sleepfoundation.org/site/c.huIXKjM0IxF/b.2417433/k.6DFE/Older_Adults_and_Sleep.htm

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COMMONWEALTH of VIRGINIA
Department for the Aging
Julie Christopher, Commissioner

MEMORANDUM

TO: Executive Directors
Area Agencies on Aging

AND: Nutrition Directors
Disease Prevention-Health Promotion Coordinators

FROM: Elaine S. Smith, MS, RD
Program Coordinator

DATE: March 6, 2007

SUBJECT: *Eat Better & Move More* Article

Following is a research article evaluating the outcomes of the *Eat Better & Move More* program developed for local AAA nutrition program sites. Our own Valley Program for Aging Services (VPAS) in Waynesboro, VA was one of the ten project sites. In fact, VPAS had the largest number of enrollees and one of the largest percentages of seniors completing the program.

As a result of the study, researchers state that the *Eat Better & Move More* program is simple, ready to use, and designed to fit modest local agency resources. It seems to fit the needs and interests of community-dwelling older adults who want to maintain their quality of life and independence. Ninety-nine percent of the participants indicated that they would recommend the program to others.

Specific outcomes were that daily intake of fruit increased 1 or more servings among 31% of participants; vegetables, 37%; and fiber, 33%. Daily steps increased 35%; blocks walked, 45%; and stairs climbed, 24%.

Eat Better & Move More Guidebooks, step counters, and other program resources are available for order and download at
http://nutritionandaging.fiu.edu/You_Can/index.asp

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Eat Better & Move More: A Community-Based Program Designed to Improve Diets and Increase Physical Activity Among Older Americans

Nancy S. Wellman, PhD, RD, FADA, Barbara Kamp, MS, RD, Neva J. Kirk-Sanchez, PhD, PT, and Paulette M. Johnson, PhD

Objectives. We assessed outcomes of an integrated nutrition and exercise program designed for Older Americans Act Nutrition Program participants as part of the Administration on Aging's You Can! campaign.

Methods. A 10-site intervention study was conducted. Preintervention and postintervention assessments focused on nutrition and physical activity stages of change, self-reported health status, dietary intakes, physical activity, and program satisfaction.

Results. Of 999 enrollees, the 620 who completed the program were aged 74.6 years on average; 82% were women, and 41% were members of racial/ethnic minority groups. Factors associated with program completion were site, health conditions, and nutrition risk. Seventy-three percent and 75% of participants, respectively, made a significant advance of 1 or more nutrition and physical activity stages of change; 24% reported improved health status. Daily intake of fruit increased 1 or more servings among 31% of participants; vegetables, 37%; and fiber, 33%. Daily steps increased 35%; blocks walked, 45%; and stairs climbed, 24%. Program satisfaction was 99%.

Conclusions. This easy-to-implement program improves diets and activity levels. Local providers should offer more such programs with the goal of enabling older Americans to take simple steps toward successful aging. (*Am J Public Health.* 2007;97:XXX–XXX. doi:10.2105/AJPH.2006.090522)

The Older Americans Act (OAA) Nutrition Program is the largest federally funded nutrition assistance program aimed toward adults older than 60 years.[1,2] Established in 1972, it is administered by the US Administration on Aging. Frequently called "meals on wheels" (this misnomer refers only to home-delivered meals), the program's purpose was never limited to providing meals. Among its stated purposes—still applicable 35 years later—were promoting health, decreasing malnutrition, preventing physical and mental deterioration, and reducing social isolation. Today, the program annually provides about 250 million nutritious meals, other nutrition services, and socialization opportunities to 3 million adults older than 60 years. States and local communities successfully leverage OAA funds to build coordinated service systems at a rate of about $2 for every federal dollar.

The OAA Nutrition Program is available to all individuals 60 years or older regardless of income. However, it is targeted to those in greatest social or economic need, particularly to low-income members of minority groups and individuals residing in rural areas. The Nutrition Program is a primary source of support for many older people ineligible for services provided by means-tested programs with income criteria, such as food stamps. Indeed, the program is the chief service system of any type for older individuals slightly above the poverty level. Of the participants, 80% to 90% have incomes below the poverty level to 125% of the poverty level, 76% are older than 75 years, and 60% live alone.[3]

Participants' voluntary contributions cover about 20% of the cost of a meal, and a single meal eaten at a community site is often their primary source of food for the entire day (for 60% of participants, this meal provides half or more of the total day's food). Nutrition Screening Initiative Checklist scores, which indicate level of nutrition risk. are high for 43% of participants and moderate for 48%.[3] Nutrition risk is based on factors or characteristics associated with an increased likelihood of poor nutritional status, commonly called malnutrition. These factors include the presence of various acute or chronic diseases and conditions, insufficient or inappropriate food intake, poverty, dependency on others or disability, and long-term or multiple medication use.

In addition to typically offering 5 midday meals per week at community sites and in homes, the program provides nutrition services that include screening, education, and counseling. It also provides linkages to other supportive in-home and community-based services such as homemaker–home health aide services, transportation, and even home repair and home modification programs. Each day, the 4000 local agencies serve as few as 20 clients to several thousand clients. Most agencies have modest budgets and depend on volunteer staff to a great degree.

The Eat Better & Move More (EBMM) program[4] was developed specifically for local OAA Nutrition Program sites and the Administration on Aging's national You Can! campaign.[5] The latter, part of the Steps to a HealthierUS initiative,[6] encourages all Americans, including older adults, to live longer, healthier lives by being physically active, eating nutritious diets, obtaining preventive screenings, and making healthful choices such as not smoking. Because nutrition and physical activity are cornerstones of successful aging,[7] EBMM incorporates both of these elements. The program, which is simple, ready to use, and designed to fit modest local agency resources, fits the interests and needs of community-dwelling older adults who want to maintain their quality of life and independence. We sought to document EBMM's effectiveness in a variety of community sites

nationwide that serve diverse older populations, including members of racial/ethnic minority groups.

METHODS

Design

The multisite applied intervention study described here was a collaborative endeavor coordinated by the National Resource Center on Nutrition, Physical Activity and Aging in 2005 with 10 OAA Nutrition Program grantees. The lead person at each site (8 registered dietitians, 1 registered nurse, 1 Native American program manager) attended a 1.5-day workshop on protocol implementation. The center incorporated changes in data collection tools suggested by site leaders and provided technical assistance throughout the study via biweekly conference calls and a dedicated listserv.

Program Background

Two pilot studies were completed before development of the EBMM program. The first, in Florida and Iowa, assessed the feasibility of having older adults use step counters and keep daily step logs. Eighty percent of the 115 participating adults, who were aged 61 to 90 years and many of whom had multiple impairments, successfully wore counters and kept logs. The range of steps was 100 to 10 000 at baseline, and the range was 430 to 13 000 at the end of the program. A guidebook was piloted in Florida with a program group that received step counters, engaged in educational activities, and completed a walking program, and a comparison group that received step counters only. Members of the program group significantly increased the number of steps they took each day and improved their food intakes.

The EBMM Guidebook[4] included 12 weekly sessions incorporating mini-talks and activities for group nutrition and physical activity sessions. Nutrition mini-talks emphasized the benefits of eating more fruits, vegetables, calcium-rich foods, and dietary fiber. In addition, given that many older adults were either overweight or underweight, mini-talks focused on sensible portion sizes. Nutrition topics, introduced during a particular weekly session and then reviewed and expanded on in the next session, addressed serious diet deficiencies or excesses. Physical activity mini-talks emphasized the benefits of walking. Participants learned how to use a step counter, perform simple stretching exercises, walk more at home and away, dress for all-weather walking, and stay hydrated.

Participants checked off food choices and recorded the number of steps taken each day on "Tips & Tasks" sheets. These take-home sheets briefly review the week's nutrition and physical activity mini-talks. The step goal was personalized to each participant's ability. A new goal with a modest 10% increase was suggested if the participant had reached the previous week's goal. Otherwise, the same goal continued. Sites were encouraged to offer group walking sessions.

Sample

The National Resource Center on Nutrition, Physical Activity and Aging, with support from the Administration on Aging, posted an announcement on the center's Web site, the US Administration on Aging's site, and the center's 5 Aging Network listservs. State Unit on Aging nutritionists and administrators were asked to distribute the announcement to area agencies and local providers in their state. The announcement encouraged both large and small OAA Nutrition Program sites, especially those serving non-White populations, to apply to take part in the intervention study.

From the 106 applications, a multidisciplinary panel selected 10 applicants according to several criteria: program description, no existing physical activity program at the location, ability to recruit 50 to 100 participants, and capacity to collect and electronically submit data. Program size, location, and clientele also entered into selection decisions. Grants of $10 000 were awarded to the 10 programs, which were based in congregate dining centers, neighborhood recreation centers, and housing complexes in urban inner-city, suburban, and rural locations and a Native American reservation (Table 1).

A total of 999 older volunteer participants enrolled (Table 1). Sites screened potential participants using the EBMM Guidebook screening questionnaire. If 1 or more questions were answered affirmatively, participants were encouraged to obtain medical approval using the guidebook's physician approval form. Inclusion criteria were as follows: (1) 60 years or older (50 years or older at the Native American site), (2) ability to walk with or without assistive devices, and (3) completion of a consent form. OAA regulations (45 CFR 1326.3) allow tribes to define age eligibility

TABLE 1—Eat Better & Move More Program Enrollees, by Project Site: 2005

Site (Location)	Total Enrollees, No. (%)[a]	Completers, No. (%)[b]	Noncompleters, No. (%)[b]
Active Aging Inc (Meadville, Pa)	170 (17)	121 (71)	49 (29)
Alameda County Area Agency on Aging (Oakland, Calif)	138 (14)	64 (46)	74 (54)
Citizen Potawatomi Nation (Shawnee, Okla)	39 (4)	22 (56)	17 (44)
Detroit Area Agency on Aging (Detroit, Mich)	141 (14)	68 (48)	73 (52)
East St. Louis Township Senior Citizens Activity Center (East St. Louis, Ill)	66 (7)	56 (85)	10 (15)
Hillsborough County Board of Commissioners (Tampa, Fla)	82 (8)	68 (83)	14 (17)
Kit Clark Senior Services, Federated Neighborhood Houses (Dorchester, Mass)	28 (3)	18 (64)	10 (36)
Senior Services of Snohomish County (Mukilteo, Wash)	74 (7)	26 (35)	48 (65)
Southeastern Wisconsin Area Agency on Aging (Brookfield, Wis)	46 (5)	24 (52)	22 (48)
Valley Program for Aging Services Inc (Waynesboro, Va)	215 (22)	153 (71)	62 (29)
Total	999 (100)	620 (62)	379 (38)

Note. Rates of program completion differed significantly ($P < .001$) by study site, ranging from 35% to 85%.
[a]Percentage of all enrollees.
[b]Percentage of enrollees by site.

for Nutrition Program services; in most instances, the age is 50 years. Of the 45 Native Americans in the sample, only 5 (0.5%) were younger than 60 years. Discretion was given to site staff regarding exclusion of those with cognition problems.

Measures

The enrollment form included questions on demographic characteristics, health conditions, use of assistive devices, and access to or use of exercise programs. Data on functional ability and Nutrition Screening Initiative Checklist[8] (a 10-item nutritional status screening tool including questions on illnesses and diseases, appetite, tooth loss or mouth pain, economic hardship, involuntary weight loss or gain, and functional limitations) scores were obtained from participant records when possible. The nutrition and health questionnaire was adapted from the Performance Outcomes Measures Project Congregate Meals Survey[9] (an ongoing federally required performance measurement of OAA programs).

The physical activity questionnaire included the Modified Baecke Questionnaire for Older Adults[10] (which assesses household and leisure activities). Scores on the "Timed Up and Go" test,[11,12] which quantifies functional mobility and has been shown to be reliably correlated with risk of falling, were used in evaluating all participants. (All forms and questionnaires are downloadable at http://nutritionandaging.fiu.edu. Contact information for the 10 sites is available at http://nutritionandaging.fiu.edu/You_Can/Mini_Grantees.asp. For assistance in implementing the program, contact the National Resource Center on Nutrition, Physical Activity and Aging at nutritionandaging@fiu.edu.)

The nutrition and physical activity questionnaires each included a "stage-of-change" question.[13] As a means of keeping questionnaire length reasonable, only calcium-rich food intake was assessed with such a question. To indicate their current stage, participants selected from 5 statements reflecting each stage of change: precontemplation ("I do not eat 2–3 servings of milk, cheese, yogurt, and calcium-rich soy products per day, and I do not intend to begin eating 2–3 servings of milk, cheese, yogurt, and calcium-rich soy products per day in the next 6 months"), contemplation ("I do not eat . . ., but I intend to begin eating . . . in the next 6 months"), preparation ("I do not eat . . ., but I intend to begin eating . . . in the next 30 days"), action ("I have been eating . . ., but for less than 6 months"), and maintenance ("I have been eating . . . for more than 6 months"). The phrase "doing regular physical activity" was substituted in the exercise stage-of-change question.

Participants brought their "Tips & Tasks" sheet logs from the previous week to each weekly session. One-button counters (Accusplit X, ACCUSPLIT, San Jose, Calif) were used to calculate step-counting data.

Statistical Analysis

We used the χ^2 test and t test, as appropriate, to assess differences between participants who completed the program and those who did not. We conducted additional analyses focusing on those who completed the program. As a means of assessing preintervention-to-postintervention differences, we used the paired-samples t test, Wilcoxon signed rank test (z test), and McNemar tests depending on the variable analyzed. For example, we analyzed preintervention-to-postintervention changes in Timed Up and Go scores, number of blocks walked, and weekly number of steps taken using the t test.

We analyzed ordinal variables (e.g., changes in numbers of servings of fruits and vegetables consumed) using the nonparametric Wilcoxon signed rank test. In the case of dichotomous variables, we used the McNemar tests. For all tests, SPSS for Windows (SPSS Inc, Chicago, Ill) was used in determining significance ($P<.05$) of results.

RESULTS

Among the enrollees, 620 (62%) had both preintervention and postintervention data on nutrition, physical activity, or both ("completers"). Rates of program completion differed significantly ($P<.001$) according to study site, ranging from 35% to 85% (Table 1). The mean age of completers was 74.6 years (SD=7.5; Table 2). The oldest was 101; 5 were in their 90s, and 162 were in their 80s. Eighty-two percent were women, and 41% were members of racial/ethnic minority groups. Eleven percent had an 8th-grade education or less; another 45% had completed 1 to 4 years of high school. Most lived with family members (50%) or their spouse (38%).

Completers had significantly fewer health conditions ($P=.022$) than did noncompleters, and fewer (15% vs 30%) were at high nutrition risk ($P<.001$; Table 2). Also, fewer completers (12% vs 23%) were at or below the poverty level ($P=.004$); however, more than half of all participants chose not to answer the income question, and most (80%–90%) Nutrition Program enrollees are at or near the poverty level.[3] Fewer completers than noncompleters smoked ($P=.003$), but only 6% of participants overall were smokers. Otherwise, completers and noncompleters were similar (Table 2).

Completers' Nutrition Outcomes

There was significant movement of participants through nutrition stages of change. At preintervention, 59% of the participants were at the maintenance stage, reporting that they had been eating 2 or 3 servings of calcium-rich foods daily for more than 6 months. Of the 41% not at the maintenance stage at preintervention, 73% made a significant advance of 1 or more stages toward maintenance, including 47% who advanced 2 or more stages ($P<.001$).

Changes in daily food intakes were as follows. Thirty-one percent of participants increased the number of servings of fruit they consumed by 1 or more servings, whereas only 18% decreased their consumption by 1 or more servings; 37% increased and 13% decreased their vegetable consumption by 1 or more servings; 33% increased and 16% decreased their fiber consumption by 1 or more servings; and 42% increased and 14% decreased their consumption of calcium-rich foods by 1 or more servings (all Ps$<.001$; Table 3). Thirty-one percent of participants increased their fluid intake by 1 to 3 glasses, whereas 18% decreased their intake by the same amount ($P<.001$).

Completers' Physical Activity Outcomes

At preintervention, 58% of participants were at the maintenance stage in terms of regular physical activity. Of the 42% who were not at this stage, 75% made a significant advance of 1 or more stages toward

TABLE 2—Demographic Characteristics of Individuals Who Completed and Did Not Complete the Eat Better & Move More Program: 2005

Sample Characteristics	Completers		Noncompleters	
	No.[a]	Mean (SD, Range) or %	No.[a]	Mean (SD, Range) or %
Age, y (n = 823)	596	74.6 (7.5, 53–101)	227	73.6 (7.6, 56–95)
No. of health conditions* (n = 852)	615	2.1 (1.9, 0–11)	237	2.4 (2.2, 0–15)
Uses assistive devices (n = 852)	615	0.4 (0.8, 0–6)	237	0.4 (1.0, 0–5)
Gender (n = 795)				
Man	102	18	49	23
Women	478	82	166	77
Ethnicity (n = 830)				
White	352	59	119	52
African American	149	25	56	24
Hispanic/Latino	24	4	20	9
Native American	34	6	11	5
Asian/Pacific Islander	42	7	23	10
Educational level (n = 822)				
1st–8th grade	68	11	42	19
9th–12th grade	271	45	100	45
Some college	165	28	50	22
Bachelor's degree	44	7	12	5
Graduate school	51	9	19	9
Living arrangements (n = 837)				
Lives with spouse	229	38	89	39
Lives with family members	308	50	111	48
Lives alone	59	10	26	11
Other	11	2	4	2
Lives at or below poverty level** (n = 482)				
Yes	43	12	27	23
No	322	88	90	77
Smokes*** (n = 838)				
Yes	28	5	24	10
No	580	95	206	90
Nutrition risk score† (n = 533)				
Low (0–2)	205	51	44	33
Moderate (3–5)	137	34	48	36
High (≥6)	59	15	40	30
Activities of daily living (n = 760)				
0	529	92	164	90
1–6	49	8	18	10
Instrumental activities of daily living (n = 764)				
0	494	85	143	78
1–9	86	15	41	22
Exercise programs in vicinity (n = 679)				
Yes	381	77	135	74
No	115	23	48	26
Safe places to walk (n = 810)				
Yes	521	88	195	90
No	72	12	22	10
Currently walk in available areas (n = 768)				
Yes	401	71	139	69
No	165	29	63	31

[a]Sample sizes varied as a result of participant nondisclosure.
*$P = .022$ (independent samples t test); **$P = .004$ (χ^2 test); ***$P = .003$ (χ^2 test); †$P < .001$ (χ^2 test).

maintenance, including 38% who advanced 2 or more stages. During week 2, participants averaged 3110 steps per day (Table 4). By Week 11, the number of steps per day had increased significantly to 4183 (an increase of 35%; $P < .001$).

At preintervention, participants reported that they averaged 10 blocks walked and 4.6 flights of stairs climbed daily. At postintervention, number of blocks walked per day had increased significantly to 14.5 (an increase of 45%), and flights of stairs climbed had increased to 5.7 daily (an increase of 24%; Table 4). Number of days walked per week had increased significantly from 5.7 to 6.2 (an increase of 9%).

Timed Up and Go scores, measured by trained program staff, improved significantly from 11.7 seconds to 10.6 seconds (Table 4). The norm is 7 to 10 seconds, and individuals requiring more than 10 seconds are considered to have limited physical mobility and to be at increased risk of falling; those requiring more than 20 seconds are considered to be at high risk of falling. A level of improvement such as that observed here can be clinically significant in an at-risk population on the threshold of fall risk. Completers reported a significantly higher exertion level at postintervention (5.4) than at preintervention (4.9) on the modified 1 (none) to 9 (very, very strong) Borg scale (Table 4).

At preintervention, 6% of the participants perceived their health as excellent. Of the 94% of participants not reporting excellent health, 24% made a significant advance of 1 or more categories toward excellent, including 3% who advanced 2 or more categories ($P < .008$).

Finally, almost all of the participants (99%) indicated that they would recommend the program to others. Ninety-three percent reported that it helped them "eat better" and 90% reported that it helped them "move more."

DISCUSSION

A limitation of this study was that completion rates differed significantly according to site. Influential factors may have included differences in staff and facilities.[14] However, completion rates did not differ according to

TABLE 3—Percentage Changes in Numbers of Daily Servings Consumed From Preintervention to Postintervention, by Food Category: Participants Who Completed the Eat Better & Move More Program, 2005

Category and No. of Servings Preintervention	Increased 2 or More, %	Increased 1, %	No Change, %	Decreased 1, %	Decreased 2 or More, %
Fruit† (n = 590)					
0	1.4	1.9	0.2	. . .	. . .
1	2.2	15.6	10.5	0.8	. . .
2	. . .	9.5	23.1	5.4	0.0
3	. . .	. . .	17.8	10.5	1.2
Total	3.6	27.0	51.6	16.7	1.2
Vegetables† (n = 512)					
0	1.5	1.7	0.0	. . .	. . .
1	3.4	14.8	8.1	0.2	. . .
2	. . .	15.3	24.4	4.6	0.2
3	. . .	. . .	17.5	7.0	1.2
Total	4.9	31.8	50.0	11.8	1.4
Fiber† (n = 544)					
0	1.7	1.7	0.2	. . .	. . .
1	6.1	10.1	9.9	0.0	. . .
2	. . .	13.4	23.0	7.4	0.2
3	. . .	. . .	17.6	7.2	1.7
Total	7.8	25.2	50.7	14.6	1.9
Calcium† (n = 586)					
0	2.3	5.1	1.4	. . .	. . .
1	3.4	15.5	13.1	0.7	. . .
2	. . .	15.4	18.3	5.8	0.2
3	. . .	. . .	11.8	5.8	1.2
Total	5.7	36.0	44.6	12.3	1.4
Water† (n = 541)					
0	1.1	0.0	0.0	. . .	. . .
1–2	1.0	3.5	2.0	0.2	. . .
3–4	1.8	12.4	14.0	1.1	0.0
5–6	. . .	11.5	19.4	7.4	1.0
≥7	. . .	. . .	15.0	6.7	2.1
Total	3.9	27.4	50.4	15.4	3.1

Note. . . . = not applicable.
†$P < .001$ (change from preintervention to postintervention).

ethnicity, even though the samples at some sites were composed primarily of individuals from a single ethnic group. Population diversity was emphasized in the site selection process.

The lowest participant completion rate (35%) occurred at a high-rise housing site, the site whose participants had the highest mean nutrition risk score. Older adults residing in subsidized high-rise apartments often have more unmet needs than those living in traditional community housing.[15] Despite these differences among sites, there is little reason to believe that they biased participation or outcomes. Encouragingly, EBMM outcomes were positive at all 10 sites, each of which, in accordance with the selection criteria, had no physical activity programming.

All of the participants were self-selected volunteers; there were no control groups in this demonstration project. There was concern that OAA Nutrition Program participants randomized into control groups would be upset and might no longer opt to receive services, a consequence detrimental to individuals as well as local sites. In a pilot study, a comparison group that received step counters but no other intervention increased (albeit not significantly) the number of steps they took per day.

The EBMM Guidebook and this demonstration project recognized the burden that applied research places on community agencies with limited funding and staffing, especially those generally unaccustomed to collecting data. Because this project focused on documenting outcomes, we did not collect implementation cost data. As a result of the extensive and time-consuming data collection process associated with the project, the implementation costs incurred at the 10 study sites are not representative of actual program costs. Facilitators' salaries were the primary expenditures according to the sites' final budget reports, and included in these salaries was considerable time devoted to collecting data. Without such substantial data collection, the cost of implementing the program would probably be low. Because it yielded significant outcomes at a variety of sites involving diverse populations, EBMM is cost effective.

With respect to age, gender, health conditions, nutrition risk scores, and ability to engage in activities of daily living and instrumental activities of daily living, participants were reasonably representative of older Americans. Age and gender distributions reflected those of OAA Nutrition Program participants. Nutrition and physical activity outcomes may have been attributable to EBMM mini-talks, discussions, "Tips & Tasks" handouts, walking sessions, step counters, or the combination of nutrition and physical activity as an integrated intervention. Also, the significant increase in number of steps walked may have promoted improved dietary intakes.[16]

Successful nutrition education interventions have common characteristics.[17] They limit their intended messages, reinforce and personalize these messages, and provide hands-on activities and access to health

TABLE 4—Preintervention to Postintervention Changes in Mean Physical Activity Indicators: Participants Who Completed the Eat Better & Move More Program, 2005

Physical Activity Indicator	No.	Preintervention Mean (SD)	Postintervention Mean (SD)	P[a]
Steps walked	320	3110 (2448)	4183 (3257)	<.001
Blocks walked	390	10.0 (12.3)	14.5 (16.2)	<.001
Flights of stairs climbed	467	4.6 (9.0)	5.7 (9.0)	.021
Days walked per week	320	5.7 (1.4)	6.2 (1.4)	.008
Timed Up and Go score, s[b]	449	11.7 (5.3)	10.6 (4.3)	<.001
Exertion level[c]	475	4.9 (1.4)	5.4 (1.2)	<.001

[a]Dependent samples *t* tests.
[b]Measured by trained program staff; all other data self-reported.
[c]Degree of effort expended "when exercising in your usual fashion" (1 = none, 9 = very, very strong).

professionals. Each of the 4 EBMM nutrition messages was introduced during a particular week and reinforced the next week. "Tips & Tasks" sheets encouraged individuals to attain personal goals. Check boxes served as visual reminders of daily goals. Short lists of healthful options within a featured food message enabled participants to personalize choices to improve their diets. Weekly mini-sessions included interactive activities based on actual food items, food labels, and program meals. Sessions were led by registered dietitians at 8 of the 10 sites; a registered nurse led another.

Seventy-seven percent of completers indicated that they had access to exercise programs, and most (88%) reported having a safe place to walk. More than 70% reported walking regularly in their community (Table 2). This finding is contrary to assumptions that older adults who reside in urban areas have no place to walk because of safety issues related to crime or uneven sidewalks and that paved roads are not available to those who live in rural areas and other surfaces are too uneven to use. The personalized step goal allowed individuals to progress more slowly if they were less active and more rapidly if they were already more active. Such self-pacing probably improved outcomes, facilitated self-efficacy, and encouraged adherence.

Most of the participants increased their physical activity levels. Evidence suggests that even modest increases in physical activity can lead to improvements in health, functioning, and quality of life.[18,19] Even activity of insufficient intensity to improve fitness has substantial health benefits related to increasing accumulated daily energy expenditures and maintaining muscular strength.[18] The surgeon general's 1996 report on physical activity and health recommended that all Americans engage in at least 30 minutes of activity most days of the week.[20] The Behavioral Risk Factor Surveillance System shows that walking is the most frequently reported regular physical activity and that increasing frequency of walking is an effective strategy to facilitate adherence to recommendations.[21]

Research has shown that healthy older adults average 6000 to 8500 steps per day and that older adults with disabilities and chronic diseases average 3500 to 5500 steps.[22] A universal goal in terms of number of steps taken per day is considered inappropriate because it can lead to failure and attrition.[23] Thus, step goals can be low and still result in 30 minutes of moderate physical activity on most days of the week. In a study of sedentary women, those who reported a low number of steps taken at baseline were less likely to reach the goal of 10 000 steps a day than those who reported a higher number of steps at baseline.[24] This finding supports targeting goals toward individuals' physical activity levels, as was done in EBMM.

The EBMM intervention significantly improved nutrition and physical activity behaviors among the 620 individuals who completed the program, who were primarily female and were from ethnically/racially diverse backgrounds. The volunteer nature of the study may have influenced participants' readiness to make changes. Approximately 75% of participants who were not at the maintenance stage at preintervention progressed 1 or more stages with respect to nutrition and physical activity. Daily intakes of fruits, vegetables, fiber, calcium-rich foods, and fluids increased significantly. Number of steps taken per day increased by 35%. Number of blocks walked increased, as did flights of stairs climbed and number of days of walking per week. Risk of falling decreased. Approximately 25% of those who were not in excellent health at preintervention improved their self-rated health, an important outcome given that self-rated health may predict functional abilities and mortality among community-dwelling populations.[25]

Overall, EBMM was even more successful than anticipated, in part because it is easy to use, inexpensive to implement, and tailored to meet the needs of older adults while being geared simultaneously toward changing nutrition and physical activity behaviors. Similar to other activity-promoting programs,[26,27] this project succeeded because of the enthusiasm of local staff, especially site directors and managers, and the involvement of health professionals and facilitators (registered dietitians and a registered nurse) who were culturally sensitive and, in many cases, able to answer questions beyond the intervention's scope. Another important factor was the coordination of this demonstration project by the university-based National Resource Center on Nutrition, Physical Activity and Aging.

As mentioned, feedback regarding EBMM was overwhelmingly positive, with 99% of participants indicating that they would recommend the program to others. One of the participants noted: "Right from day one, I knew this program was going to be a winner. Every session was full of good information on eating and exercise." According to another: "I was encouraged and learned that I needed to walk more. It also helped me understand the benefits of eating a variety of foods." In the words of still another: "In my opinion, Eat Better & Move More was excellent. This was a terrific opportunity to learn more about being healthy by combining good nutrition and exercise."

The results of this study have a number of implications for practitioners, service providers, and researchers. Because poor diets and inactivity, which are major obstacles to

successful aging, are relatively common among older adults,[28] integrated nutrition and physical activity programs such as EBMM should be offered more widely as a part of community programs. Each of these components has separately been shown to be effective at local OAA Nutrition Program sites,[29–31] and several studies integrating nutrition and physical activity have reported significant outcomes.[32–35]

On the basis of findings indicating that nutrition education programs are enhanced by integrating physical activity and exercise under the guidance of trained instructors and registered dietitians, Wunderlich and McKinnon specifically recommended that sufficient federal funds be provided for programs that produce long-term health benefits for older adults.[36] Another study on enriched foods and exercise[37] also emphasized the need for additional investigations to confirm that integrated nutrition and fitness programs are more effective than either alone. Our study provides such confirmation, and our results are not surprising given the interrelationships among energy (calories) in food, energy (calories) expended in physical activity, diet quality and quantity, and health.

The 2005 Dietary Guidelines for Americans[38] single out people older than 50 years as one of the "specific population groups" that need special consideration and provide additional nutrition and physical activity recommendations for them. The content of the EBMM Guidebook conforms to these evidence-based federal recommendations. The National Resource Center on Nutrition, Physical Activity and Aging has distributed 1000 guidebooks and 17 500 step counters to aging network programs. As a result of requests for additional modules, a second EBMM Guidebook will be available in 2007.

Misinformation and confusion about nutrition and physical activity abound. Because older adults may need more encouragement than other groups to eat healthfully and be more active, higher levels of professional expertise are needed at local OAA Nutrition Program sites. We encourage dietitians, nutritionists, and exercise specialists to use the EBMM Guidebook and work with their health and social service colleagues to encourage health-promoting behaviors.

Medicaid reform[39] trends show states moving away from their institutional bias toward community-based, consumer-directed services. Given that integrated, evidence-based programs such as EBMM promote health, improve quality of life, and help older adults maintain their independence, these programs deserve the support of policymakers, aging and public health networks, and other public and private agencies. Local providers should offer more such community-based programs with the goal of enabling older Americans to take simple steps toward successful aging. ■

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Contributors

N.S. Wellman originated the study and supervised its implementation. B. Kamp coordinated the study, provided technical assistance to the 10 community sites, and managed the data collection. N.J. Kirk-Sanchez led all physical activity aspects, including identification and interpretation of evaluation instruments. P.M. Johnson completed the data analysis. All of the authors interpreted findings and reviewed drafts of the article.

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Human Participant Protection

This study was approved by the institutional review board of Florida International University. Participants provided written informed consent.

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COMMONWEALTH of VIRGINIA
Department for the Aging
Julie Christopher, Commissioner

MEMORANDUM

TO: Executive Directors
Area Agencies on Aging

AND: Nutrition Directors

FROM: Elaine S. Smith, MS, RD
Program Coordinator

DATE: March 6, 2007

SUBJECT: Resources for National Nutrition Month®—March 2007

National Nutrition Month® is a nutrition education and information campaign sponsored annually by the American Dietetic Association. The campaign is designed to focus attention on the importance of making informed food choices and developing sound eating and physical activity habits.

The theme this year is *100% Fad Free*. Key nutrition messages are found in the following guide, which also contains several food and nutrition related activities for seniors. These activities could be conducted at any time but no more appropriate time than in March for National Nutrition Month®. There are also instructions and helps for several nutrition related games.

I hope these materials will be useful to you in your efforts to promote healthy eating and physical activity. Please let me know at 804-662-9319 or Elaine.Smith@vda.virginia.gov if you use any of these materials and how they were received by the seniors.

1610 Forest Avenue, Suite 100, Richmond, Virginia 23229
Toll-Free: 1-800-552-3402 (Voice/TTY) · Phone: 804-662-9333 · Fax: 804-662-9354
E-mail: aging@vda.virginia.gov · Web Site: www.vda.virginia.gov

NATIONAL NUTRITION MONTH® 2007: 100% Fad Free!
Leader's Guide

Learning Objectives

Participants will be able to:

Understand that healthful eating includes tasty and delicious foods.

Name the food groups of the MyPyramid food guide.

Give an example of a menu that includes foods from all of the food groups.

Share information about unusual or favorite foods with other participants.

Understand that healthful eating is fad free.

NNM Key Messages for March 2007

Develop an eating plan for lifelong health. Too often people adopt the latest food fad rather than focusing on overall health. Get back to basics and use the Dietary Guidelines 2005 and *MyPyramid* as your guide to healthy eating.

Choose foods sensibly by looking at the big picture. A single food or meal doesn't make or break a healthful diet. When consumed in moderation in the appropriate portion size, all foods can fit into a healthful diet.

Learn how to spot a food fad. Unreasonable or exaggerated claims that eating (or not eating) specific foods, nutrient supplements or combinations of foods may cure disease or offer quick weight loss are key features of fad diets.

Find your balance between food and physical activity. Regular physical activity is important for your overall health and fitness plus it helps control body weight, promotes a feeling of well-being and reduces the risk of chronic diseases.

Food and nutrition misinformation can have harmful effects on your health and well-being, as well as your wallet. Registered dietitians are uniquely qualified to communicate current and emerging science-based nutrition information and are an instrumental part of developing a diet plan that is unique to your particular needs.

Suggested Activities — Traditional and New

Activity 1

1. Ask the participants to tell the group what their favorite foods are and why.
2. Ask them to share a story about eating their favorite food with their family or friends.
3. Have participants share a story about a food or special recipe that is unique to their family's special celebrations.

Activity 2

Plan a menu for a day!

Split the group into 5 teams. Each team is responsible for planning breakfast, lunch, after-school snack, dinner or bedtime snack. They plan a meal or snack using MyPyramid as a

resource. Then, each team tells the leader their meal or snack, and she writes it on the board.

Together the group decides if they are getting enough servings from each group in the MyPyramid food guide. If not, the group can think of ways to get what they need. See the chart below and also go online to www.mypyramid.gov/ to determine the correct serving amounts for seniors. Participants should be encouraged to be physically active as well.

Grains	**Vegetables**	**Fruits**	**Milk**	**Meat & Beans**
Start smart with breakfast. Look for whole grain cereals. Make sure the first word is "whole" (like "whole wheat").	Color your plate with all kinds of great-tasting veggies: try broccoli, spinach, carrots and sweet potatoes.	Fruits are nature's treats — sweet and delicious. Go easy on juice and make sure it's 100%.	Move to the milk group to get your calcium. Calcium builds strong bones.	Eat lean or lowfat meat, chicken, turkey, and fish. Remember nuts, seeds, peas and beans, too.
For a 2,000 calorie diet, you need the amount below.	For a 2,000 calorie diet, you need the amount below.	For a 2,000 calorie diet, you need the amount below.	For a 2,000 calorie diet, you need the amount below.	For a 2,000 calorie diet, you need the amount below.
Eat 6 oz. every day; at least half should be whole.	Eat 2 ½ cups every day.	Eat 2 cups every day.	Get 3 cups every day.	Eat 5 ½ oz. every day.

Activity 3

Working on the Web.

If your seniors have computer and Internet access, the MyPyramid website is well worth browsing. Following are some tips to make the most of their time on the site.

Assign participants to go to www.mypyramid.gov/, enter their age, sex and physical activity level, then print their MyPyramid plan.

Handout copies of the MyPyramid Worksheet. Ask participants to fill out the worksheet with the foods they ate (and drank) for the previous day.

Ask the participants to compare this with their MyPyramid plan. How well do their food choices match up to the MyPyramid plan recommendations?

Activity 4

"What is a fad diet?"

Ask participants to:

- Make a list of some fads they've heard about and participated in. (poodle skirts, platform shoes, go-go boots, bellbottom pants, tie-dye shirts, pet rocks, bouffant hair)
- Bring in at least one example of a fad item. It can be the real thing or a picture from a magazine or Web page.

Discussion starters; look at the fad items participants have collected.

- When were these items popular? What have you heard adults say about them?
- Describe a fad you've participated in. Why did you want to be part of the fad?
- Have you heard people speak about "fad diets"? What would be involved with "fad diets"? (Eating only certain foods, like grapefruit; perhaps avoiding certain food groups.)
- What might be some problems with "fad diets"? (Missing certain foods or even whole food groups, eating the same food or foods every day, etc.) Review MyPyramid food guide emphasizing the important of including foods from <u>every</u> food group and choosing a variety of foods in the appropriate portion sizes.

Activity 5

Investigating and Researching New and Exotic Foods

- Ask participants to work in groups or individually to select one or more of the following foods (or others you may have in mind).
- Assign participants to find as much information as they can about the food. For example, the origin or history, where and how it grows, where it fits into the Food Pyramid, and how it is prepared. If possible, bring the foods to the meal site for participants to see, feel, and taste.

Broccoli	Lychee	Couscous	Kiwi
Kohlrabi	Plantain	Pomegranate	Ugli fruit
Bulgar	Jicama	Kumquat	Bok choy
Star fruit	Basmati rice	Tamarind	Cherimoya

Activity 6

"Fearless About Food"

- Assemble a variety of 20-30 unusual fruits and vegetables. Suggestions: blood oranges, bok choy, pomelo, tamarind, etc.
- Formulate questions about these foods, such as "Where is pomelo grown?" "What are some good ways to use bok choy?"
- Choose teams.

Moderator asks a question, and whoever calls out the answer first gets a point for their team.

When all questions have been asked, distribute to the participants samples of the foods on small plates. On a given signal, they begin eating. Prizes can be given to everyone who tastes all the foods. (Go to www.eatright.org/nnm and see the catalog for NNM stickers, pencils, etc. which may be used as prizes.)

Activity Guides for Other Games

"Jeopardy"

This game consists of a layout with food group questions and answers, as well as instructions for play.

"Fill in the Blanks"

A take-off on the old "Hangman" and "Wheel of Fortune", the game includes suggested food-related titles and phrases as well as instructions for play.

"Test Your Memory"

Seniors may remember the television show "Concentration". This game offers participants an opportunity to recognize different foods and see if they remember where the matching picture is placed. The game may be adapted for use by participants of different abilities, depending on the food pictures you provide.

"Food Group Password"

This is a fun game that permits clues of more than one word — it even allows gesturing and movement to help the contestant get the word. A good team game.

FOOD GROUP "JEOPARDY"

FRUITS	VEGETABLES	MILK	GRAINS	MEAT & BEANS
It keeps the doctor away.	It comes in ears.	Rocky Road and Mint Chocolate Chip	Popular in China, we have it in brown or white.	This is the biggest part of Thanksgiving dinner.
It's yellow, and a lady named Chiquita made it famous.	It's dark green, very good for you, and breaks apart into something like little flowers.	Pizza would be dull without it.	Spaghetti is one type of this product.	This is also a slang word for "disagreement."
It's also a color.	They are small, round, green and come in pods.	This is meant for the very "cultured."	Popular in Mexico, add a favorite filling to it.	You can have this scrambled, fried or poached.
A homonym for this word means "two."	They have "eyes."	Molars, wisdom and canines.	Saltines and oyster are two kinds.	Cashews and almonds are two kinds.
If someone calls you this, they think you're nice.	Some say this is really a fruit. Most of us think of this red delight as a veggie.	Use it on toast or mashed potatoes.	**DAILY DOUBLE**	Salmon, trout and herring are three kinds.
It's green, fuzzy and has four letters.	We bake this in pies at Thanksgiving.	It's udderly ridiculous to have cereal without this.	Breakfast product, sometimes with a prize in the box.	Placed in a bun, these are popular at baseball games.
It's red, white and green with seeds of two colors.	Tofu is made from these.	**DAILY DOUBLE**	Made with an "iron" and drizzled with syrup.	"The Colonel" sells this in buckets.

DAILY DOUBLE – Milk **Name one nutrient provided by the MILK group.**

DAILY DOUBLE – Grains **True or False: Foods labeled with the words "multi-grain," "stone-ground," "100% wheat," "cracked wheat," "seven-grain," or "bran" are *ALWAYS* whole-grain products.**

FOOD GROUP "JEOPARDY"

FRUITS	VEGETABLES	MILK	GRAINS	MEAT & BEANS
APPLE .	CORN	ICE CREAM	RICE	TURKEY
BANANA	BROCCOLI	CHEESE	PASTA	BEEF
ORANGE	PEAS	YOGURT	TORTILLA or TACO	EGGS
PEAR	POTATO "eyes"	TEETH	CRACKERS	NUTS
PEACH	TOMATO	BUTTER, MARGARINE	**DAILY DOUBLE**	FISH
KIWI	PUMPKIN	MILK	CEREAL	HOT DOGS
WATERMELON	SOYBEANS	**DAILY DOUBLE**	WAFFLE	CHICKEN

DAILY DOUBLE – MILK **Name one nutrient provided by the MILK group (Calcium, potassium, Vitamin D and protein.)**

DAILY DOUBLE – GRAINS **The answer is "false." Always check the food label.**

FOOD GROUP "JEOPARDY"

PREPARATION

1. This game may be played with individual contestants or with teams (for more discussion and possibly a more enthusiastic effect). You may also create your own food questions, of course.

2. You may take this file and create a computer display on the chalkboard, or print it out on a transparency to use with your projector. If you wish, each square may be individually enlarged, cut out and pasted on the board. (Be sure to delete the "Daily Double" questions and answers from the bottom of the grid. These are for your use only.)

3. Cover each answer under each category with a piece of paper labeled $100, $200, $300, etc. (See attached which have been prepared for you.) As contestants choose, remove the paper to see the answer for which they need to guess the question.

4. See also "Simpler Procedure" below.

PLAY

1. First contestant chooses the food group from which she would like to hear an answer. For example, MILK.

2. Moderator removes the cover; for example, "Rocky Road and Chocolate Chip"

3. Contestant states: "What is ice cream?" That response is correct. Contestant gets "the money" indicated for that question.

4. Proceed as above with next contestant. A contestant may choose whatever square she wishes. For example, if she is the first contestant and wants to go directly to a $700 square, that is permitted.

5. If any contestant responds incorrectly, give the next contestant the opportunity to respond and receive the money.

6. When someone selects the "Daily Double," he may wager some or all of his money. If he responds correctly, he receives double the amount wagered. If he is incorrect, he loses the money wagered.

7. Play continues until all squares are uncovered. Contestant or team with the most money wins.

SIMPLER PROCEDURE

1. Write the five food group names horizontally across the board: FRUITS, VEGETABLES, MILK, GRAINS, MEAT & BEANS.
2. First contestant chooses the food group from which she would like to hear an answer. For example, MILK.
3. Moderator states an answer from the attached grid; for example: "Rocky Road and Chocolate Chip."

4. Contestant states: "What is ice cream?" That response is correct. Contestant gets a point.
5. Proceed to next player as above. Play continues until all questions have been answered.

MONETARY AMOUNTS – TO BE TAPED OVER THE "ANSWER" SQUARES. THESE MAY BE ENLARGED.

$100	$100	$100	$100	$100
$200	$200	$200	$200	$200
$300	$300	$300	$300	$300
$400	$400	$400	$400	$400
$500	$500	$500	$500	$500
$600	$600	$600	$600	$600
$700	$700	$700	$700	$700

FOOD GROUP "Fill in the Blanks"
(A takeoff on the old "Hangman" game or "Wheel of Fortune")

1. This is a great game to accompany discussion of MyPyramid food groups.

2. Leader will develop several food-related puzzle titles, such as "FRUITS ARE YUMMY." Titles may be more challenging, depending on group's ability.

3. On the chalkboard, write enough blanks to accommodate the letters of the first puzzle – leaving space between the words so that participants can see where one word ends and another begins. A period at the end might be appropriate, too. In "Fruits Are Yummy," the blanks and spaces would be arranged as shown below:

___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ .

4. Divide participants into two teams, and seat team members together.

5. First contestant on Team A suggests a letter – perhaps "S." Leader (or participant who wants to act as host) places the letter in the appropriate spot as shown below:

___ ___ ___ ___ ___ S_ ___ ___ ___ ___ ___ ___ ___ ___ ___.

6. Since Team A was successful in finding a letter in the puzzle, their next contestant gets a turn. Continue until the team calls a letter that is NOT in the puzzle.

7. When a letter is called that is NOT in the puzzle, leader writes that letter in a nearby area of the chalkboard called "Not in Puzzle." Participants should remember not to waste a turn calling one of those letters.

8. When Team A calls a letter not in the puzzle, Team B gets a turn. Continue as shown above.

9. When any team member feels she has enough information to guess the puzzle, she may do that during her turn. If she guesses correctly, her team wins the round. If she is incorrect, the turn goes back to the other team.

10. The next contestant on the other team should be encouraged to call another letter before taking a guess -- it will give them more information on the solution.

11. When a team solves the puzzle, it gets a point. Erase the board, and write the blanks for the next puzzle. Play three rounds, and the team with two solved puzzles is declared the winner. Or play indefinitely – depending on the day's schedule.

Suggested titles – and they need not be complete sentences, depending on group's ability.

- Cherries, berries, watermelon and grapes
- Eat a good breakfast every day.
- Whole grain cereal is good for you.
- Pile your plate with vegetables.
- Milk, cheese, butter and yogurt are dairy products.

…continued

Discussion Variation:
Have each team decide as a group on the letter they want to call during each turn. One member should be the spokesperson, but the letter is agreed on by the group. When one team member has an idea on the solution, discussion will begin about whether it is correct or not.

Include the Parents: "Step Up to Nutrition & Health" Night
Publicize as a major school event, and schedule it for evening.

- Use a portable chalkboard, or have someone prepare a computer-generated game.
- As participants call letters, the computer operator inserts them into the puzzle. This may also be easier to see, as the game can be displayed on a large screen.
- Depending on size of the school, many participants can have an opportunity to play. Each grouproom can play a round – or each grade level. The more children involved, the greater number of parents attending.
- If there are too many children to have everyone play, use some as ushers, refreshment coordinators, coat checkers, etc.

This will be a night for emphasizing the importance of eating for good health. All puzzles will have food-related titles, refreshments will be healthy (oatmeal cookies work, as does unbuttered popcorn!), offer handouts on simple menus, exercise ideas, etc.

The school nurse and physical education leaders should be very involved.

TEST YOUR MEMORY

(Can be adapted to various abilities.)

1. Copy TWO pictures (one identical pair) of as many fruits, vegetables, grains, dairy products, and meats & beans products as you feel appropriate for the ability of the age group. Cut them into 3" or 4" squares.

2. Shuffle these and spread them out -- face down -- on the floor, table, etc.

3. First participant turns over one picture, looks at it, and leaves it turned face up in the original spot. Same participant then turns over another picture, hoping to match the first one.

4. If participant has matched the two, she picks up both and places them beside her. These will be counted later to determine the winner.

5. She repeats her turn until she makes no more matches.

6. If no match is made, remind the participants to note where the two pictures were; participant turns the two pictures face down and leaves them in their original position. Next participant now takes a turn.

7. Emphasize to participants to pay attention to where pictures are turning up. This is a memory game, and we want to see how well they remember!

8. Continue around the circle, each participant taking a turn. Turn ends when a participant makes no matches. Play continues to next participant.

9. Obviously, play becomes easier as fewer pictures are left to match. The last participant to play often gets quite a few pairs. When the final pictures are turned over, have everyone count how many pairs they have.

10. Appropriate prizes would be apples, bananas, etc. Pictures can be reshuffled and replayed several times, with discussion of the healthy foods the participants are seeing.

11. MORE CHALLENGING: Don't use identical pictures. See if the participants can remember that cheese and ice cream are part of the dairy group, and thus a match! (Chicken and hamburger – both meats; bread and crackers – both grains, etc.)

FOOD GROUP "PASSWORD"

Object of the game: Get your team member to say the word. Leader/moderator will provide the food-related words on individual pieces of paper. (See suggested list of words attached.) Leader/moderator will keep score on the chalkboard. Team that scores 10 points first wins.

1. Divide players into two teams, and seat each team together in separate areas of the room – near enough so they can still hear each other.
2. One person on each team will be the contestant, and the other members of his team will take turns giving him clues to the word.
3. Each team gets one turn; play then turns to the other team. Alternate back and forth.
4. Play begins with Team A receiving a piece of paper from the leader with their word – let's say it's BREAD:
   a. First questioner on Team A gives contestant a clue to make him say "bread." Allow participants to use a phrase, gestures, jump around, etc. Possible clue for "bread" might be: "Two slices of this are used for a sandwich." Contestant gets one guess.
   b. If contestant guesses the word, Team A gets a point; play goes to Team B. (Team B gets their own new word from the leader.)
   c. If contestant misses the word, questioner hands the word to next questioner in line – who WAITS until Team's next turn to give a new clue to the contestant.
   d. Play reverts to Team B and proceeds as with Team A. (Team B gets their own new word from the leader.)

5. If Team A scored a point, a new contestant from that team moves into place. The original contestant goes to end of line and becomes a questioner. Wait until next turn to begin new questioning.

6. If Team A did NOT score a point, the second questioner now gets a turn to give a clue for BREAD to the contestant. Proceed as above.

7. Continue alternating between teams until a team scores 10 points. Game may be replayed as time permits.

FRUITS

Apples
Apricots
Avocado
Bananas

Berries:
strawberries
blueberries
raspberries
cherries

Grapefruit
Grapes
Kiwi fruit
Lemons
Limes
Mangoes

Melons:
cantaloupe
honeydew
watermelon

Mixed fruits:
fruit cocktail

Nectarines
Oranges
Peaches
Pears
Papaya
Pineapple
Plums
Prunes
Raisins
Tangerines

100% Fruit juice:
orange
apple
grape
grapefruit

MILK

Milk*
All fluid milk:
fat-free (skim)
low fat (1%)
reduced fat (2%)
whole milk

flavored milks:
chocolate
strawberry

lactose reduced milks
lactose free milks

Milk-based desserts*
Puddings made with milk
ice milk
frozen yogurt
ice cream

Cheese*
Hard natural cheeses:
cheddar
mozzarella
Swiss
parmesan

soft cheeses
ricotta
cottage cheese

processed cheeses
American

Yogurt*
All yogurt
Fat-free
low fat
reduced fat
whole milk yogurt

*Selection Tips

Choose fat-free or low-fat milk, yogurt, and cheese. If you choose milk or yogurt that is not fat-free, or cheese that is not low-fat, the fat in the product counts as part of the discretionary calorie allowance.

OILS

- canola oil
- corn oil
- cottonseed oil
- olive oil
- safflower oil
- soybean oil
- sunflower oil
-

Some oils are used mainly as flavorings, such as walnut oil and sesame oil. A number of foods are naturally high in oils like nuts, olives, some fish and avocados.

MEAT & BEANS

Meats*
Lean cuts of:
beef
ham
lamb
pork
veal

Game meats:
bison
rabbit
venison

Lean ground meats:
beef
pork
lamb

Lean luncheon meats
Organ meats:
liver
giblets

Poultry*
chicken
duck
goose
turkey
ground chicken and turkey

Eggs*
chicken eggs
duck eggs

Dry beans and peas:
black beans
black-eyed peas
chickpeas (garbanzo beans)
falafel
kidney beans
lentils
lima beans (mature)
navy beans
pinto beans
soy beans
split peas
tofu (bean curd made from soy beans)
white beans

bean burgers:
garden burgers
veggie burgers

tempeh
texturized vegetable protein (TVP)

Nuts & seeds*
almonds
cashews
hazelnuts (filberts)
mixed nuts
peanuts
peanut butter
pecans
pistachios
pumpkin seeds
sesame seeds
sunflower seeds
walnuts

Fish*
Finfish such as:
catfish
cod
flounder
haddock
halibut
herring
mackerel
pollock
porgy
salmon
sea bass
snapper
swordfish
trout
tuna

Shellfish such as:
clams
crab
crayfish
lobster
mussels
octopus
oysters
scallops
squid (calamari)
shrimp

Canned fish such as:
anchovies
clams
tuna
sardines

*Selection Tips

Choose lean or low-fat meat and poultry. If higher fat choices are made, such as regular ground beef (75 to 80% lean) or chicken with skin, the fat in the product counts as part of the discretionary calorie allowance. Click here for more details on discretionary calories.

If solid fat is added in cooking, such as frying chicken in shortening or frying eggs in butter or stick margarine, this also counts as part of the discretionary calorie allowance. Click here for more details on discretionary calories.

Select fish rich in omega-3 fatty acids, such as salmon, trout, and herring, more often (See Why is it important to include fish, nuts, and seeds?).

Liver and other organ meats are high in cholesterol. Egg yolks are also high in cholesterol, but egg whites are cholesterol-free.

Processed meats such as ham, sausage, frankfurters, and luncheon or deli meats have added sodium. Check the ingredient and Nutrition Facts label to help limit sodium intake. Fresh chicken, turkey, and pork that have been enhanced with a salt-containing solution also have added sodium. Check the product label for statements such as “self-basting” or “contains up to __% of __”, which mean that a sodium-containing solution has been added to the product.

Sunflower seeds, almonds, and hazelnuts (filberts) are the richest sources of vitamin E in this food group. To help meet vitamin E recommendations, make these your nut and seed choices more often.

VEGETABLES

Dark green vegetables
bok choy
broccoli
collard greens
dark green leafy lettuce
kale
mesclun
mustard greens
romaine lettuce
spinach
turnip greens
watercress

Orange vegetables
acorn squash
butternut squash
carrots
hubbard squash
pumpkin
sweetpotatoes

Dry beans and peas
black beans
black-eyed peas
garbanzo beans (chickpeas)
kidney beans
lentils
lima beans (mature)
navy beans
pinto beans
soy beans
split peas
tofu (bean curd made from soybeans)
white beans

Starchy vegetables
corn
green peas
lima beans (green)
potatoes

Other vegetables
artichokes
asparagus
bean sprouts
beets
Brussels sprouts
cabbage
cauliflower
celery
cucumbers
eggplant
green beans
green or red peppers
iceberg (head) lettuce
mushrooms
okra
onions
parsnips
tomatoes
tomato juice
vegetable juice
turnips
wax beans
zucchini

GRAINS

Whole grains:
brown rice
buckwheat
bulgur (cracked wheat)
oatmeal
popcorn

Ready-to-eat breakfast cereals:
whole wheat cereal flakes
muesli

whole grain barley
whole grain cornmeal
whole rye
whole wheat bread
whole wheat crackers
whole wheat pasta
whole wheat sandwich buns and rolls
whole wheat tortillas
wild rice

Less common whole grains:
amaranth
millet
quinoa
sorghum
triticale

Refined grains:
cornbread*
corn tortillas*
couscous*
crackers*
flour tortillas*
grits
noodles*

*Pasta**
spaghetti
macaroni

pitas*
pretzels

Ready-to-eat breakfast cereals
corn flakes

white bread
white sandwich buns and rolls
white rice.