Reference Guide of Physical Activity Programs for Older Adults: A Resource for Planning Intervention

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Reference Guide of Physical Activity Programs for Older Adults: A Resource for Planning Interventions

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Recommended Citation

Moran SA, Caspersen CJ, Thomas GD, Brown DR and The Diabetes and Aging Work Group (DAWG). Reference Guide of Physical Activity Programs for Older Adults: A Resource for Planning Interventions. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. National Center for Chronic Disease and Health Promotion, Division of Diabetes Translation and Division of Nutrition and Physical Activity, 2007.

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Preface

The Division of Diabetes Translation's (DDT's) mission is to eliminate the preventable burden of diabetes through leadership, research, programs, and polices that translate science into practice.[68] In 2001, staff at DDT wanted to explore the impact of diabetes on aging-related outcomes. We assembled a small panel of experts in aging to explore the diabetes-and-aging issue. This group produced a white paper focused on four areas: surveillance, applied public health research, programs, and policy change and development. From this initial effort, the DDT formed the Diabetes and Aging Work Group (DAWG) to highlight the health issues of older adults with diabetes. In addition to conducting scientific research and communications, the DAWG chose one programmatic focus: preserving physical function in older adults. To further that end, this Reference Guide of Physical Activity Programs for Older Adults: A Resource for Planning Interventions was created as a programmatic tool.

To be of value, members of the DAWG had to include programs in the Reference Guide of Physical Activity Programs for Older Adults: A Resource for Planning Interventions that delivered the types of physical activity (PA) that might benefit older adults with diabetes. The American College of Sports Medicine[2] and the American Diabetes Association[6] have both stressed the importance of PA as a form of therapy for adults with type 2 diabetes. Both organizations recommend that resistance training be included in the regimen.[2,6] This type of activity particularly benefits glycemic control[13] and resists the development of diabetes-hastened disability.[29, 30, 31] Therefore, the DAWG also gathered information on programs that included resistance training. Members of the DAWG emphasized practical program factors that may be of value to those wishing to administer PA programs within their community. PA programs demonstrating efficacy and effectiveness were initially sought. Although many organizations (nongovernmental organizations, federal government agencies, universities, and commercial entities) had offered useful programs, few programs demonstrated efficacy and effectiveness. Therefore, we also included programs that may not yet have been thoroughly researched. In the end, 17 PA programs were identified that could be applied to older adults with diabetes, whose health ranges from "healthy" to "frail." We would like to note, however, that inclusion of the programs in the guide should not be construed as Centers for Disease Control and Prevention's (CDC) endorsement of the programs or of any products that the programs may use.

We believed that this reference guide would be especially useful for the Diabetes Prevention and Control Programs (DPCPs), which exist in all 50 states, U.S. territories, and the District of Columbia. The DPCPs work with many partners to improve access to affordable, high-quality diabetes care and services, increase community capacity to address diabetes, and disseminate diabetes-related health education messages, with priority on reaching high-risk and disproportionately affected populations. Other community program planners dealing with older adult populations, with or without diabetes, can also use this reference guide to select suitable programs.

DDT staff is particularly grateful for the expertise that CDC's Division of Nutrition and Physical Activity (DNPA) supplied for this guide. DNPA contacted groups with which they work in order to gather a more complete list of relevant PA programs. DDT also worked with key persons in a host of organizations who sent detailed program information and later confirmed its accuracy in the guide. Their names appear in this guide's Acknowledgments section. We hope that this guide will help others to promote PA in persons with diabetes, perhaps, even broader groups of older adults.

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Foreword

Diabetes is a prevalent, growing, serious, and costly chronic disease in the United States for which the toll is profound. The consequences of diabetes are particularly severe for older adults. In 2005, about 20.8 million Americans had either diagnosed or undiagnosed diabetes;[21] 15.8% of adults aged 65+ years had diagnosed diabetes, 6.0% had undiagnosed diabetes, and 39.5% had impaired fasting glucose (IFG).[22] Thus, 6 in 10 older adults either had diabetes or were at very high risk for its development. In total, people aged 60+ years developed about 575,000 new cases of diabetes in 2005.[21]

The burden of diagnosed diabetes almost doubled between 1980 and 2002[20] and is expected to continue to grow with the aging U.S. population, the increasing number of people in racial/ethnic groups at greater risk, and the projected growth of the U.S. population.[14] Recent projections indicate that diagnosed diabetes will increase by 198%, from 16.2 million in 2005 to 48.3 million, between 2005 and 2050.[41] For adults aged 65+ years, a 443% increase is projected during this time frame, from 6.3 million to 26.7 million. These numbers translate into 39% and 55% of all cases in the U.S. for the two years, respectively. Thus, these data indicate that in a few decades the majority of people with diabetes in the U.S. will be aged 65+ years.

Diabetes can result in cardiovascular diseases and organ damage, potentially resulting in blindness, kidney failure, and leg/foot/toe amputations.[20] In terms of cost, the national estimate for 2002 was $132 billion, of which adults aged 65+ years accounted for 72%: $47.6 billion in direct medical costs; $27.1 billion for institutional care; $12.8 billion, outpatient care; and $7.8 billion, other expenditures.[5]

Modest weight loss has been shown to effectively delay or prevent type 2 diabetes among older adults with IGT.[24] Physical activity (PA) helped to achieve this and the benefits of lifestyle interventions appeared to improve as age increased in the sample. More important, metformin, the pharmacologic agent most commonly used for diabetes prevention, has not been found to work as well in older adults as in younger people.[24] Hence, PA may be one of the few things that can help to prevent or delay type 2 diabetes among high-risk older adults.

Beyond the effects of PA on type 2 diabetes prevention, adults with diabetes have a 100% to 200% increased risk of disability. In some cases, coronary heart disease and an elevated body mass index (BMI) are the two main factors associated with this increased risk of disability. Also, older adults with diabetes are likely to have lower muscle strength than their peers without diabetes.[48] Fortunately, PA may both prevent and treat disabilities.[32] The American Diabetes Association provides recommendations concerning how much aerobic and resistance training activity one should perform to prevent or treat diabetes.[6] In doing so, it recommends higher intensity and greater frequency of resistance training than does the American College of Sports Medicine.[2] Also, Eves and Plotnikoff[28] found evidence, in limited trials, that use of resistance exercise improves glycemic control/enhances insulin sensitivity, although their review did not include older adults. However, Dunstan[25] found that high-intensity resistance training improved glycemic control in adults aged 60–80 years with type 2 diabetes. Further, Casteneda[19] compared adults aged 55+ years (mean age approximately 66 years) performing progressive resistance training with controls who did not exercise and found that the former had significantly improved glycemic control.

Active living should be a goal for all older adults, even those with uncomplicated diabetes. Beyond the value of resistance training for achieving glycemic control or beneficially influencing risk factors for cardiovascular disease, this type of training may help prevent physical disability

and aid in preserving physical function.[32,67] PA is also linked to the prevention or delay of many chronic diseases, such as cardiovascular disease and colon- and breast cancer.[67] Hence, offering programs to promote PA to older adults, with or without diabetes, may help to prevent or delay many chronic diseases, including type 2 diabetes and its complications. It is our hope that this listing of programs will further achieve this aim.

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Our special thanks go to the following persons for providing and checking the accuracy of program information:

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How to Use This Guide

This reference guide describes multiple programs for promoting physical activity (PA) among older adults in the United States. Aspects of each program are described in four sections of this guide: (1) Program Summary Table, (2) Detailed Program Abstraction Table, (3) Program Descriptions, and (4) Contact Table. The Project Summary Table offers a snapshot of each program, with more detailed information listed in the Detailed Program Abstraction Table. The Program Descriptions are brief narratives about each program, and the Contact Table lists the persons and organizations that created the program.

The Program Summary Table and the Detailed Program Abstraction Table are similar. We will most often refer to the former and indicate additional features found in the latter when certain unique pieces of information not offered in the Program Summary Table are given in the Detailed Program Abstraction Table.

The Program Summary Table provides an outline of the reviewed programs and is divided into seven major sections. The first section, Population Focus, has four components: health status, age, language, and socioeconomic status. Health status encompasses five categories. Initially we sought to include only PA programs developed specifically for older adults with diabetes, but we located only four programs prescribed for persons with diabetes (or prediabetes).[8,35,43,52] We eventually expanded this criterion to include PA programs for older adults, but we indicated the specific population for which they were developed. Two are for sedentary adults,[12,34] one for frail, homebound adults,[58] and five for healthy adults;[4,10,15,63,70] the remaining five are some combination of these population groups.[45,47,53,58,66] In two cases, the programs are intended to reach persons who are healthy or who have chronic diseases for which exercise would not be contraindicated.[53,66] All reviewed programs had been restricted to adults aged 50+ years, with six restricted to those aged 60+ or 65+ years. However, we included one program[43] for persons of all ages because it was developed for persons with diabetes and offered illustrations of older adults when describing how to perform specific exercises. Diabetes disproportionately affects minority groups,[21,42] and yet seven programs are offered only in English.[8,10,12,34,35,47,66] Fortunately, four include English and Spanish,[8,43,63,70] while four include English and Spanish as well as Armenian, Chinese, Farsi, Hmong/Lao, Korean, and Russian[4,50,52,58] to reach broader population segments. Finally, two programs developed in Canada offer their materials in French.[15,53] Two programs indicate they intend to reach lower socioeconomic groups exclusively.[47,50] Otherwise, all programs seek to be inclusive in their applicability.

Physical Activity Components (the second section) refers to five different types of exercise (namely, activities to improve balance, coordination, endurance, flexibility, and strength) that may be found within a program. Programs offer activities that may strengthen specific muscles, enhance flexibility across a joint or series of joints, or even include balance training intended to maintain equilibrium while stationary or moving.[18] Endurance-related activities can be characterized as muscular endurance, which entails the capacity to repeatedly contract muscles, or as cardiorespiratory endurance, which relies on repetitive muscular contractions of typically large muscle groups that result in a substantial amount of oxygen consumption.[18] In some program manuals, this type of activity is termed “aerobic endurance” to connote that a substantial amount of oxygen is required to perform it. While most programs provide activities pertaining to at least three of the five different types of exercises, three programs focus on all five.[10,34,35] The PA component that is least likely to be included is coordination, covered in only three programs.[10,34,35] Taken as a whole, these components may improve daily functioning and enhance overall quality of life for older adults with diabetes or other chronic diseases.[67]

Although exercise is very important in managing diabetes,[2,13,59,64] other treatment regimens or existing comorbid conditions may create special circumstances for the use of exercise in diabetes care.[59] Hence, the third section of the table pertains to Diabetes-Specific Detail and covers five special circumstances that people with diabetes may need to consider when they exercise—insulin, oral medication, diet, foot care, and vision. Of the five programs intended to reach older adults with diabetes, two address each special circumstance;[8,43] one addresses insulin, diet, and foot care;[35] while one addresses only diet and foot care;[52] and another addresses only diet.[70] Understandably, programs intended to reach older adults or otherwise broader age ranges of healthy adults do not address these special circumstances. Exercising creates a limited risk of suffering a musculoskeletal injury or even a rare event such as sudden cardiac death.[17,40,60] This reality necessitated our including a section in this table addressing Medical and Legal Issues, in which we note that most programs recommend that prospective participants seek the consent of a medical doctor before beginning the program. Five programs offer informed consent forms to be filled out by participants.[15,34,35,50,70] Three programs[12,47,66] request that participants complete the revised Canadian Physical Activity Readiness Questionnaire (PAR-Q)[16,65] to determine whether physical activity is inappropriate for them, whether they can exercise after gaining a physician's clearance, or whether they need to be prescribed specific types of exercises. In the Detailed Program Abstraction Table, we note that at least one program requires a signed confidentiality form.[50]

Programs often require staff for start-up and/or maintenance; such requirements are identified in the Required Resources section. In the Personnel subsection, there are eight programs that project staff requirements of 10 or fewer staff members.[10,15,34,35,47,52,58,70] One program requires between 10 and 20 staff members to be instituted or maintained.[50] In four instances, programs are self-administered (i.e., available on the Internet to anyone who wants to follow the program).[4,43,53,66] However, four programs are either self-administered or can be used in a group setting with a facilitator.[8,12,45,63] The Exercise Instructor column of the Detailed Program Abstraction Table reveals some of the specific roles that personnel may assume. Also, in certain instances, specific training (and often the time needed to train appropriately) or existing credentials are required before staff can assume their respective roles.[10,12,15,35,47,50,52,58,70] In a few instances, specific tasks for a given role are described.[34,47,50,58,70] In the Costs subsection, five programs are listed as having no cost[8,10,52,53,63] because they are free as made available on the Internet or via the sponsoring organization. Four programs are listed as being less than $100 but not entirely free.[4,43,45,66] Two programs estimate the program costs to be greater than $100 but less than $15,000,[12,15] and two additional programs are estimated to be in the $15,000–$25,000 range.[50,58] Four programs are listed as variable (V) because the cost of a facility to deliver the program must be considered.[34,35,47,70] In the Detailed Program Abstraction Table, there is additional information for some programs that estimates the cost for persons performing certain roles as well as for required program materials.

The Evaluation section of the Program Summary Table contains three subsections: Efficacy, Effectiveness, and Program Tools. Initially we were interested in abstracting PA programs with established efficacy and effectiveness, but few programs have been subjected to testing sufficient for efficacy or effectiveness to be evaluated. In fact, almost two thirds of the listed programs have not been tested for efficacy or effectiveness. There are, however, six programs that have been tested for efficacy,[4,12,34,35,58,70] five of which have also been tested for program effectiveness.[4,12,34,35,58] Three programs have produced scientific publications of their evaluation results.[10,15,47] Accountability is increasingly important in an era of limited resources or when attempting to optimize the allocation of resources.[72] Thus, we sought to identify evaluation tools used in conjunction with programs so that accountability might be assessed. Five PA programs have sections on program evaluation as part of the manuals/toolkits that describe their

programs.[34,50,52,58,70] For most of those, tools are provided to assess PA levels before and after program implementation.

The See Comments section of the Program Summary Table indicates the number of additional comments written about each program. There are 32 across all the programs; the details for each comment are available in the Detailed Program Abstraction Table. The comments are highly variable and include a wide range of information such as the availability of participant materials (and the languages in which they are written), materials for medical and legal concerns, diabetes self-management guides, task lists for personnel describing their specific roles and scripts for interacting with participants, whether the program is proprietary, and where to find additional resources.

Detailed Program Abstraction Table

Certain unique pieces of information not offered in the Program Summary Table are located in the Detailed Program Abstraction Table. For example, in the column entitled Educational Format/ Program Length/Program Components, one often finds how the program is offered (e.g., as classes in a facility, program manuals, booklets, toolkits, Internet-only materials). The Program Length section indicates how much time program implementation requires. In the Program Components part, educational, programmatic, activity-specific, and nutritional elements are described.

The column headed Setting describes the program setting; most programs have been designed for community settings where older adults congregate (e.g., senior centers, retirement communities, places of worship, hospitals, exercise facilities). In some cases, facilities must meet certain criteria to be accredited as program settings.[35,58]

The column labeled Evidence of Efficacy and Effectiveness/Evaluation Tools describes results from published research about the program. Specifically, this column describes evaluation results from three programs that measured adherence and improved physical functioning.

Program Descriptions

The Program Descriptions section contains one-page narratives about each program. Each description begins with many pertinent details, presented in a standardized format, based on information also available in the previously described tables. Thereafter, the description provides, in order, information about program development, how the program is delivered, and its efficacy and effectiveness. This approach allows the user to learn a bit about each individual program without focusing on all elements available in the tables.

Contact Table

The Contact Table lists all programs, their sponsoring organizations, and a contact person for additional information. This information was current as of January 2007.

This completes our description of the sections and practical facets found in this Physical Activity Reference Guide. Inclusion of the programs in the guide is not an endorsement, by the authors or the CDC, of the programs or of any products that the programs may use. We hope this will serve as a programmatic tool that will help the user in identifying PA programs for older adults with diabetes, or for those high-risk older adults for whom diabetes may need to be prevented or delayed. Because no reference guide alone can solve the many problems that older adults face, it is advisable to also use the many other materials that CDC offers pertaining to PA (http://www.cdc.gov/nccdphp/dnpa/) and diabetes (http://www.cdc.gov/diabetes/).

Program Summary Table

Program Title (year), [Sponsoring Organization(s)], Reference Page in Program Description[1]	Population Focus				Physical Activity Components[6]					Diabetes-Specific Detail[7]					Medical and Legal Issues[8]	Required Resources		Evaluation			See Comments[11]
	Health Status[2]	Age[3]	Language[4]	SES[5]	B	C	E	F	S	I	O	D	FC	V		Personnel[9]	Costs[10]	Efficacy	Effectiveness	Program Tools	
1. ***Healthy Changes*** (2006, version 4) 2. ***Cambios Saludables*** (2004, version 3), [PCA/NCOA], see p. 17	D	55+	E, S, R	All	Y	N	CR	Y	Y	N	N	Y	Y	N	X	S	NC	N	N	Y	2
1. ***Exercise for Life! A Physical Activity Program for Prevention of Diabetes*** (exercise program, 2005) 2. ***Diabetes Prevention and Management for Older Adults: Small Steps with Big Rewards*** (educational module for providers, 2005), [ASA/CDC/NDEP], see p. 19	D, PD	55+	E	All	Y	N	CR, M	Y	Y	Y	Y	Y	Y	Y	X	SA or S	NC	N	N	N	3
What I Need to Know about Physical Activity and Diabetes (2004), [NIDDK/NDIC/DHHS], see p. 21	D	AA	E, S	All	N	N	CR	Y	Y	Y	Y	Y	Y	Y	X	SA	$	N	N	N	1
Lift for Life (2002), [IDI/UK], see p. 23	D, PD	50–80	E	All	Y	Y	M	Y	Y	Y	N	Y	Y	N	X, IC	S	V	Y	Y	N	2
Active Living Every Day (2001), [CI/BU], see p. 25	S	50+	E	All	N	N	CR	N	Y	N	N	N	N	N	PAR-Q	SA or S	$$	Y	Y	N	2
CHAMPS II: Community Healthy Activities Model Program for Seniors (2001), [UCSF/SU], see p. 27	S	65+	E	All	Y	Y	CR	Y	Y	N	N	N	N	N	X, IC	S	V	Y	Y	Y	1
EnhanceFitness (1993), [SS/GHC/UW], see p. 29	S, H	65+	E, S, C, H,	All	Y	N	CR	Y	Y	N	N	N	N	N	X	S	$$$	Y	Y	Y	1
Active Start (under development), [OI/LADA/AoA/NCOA], see p. 31	S, C, H	50+	E	Low	N	N	CR	Y	Y	N	N	N	N	N	PAR-Q	S	V	N	N	N	2
Healthy Moves for Aging Well (2004), [Partners/AF/TCE/U/AoA], see p. 33	F, HB	65+	E, S, A, C, Fa, K, R	Low	Y	N	M	Y	Y	N	N	N	N	N	X, IC	SS	$$$	N	N	Y	2
1. ***Exercise: A Guide from the National Institute on Aging*** (2004) 2. ***Exercise: A Video from the National Institute on Aging*** (2000) 3. ***El Ejercicio y Su Salud*** (2001), [NIA], see p. 35	F, C, H	50+	E, S	All	Y	N	CR	Y	Y	N	N	N	N	N	X	SA or S	$	N	N	N	2
Growing Stronger: Strength Training for Older Adults (2002), [TU/CDC], see p. 37	C, H	50+	E	All	Y	N	M	Y	Y	N	N	N	N	N	PAR-Q	SA	$	N	N	N	1
Canada's Physical Activity Guide to Healthy Living for Older Adults (1999), [PHAC/ALCOA/CSEP], see p. 39	C, H	55+	E, Fr	All	Y	N	CR	Y	Y	N	N	N	N	N	X	SA	NC	N	N	N	1
1. ***First Step to Active Health*** (exercise program, 2004) 2. ***Active Aging Toolkit*** (health care provider manual, 2004), [AAFP/ACSM/AGS/APTA/NCPAD/TPC/HC], see p. 41	H	50+	E, S, K	All	Y	N	CR	Y	Y	N	N	N	N	N	X	SA	$	Y	Y	N	4
Eat Better and Move More (2004), [FIU/AoA], see p. 43	H	60+	E, S	All	Y	N	CR	Y	Y	N	N	Y	N	N	X, IC	S	V	Y	N	Y	2
Get Fit For Active Living (2001), [CCAA], see p. 45	H	55+	E, Fr	All	Y	N	CR	Y	Y	N	N	N	N	N	X, IC	S	$$	N	N	N	3
Texercise (1999), [DADS], see p. 47	H	60+	E, S	All	Y	N	CR	Y	Y	N	N	N	N	N	X	SA or S	NC	N	N	N	2
The SilverSneakers Fitness Program (1992), [AHM], see p. 49	H	65+	E	All	Y	Y	CR	Y	Y	N	N	N	N	N	X	S	NC	N	N	N	1

Program Summary Table *(continued)*

[1] **AAFP** = American Academy of Family Physicians
ACSM = American College of Sports Medicine
AF = Archstone Foundation
AGS = American Geriatrics Society
AHM = Axia Health Management
ALCOA = Active Living Coalition for Older Adults
AoA = U.S. Administration on Aging
APTA = American Physical Therapy Association
ASA = American Society on Aging
BU = Brown University
CCAA = Canadian Centre for Activity and Aging
CDC = Centers for Disease Control and Prevention
CI = Cooper Institute
CSEP = Canadian Society for Exchange Physiology
DADS = Texas Department of Aging and Disability Services
DHHS = U.S. Department of Health and Human Services
FIU = Florida International University
GHC = Group Health Cooperative
HC = Hygenic Corporation
IDI = International Diabetes Institute
LADA = Los Angeles Department on Aging
NCOA = National Council on Aging
NCPAD = National Center for Physical Activity and Disability
NDEP = National Diabetes Education Program
NDIC = National Diabetes Information Clearinghouse
NIA = National Institute on Aging
NIDDK = National Institute of Diabetes and Digestive and Kidney Diseases
OI = Oasis Institute
Partners = Partners in Care Foundation
PCA = Providence Center on Aging
PHAC = Public Health Agency of Canada
SS = Senior Service
SU = Stanford University
TCE = The California Endowment
TPC = The President's Challenge
TU = Tufts University
U = UniHealth
UCSF = University of California, San Francisco
UK = Diabetes United Kingdom
UW = University of Washington

[2] **C** = chronic condition, **F** = frail, **D** = diabetes, **H** = healthy, **HB** = homebound, **PD** = prediabetes, **S** = sedentary
[3] **AA** = adults of all ages
[4] **A** = Armenian, **C** = Chinese, **E** = English, **Fa** = Farsi, **Fr** = French **H** = Hmong/Laotian, **K** = Korean, **R** = Russian, **S** = Spanish
[5] **SES** = socioeconomic status, **All** = applies to all socioeconomic status, **Low** = applies to low income only
[6] **B** = balance, **C** = coordination, **E** = endurance, **F** = flexibility, **S** = strength, **CR** = cardiorespiratory endurance, **M** = muscular endurance, **Y** = yes, **N** = no
[7] **I** = insulin medication, **O** = oral medication, **D** = diet, **FC** = foot care, **V** = vision
[8] **X** = doctor's consent recommended, **IC** = informed consent form, **PAR-Q** = Physical Activity Readiness Questionnaire
[9] **S** = <10 staff members, **SS** = 10 to 20 staff members, **SA** = self-administered, **SA** or **S** = Self-administered or can be used in a group setting with a facilitator
[10] **$** = <$100, **$$** = <$15,000, **$$$** = $15,000 to $25,000, **V** = variable, **NC** = no cost
[11] Number of descriptive comments written about the physical activity program. These comments are included in the Detailed Program Abstraction Table.

Detailed Program Abstraction Table

Program Title (year)/Sponsoring Organization(s)	Educational Format/ Program Length/Program Components	Population Focus[1]		Physical Activity Components/ Diabetes-Specific Detail	Setting	Exercise Instructor	Medical and Legal Issues[2]	Required Resources		Evidence of Efficacy and Effectiveness[3]/ Evaluation Tools	Comments
		Health Status/ Age	Language/ SES					Personnel	Cost		
Healthy Changes (2006, version 4) ***Cambios Saludables*** (2004, version 3) Providence Center on Aging (Portland, OR) and the National Council on Aging	Group-led physical activity program with toolkit 26 weekly sessions (1.5 hr each) provide ongoing diabetes, nutrition and physical activity education 26 educational sessions: • 5 diabetes • 11 nutrition • 10 physical activity: 1. The basics about physical activity 2. How much is too much? 3. Knowing your preferences 4. Managing diabetes and exercise safety 5. Parts of an exercise program 6. Maintaining an activity program 7. Are you F.I.T.T.? (frequency, intensity, time, type of activity) 8. Community resources 9. Planning for the unexpected 10. The buddy system	Type 1 and type 2 diabetes 55+	English, Spanish, Russian All SES groups	Balance, cardiorespiratory endurance, flexibility, strength Diet, foot care	Senior centers, churches, or retirement communities	Trained lay leaders (volunteers) to lead 12 to 15 older adults	Medical doctor's permission recommended	Trainers (desired expertise as certified health education specialists or certified diabetes educators): Train lay leaders in 2-day training (6 hr each) Lay leaders: Teach the 26 weekly sessions	PDF version online: No cost	Evaluation: Offers 4 different types of evaluation worksheets: 1. Participant information pre-program survey 2. Participant information post-program survey 3. Progress chart 4. Session evaluation	Handouts for clients include goal setting worksheets, food and physical activity log books, and diabetes self-knowledge test Handouts for group leaders include client attendance log, absentee follow-up sheet, and diabetes self-knowledge test
1. ***Exercise for Life! A Physical Activity Program for Prevention and Management of Diabetes*** (exercise program, 2005) 2. ***Diabetes Prevention and Management for Older Adults: Small Steps with Big Rewards*** (educational module for providers, 2005) American Society on Aging, Centers for Disease Control and Prevention. Endorsed by the National Diabetes Education Program	Self-administered text with provider manual 4 exercise routines: 1. Strengthening and stretching the upper body 2. Strengthening and stretching the lower body 3. Developing better balance 4. Building endurance	Type 2 diabetes, pre-diabetes 55+	English All SES groups	Balance, cardiorespiratory/ muscular endurance, flexibility, strength Insulin, oral medication, diet, foot care, vision	Community where older adults can exercise safely	This self-administered program can also be used in a group setting with a facilitator using the educational module for providers	Medical doctor's permission recommended	Facilitator: Explains how to set up a group session; how to help participants follow the program; how to help participants perform diabetes self-care before, during, and after exercise	PDF versions online: No cost	No testing on the efficacy and effectiveness was found No evaluation tools available	Diabetes information includes diabetes self-care guidelines to follow before and during exercise A facilitator guide for *Exercise for Life! A Physical Activity Program for Prevention and Management of Diabetes* is also available *Exercise for Life*! is part of *Live Well, Live Long: Steps to Better Health* Series

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What I Need to Know about Physical Activity and Diabetes (2004) National Institute of Diabetes and Digestive and Kidney Diseases, National Diabetes Information Clearinghouse, U.S. Department of Health and Human Services	Self-administered text Self-help exercise information on: • Benefits • Examples of physical activities • Diabetes care	Type 1 and type 2 diabetes Adults of all ages	English, Spanish All SES groups	Cardiorespiratory endurance, flexibility, strength Insulin, oral medication, diet, foot care, vision	Community	Self-administered	Medical doctor's permission recommended	Personnel not required	PDF version online: No cost Single copies: No cost Packages of 25: $10	No testing on the efficacy and effectiveness was found No evaluation tools available	Diabetes information includes treating hypoglycemia (low blood glucose)
Lift for Life® (2002) International Diabetes Institute (Melbourne, Australia), Diabetes United Kingdom	Group-led physical activity program An 8 week program: *Introductory* • Initial one-on-one assessment • 2 supervised exercise sessions per week • Small group sessions –8 people or fewer • 2nd assessment and feedback Series of 8 week programs: *Maintenance* • 2 supervised exercise sessions per week • Individually-tailored strength training sessions • Small group sessions –12 people or fewer • Review and personalized program update every 8 week • Regular progress feedback • Regular updates from IDI	Type 2 diabetes, pre-diabetes and persons with multiple diabetes risk factors 50–80	English All SES groups	Balance, coordination, flexibility, muscular endurance, strength Insulin, diet, foot care,	Health and fitness centers; personal training studios; primary care provider; allied health personnel (all facilities must meet criteria and be accredited by the IDI)	Accredited *Lift for Life®* trainers. Must meet criteria (regarding qualifications and experience) and complete *Lift for Life®* training package	Medical doctor consent form	Instructor: Trained by IDI in pre-exercise screening, exercise prescription, and education	Variable– dependent on the facility	E_1: RCT Changes in metabolic variables from BL:[4] HbA_{1c} (%) RT + WL 3 mon: -0.6 ± 0.7 6 mon: NS WL (P<0.01) 3 mon: NS 6 mon: NS Body mass (kg) RT/WL 3 mon: -1.8 ± 2.0 6 mon: -2.5 ± 2.9 WL (P<0.01) 3 mon: -2.1± 1.5 (P<0.01) 6 mon: -3.1 ± 2.1 E_2: RCT Changes in metabolic variables from BL to 14 mon:*[5] Introductory phase (first 2 months) Insulin sensitivity (HOMA) (%) Home: NS Center: NS HbA_{1c} (%) Center: -0.5 ± 1.0 Home: Weight (kg) NS (P<0.05) Maintenance phase (12 months after introductory phase) Home: Center: NS Insulin sensitivity (HOMA) (%) Home:	Embarking on national roll-out in Australia 2006-2008 *Lift for Life®* is a licensed program that can only be delivered by accredited *Lift for Life®* trainers in accredited *Lift for Life®* facilities

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										Center: 5.4 ± 16.4 (P<0.05) HbA$_{1c}$ (%) Center: -0.4 ± 1.0 (P<0.05) Home: NS Weight (kg) Home: -1.8 ± 3.2 (P<0.05) Center: -2.0 ± 4.2 (P<0.05) Purpose-built IT system has been developed for the on-going monitoring and evaluation of *Lift for Life®* *Lift for Life®* is based on findings from the *Lift, Loosen and Lose for Diabetes* Study	
Active Living Every Day (2001) The Cooper Institute, Brown University Center for Behavioral and Preventive Medicine	Self-administered text 20 weekly education sessions (one per week): 1. Getting started 2. Ready, set, go 3. Making plans 4. Barriers and benefits 5. Over, under, around, through 6. Let's burn some calories! 7. Setting goals 8. Enlisting support 9. Gaining confidence 10. Strengthening the foundation 11. Rewarding yourself 12. Avoiding pitfalls 13. Defusing stress 14. Step by step 15. Managing your time 16. Exploring new activities 17. Making lasting changes 18. Becoming a hunter-gather 19. Positive planning 20. Onward and upward	Sedentary 50+	English All SES groups	Cardiorespiratory endurance, strength	Worksites, hospitals, community health programs, colleges, senior residences	Available as a self-administered program or a course with a trained *Active Living Every Day* facilitator	PAR-Q and You	Facilitator training: $349 per person	*Active Living Every Day* book: $29.95 Active Living Every Day Participant's Packet (textbook, online study guide, and journal): $49.00	E_2: Pre-/post-test Adjusted mean pre-and post-test scores:*[6] Moderate- and vigorous-intensity physical activities Pre: 2.27 Post: 4.92 (P<0.0001) Light-, moderate-, and vigorous intensity physical activities Pre: 5.77 Post: 11.72 (P<0.0001) BMI Pre: 29.17 Post: 28.76 (P<0.001) *Physical activity measured with Community Healthy Activities Model Program (CHAMPS)–41-item self-report measure Although *Active Living Every Day* is for all adults, the program was found to be efficacious with sedentary older adults (aged 50 yr and older) in a community setting	Appendices include: • Signs and symptoms of heart attack and stroke • Stages on the way to becoming active • Energy expenditure chart • Forms to record physical activities *Active Living Every Day* classes focus on behavior change and developing skills intended for participants to incorporate physical activity as part of their daily life

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CHAMPS II: Community Healthy Activities Model Program for Seniors (2001) University of California, San Francisco, Stanford University	Group-led physical activity program with toolkit 5 physical activity support mechanisms: 1. Personal planning session 2. Telephone support 3. Group workshops 4. Monthly newsletter 5. Activity logs (for 2 weeks of every month)	Sedentary, underactive 65+	English All SES groups	Balance, cardiorespiratory endurance, coordination, flexibility, strength	Participant's home and community sites that offer physical activity classes for seniors	Physical activity counselors	Participant and medical doctor consent form	Nurse and exercise physiologist: Conduct baseline, 6- and 12-mon assessments PA counselors: Provide support, motivation, and follow-up. Develop strategies to overcome barriers. Also, discuss changes in participants' medical condition and physical activity planning	Variable–dependent on facility	E_2: RCT Caloric expenditure (kcal/wk), moderate intensity:[7] Intervention 1052 BL: Yr 1: 1539 (P<0.001) Control 1185 BL: Yr 1: 1190 Caloric expenditure (kcal/wk), all physical activity: NS Intervention 1935 BL: Yr 1: 2622 (P<0.001) Control 2057 BL: Yr 1: 2048	Manual includes medical history questionnaire, medical release form, script and phone screen to schedule 6-mon functional fitness review
EnhanceFitness (1993) Senior Services, Group Health Cooperative, University of Washington	Group-led physical activity program 3 days/wk, 1-hr fitness class: • 5-min warm-up • 20-min cardiovascular • 5-min cool down • 20-min strength training • 10-min stretch	Sedentary, healthy 65+	English, Spanish, Hmong/Lao, Chinese All SES groups	Balance, cardiorespiratory endurance, flexibility, strength	Community-based groups for seniors	*EnhanceFitness* certified fitness instructor to lead 12 to 20 older adults	Medical doctor's permission recommended	Project coordinator: Program maintenance (requires approximately 10 hr/wk) for participating organizations with multiple *EnhanceFitness* sites *EnhanceFitness* instructor (to be certified): Receives 12 hr of training, leads fitness class (4 hr/wk)	*EnhanceFitness* package (1 yr): $3,000 YMCA certification training (1 yr): $600 *EnhanceFitness* Instructor Trainer Training (1 yr): $2,000 Renewal fee: $300 Additional site fee: $1000 Additional site renewal fee: $100 Fitness equipment: $850 Fitness instructor: $4,160 ($20/hr, 4hr/wk) Project Coordinator: $5,060 ($15/hr, 5 hr/mon) Office supplies: $175	E_1: Descriptive Performance-based measures by subgroup (BNL and WNL):[8] BNL Eight-Foot Up and-Go (sec) Initial: 9.6 4 mon: 8.4 8 mon: 8.3 (P<0.001) Chair Stand (number in 30 sec) Initial: 9.5 4 mon: 10.4 8 mon: 11.1 (P<0.001) Arm Curl in 30 sec (repetitions) Initial: 7.3 4 mon: 7.5 8 mon: 9.1 (P<0.001) Initial: 4 mon: 15.8 8 mon: 18.0 (P<0.001) Eight-Foot Up and-Go (sec) Initial: NS 4 mon: NS 8 mon: NS (P<0.001) Chair Stand (number in 30 sec) Initial: 4 mon: 8 mon: (P<0.001) Arm Curl in 30 sec (repetitions) Initial: 4 mon: 8 mon: (P<0.001) Initial: 4 mon: 8 mon: (P<0.001) Initial: 4 mon: 8 mon: (P<0.001)	Individual participants can find ongoing *EnhanceFitness* programs in their area on the program's Web site

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		Health Status/ Age	Language/ SES					Personnel	Cost		
										Initial: NS 8 mon: NS Chair Stand (number in 30 sec) 14.1 Initial: 4 mon: 15.3 14.2 Initial: (P<0.001) 8 mon: 15.6 (P<0.001) Arm Curl in 30 sec (repetitions) 17.9 Initial: 4 mon: 19.9 (P<0.001) 18.0 Initial: 8 mon: 20.3 (P<0.001) Evaluation: Evaluation materials and feedback on effectiveness are available to participating organizations	
Active Start (Implementation toolkit is currently under development and is expected to be available in 2007. Program can currently be accessed by calling OASIS.) The OASIS Institute, City of Los Angeles Department of Aging, the Administration on Aging, and National Council on Aging	Group-led physical activity program with toolkit Consists of 2 independent programs linked in conjunction: *ExerStart!* and *Active Living Every Day* 20-weekly sessions on behavioral change and exercise: *Active Living Every Day* • Weekly 1-hr behavior change class • Taught by older adult lay leaders senior service staff, and other health educators/ health professionals *ExerStart for Lay Leaders* • 45 min of light to moderate physical activity	Sedentary, chronic conditions, healthy 50+	English Low income groups	Cardiorespiratory endurance, flexibility, strength	Senior centers, living facilities, and any area where older adults congregate. Space for group exercise should be available	2 to 3 adult volunteer lay leaders and senior center (or host site) staff	PAR-Q (encouraged but not required)	Project coordinator: Supervises lay leaders and gives technical assistance Master trainer (certified through Human Kinetics): Lead lay leaders in 2-day training Lay leaders: Coach, facilitate, and motivate participants	Variable–dependent on facility	Evaluation: Participant pre-/post-fitness assessments using the Senior Fitness Test and self-reported physical activity, self efficacy, physical and mental wellness, and social support measures *Active Start* is implemented the program with intervention and control groups *Active Living Every Day* is based on RCT *ExerStart* is based on research 1-yr outcomes available for fitness measures and min/wk of physical activity.	Programming implemented with a 3-yr grant. Some materials for *Active Start* are available in Spanish

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Healthy Moves for Aging Well (2004) Partners in Care Foundation, Archstone Foundation, The California Endowment, UniHealth, the U.S. Administration on Aging	Toolkit Enrollment Session: • Care manager (CM) enrolls client into *Healthy Moves* • CM teaches client chair and/or advance in-home exercises • CM assesses client performance on exercises and completes evaluation sheet • Client receives exercise handouts and exercise log First 3 months: • Client receives bi-weekly phone calls from motivational coach to encourage completion of exercises 3 to 5 times per week At 3 months: • CM visits client and assesses client's performance on exercises, pain, depression, falls, fear of falling and goal attainment Months 4, 5, and 6: • Client receives monthly phone calls from motivational coach to check on progress	Frail, homebound 65+	English, Spanish, Armenian, Chinese, Farsi, Korean, Russian, Low income groups	5 in-home exercises: *Chair Exercises* 1. Arm Curl 2. Ankle Point and Flex 3. Seated Step-in-Place *Advanced Exercises* 4. Chair Stand 5. Standing Step-in-Place	Community-based care management programs	Existing care managers and volunteer phone coaches with technical assistance from behavior change educator and fitness expert	Medical doctor consent form in toolkit, but not required Participant informed consent and confidentiality form is required	Program coordinator: • Start up (2 mon for 20 hr/wk): • Maintenance (10 hr/wk) Behavior change educator (mental health and medical health specialist): Trains CMs and volunteers, consults with groups, mentors CMs and volunteers Fitness expert (desired background in physical activity and as geriatrics specialist): Trains and mentors CMs and volunteers CMs: Receive 6 hr training, recruit clients, provide ongoing client support Volunteers: Receive 6 hr of training and provide telephone-based client support	Projected sample budget for 8 mon: Staff: $19,950 Transportation: $500 Supplies: $600 Total: $21,050	Pilot Project: 76% of clients continued to exercise after 6 mon. Current study, 2004 to 2008, involving 400 clients shows significant improvements in pain, number of falls and the number of arm curls seniors can perform in 30 seconds. Final results available in 2008	Spanish version of medical doctor consent form and participant informed consent form are available Offers 3 types of evaluation worksheets: 1. Agency Program Summary 2. Evaluation Form (to measure participants' progress) 3. *Healthy Moves for Aging Well* Client Satisfaction Survey
Exercise: A Guide from the National Institute on Aging (2004) ***Exercise: A Video from the National Institute on Aging*** (2000) ***El Ejercicio y Su Salud*** (2001) National Institute on Aging	Self-administered text with video Self-help exercise information on: • Benefits • Safety • Motivation • Examples of exercise activities • Nutrition • Samples of weekly activity and progress charts	Healthy, frail, chronic conditions 50+	English, Spanish All SES groups	Balance, cardiorespiratory endurance, flexibility, strength	Community or home-based	Self-administered	Medical doctor's permission recommended	Personnel not required	Book: no cost VHS: $7 DVD: $7	NIH/NIA-supported research as evidence base for program	Offers exercise worksheets to record weekly schedule, daily activities, and monthly progress *Exercise: A Guide from the National Institute on Aging* is currently being updated. The release date is expected in 2007

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Growing Stronger: Strength Training for Older Adults (2002) Tufts University, Centers for Disease Control and Prevention	Self-administered text Self-help exercise information on: • Goal to maintain lifelong strength training • 12 prescribed exercises (developed in Tufts University's research laboratory) • Includes 12-week workbook of exercise log sheets	Healthy, chronic conditions 50+	English All SES groups	Balance, coordination, muscular endurance, strength	Home-based or community	Self-administered	PAR-Q and You	Personnel not required	PDF version online: No cost Hardcopy: $9.95	No testing on the efficacy and effectiveness was found No evaluation tools available	The online and CD-ROM versions animate the exercises
Canada's Physical Activity Guide to Healthy Active Living for Older Adults (1999) Public Health Agency of Canada, Active Living Coalition for Older Adults, Canadian Society for Exercise Physiology	Self-administered text Self-help exercise information on: • Benefits • Experts recommendations • Motivation • Examples of exercise activities • Exercise progress table	Healthy, chronic conditions 55+	English, French All SES groups	Balance, cardiorespiratory endurance, flexibility, strength	Community	Self-administered	Medical doctor's permission recommended	Personnel not required	Order copy online: No cost	No testing on the efficacy and effectiveness was found No evaluation tools available	Calendar available to plan weekly physical activities
First Step to Active Health® (exercise program, 2004) ***Active Aging Toolkit*** (healthcare provider manual, 2004) American Academy of Family Physicians, American College of Sports Medicine, American Geriatrics Society, American Physical Therapy Association, National Center for Physical Activity and Disability, The President's Challenge, Hygenic Corporation	Self-administered text A chronic disease prevention fitness program to improve physical and functional abilities in older adults 4-step routine to increase physical activity levels: 1. Cardiorespiratory/ aerobic 2. Flexibility 3. Strength 4. Balance	Healthy 50+	English, Spanish, Korean All SES groups	Balance, cardiorespiratory endurance, flexibility, strength	Community or home-based	This self-administered program can be led by a group exercise leader. The provider manual is to help healthcare providers prescribe physical activity programs for older adults	Medical doctor's permission recommended	Personnel not required	Free online version or purchase for $9.95, but may be purchased for less depending on the distributor and the quantity	E_2: Pilot study Senior Fitness test (pre- to post-change values): Lower extremity strength +14% ($P<0.001$) Upper body strength +24% ($P<0.001$) Cardiovascular endurance +18% ($P<0.001$) Lower extremity flexibility +137% ($P<0.001$) Upper extremity flexibility +22% ($P=0.003$) Functional mobility -6% ($P=0.14$) Senior Fitness test (pre- to post-change values):[11] Systolic blood pressure - 0.9% ($P=0.04$)	An assessment form to determine physical abilities and limitations is included Weekly physical activity log sheet is available Soon to be available in Japanese *First Step to Active Health®* program is a participant kit within the *Active Aging Toolkit*

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		Health Status/ Age	Language/ SES					Personnel	Cost		
										Diastolic blood pressure and body weight No change Upper body muscular strength and endurance +32% (P=0.004) Lower body muscular strength endurance +17% (P=0.025) Upper or lower body flexibility	
Eat Better and Move More (2004) Florida International University, U.S. Administration on Aging	Group-led physical activity program with toolkit 12 weekly sessions on nutrition education and walking: 1. Eat better for health 2. Move more for health 3. 5-a-day, fruits and vegetables/Set a new step goal 4. 5-a-day with variety and color/Stretching and movement 5. 3-a-day for calcium/ Stepping up your pace 4. 3-a-day for strong bones/Stepping for strong bones 7. Fiber fitness/Walking in all weather 8. More options for fiber/Keeping regular 9. Sensible portion sizes/Walking tall 10. Conquering portion distortion/Stepping to healthy weight 11. Food guide pyramid activity at home and away 12. Celebrate success	Healthy 60+	English, Spanish All SES groups	Balance, cardiorespiratory endurance, flexibility, strength Diet	Community	2 to 4 health facilitators and community volunteers to lead 15 to 25 participants	Participant and medical doctor consent form	Facilitator/Leader (desired background in health or fitness): • Leads the program Community volunteers: • Recruit participants • Distribute paperwork • Assist participants in completing forms • Act as a mentor	Items to include in budget: • Step counter • Staff time • Food • Handouts	[12] No change Mean values Steps walked: Pre: 3110 Post: 4183 Blocks walked: Pre: 10.0 Post: 14.5 (P<0.001) Timed Up and Go score: Pre: 11.7 Post: 10.6 (P<0.001) Exertion level: Pre: 4.9 Post: 5.4 (P<0.001) Evaluation: Start-of-Program and End-of-Program assessment tools are available	Chapters related to the food guide pyramid will be updated online, but the guidebook will not be reprinted In the pilot program, approximately 14% of participants who completed the program used canes and walkers

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Get Fit For Active Living (2001) Canadian Centre for Activity and Aging	Group-led physical activity program 8 weekly exercise and education program: 1. Getting started: the benefits of physical activity 2. Exercise adherence 3. Endurance (cardiorespiratory) exercise 4. Muscle strength and endurance 5. Flexibility, stretching and balance basics 6. Healthy eating 7. Disease prevention 8. Exercise at home and exercise program options	Healthy and mobile 55+	English, French All SES groups	Balance, cardiorespiratory endurance, flexibility, strength	Communities with the following amenities: • Ample space for group fitness classes • Exercise equipment • Classroom space	At least 2 Senior Fitness Instructor Courses (SFIC) Certified fitness instructors who are also trained *Get Fit For Active Living* facilitators	Participant informed consent required	Community facilitators: Receive *Get Fit For Active Living* facilitator training (7 hrs)	For facilitators: Seniors Fitness Instructors Course (and manual): $175 Instructor evaluation for certification as a Senior Fitness Instructor: $75 Instructor renewal fee (biannual): $50 Facilitator training course (and manual): $300 For participant: Participant manual, 3 wkly exercise classes, and a 1-wk education class: $150 or less for 8 wk (depending on the host facility)	2004 Evaluation Report from 18 *Get Fit For Active Living* programs:[13] Exercised regularly 1 mon: 73% Exercised sometimes 1 mon: 12% No exercise 1 mon: 09% 12 mon: 10%	The participant manual illustrates the prescribed exercises and provides a weekly calendar to plan and record activities Manual has been revised to be culturally sensitive for East Indians (e.g., includes a nutrition section and pictures of Indian people wearing traditional clothing) Program is geared toward any older adult living in retirement residences or community-dwellings
Texercise (1999) Texas Department of Aging and Disability Services	Self-administered text 2 fitness tools: *Texercise Handbook* (assists older adults to establish a physical activity regimen) • Facts on nutrition • Facts on physical activity • Cardiorespiratory endurance activities • Strength training activities • Balance exercise activities • Flexibility exercise activities	Healthy 60+	English, Spanish All SES groups	Balance, cardiorespiratory endurance, flexibility, strength	Community	Self-administered or through coordinated community activities	Medical doctor's permission recommended	Not specified	*Texercise* donates the following items to groups hosting *Texercise 12-Week Fitness Program* with at least 25 participants: Gift bags including *Texercise Handbook*, pledge sheets, daily fitness log, pedometers, certificates, t-shirts and tote bags	No testing on the efficacy and effectiveness was found No evaluation tools available	*Texercise Handbook* provides worksheets to record physical activity progress *Texrecise Handbook* can be used as a companion guide to support the *Texercise 12-Week Fitness Program*

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	Texercise 12-Week Fitness Program (a how-to packet to maintain a 12-week fitness program) • Define your approach • Plan an event to launch the *Texercise 12-Week Fitness Program* • Identify the launch date and location • Create awareness • Event resource • Motivate • Wrap-up										
The SilverSneakers Fitness Program (1992) Axia Health Management	Group-led physical activity program 2 types of classes are available at participating fitness centers: *SilverSneakers I* Muscular strength and Range of Movement Class: Works all muscle groups; includes warm-up and rhythmic range of movement stretch, resistance tools, cool down, final stretch and relaxation segment *SilverSneakers II* Cardio circuit class: Non-impact cardiovascular conditioning class; includes resistance tools and aerobic conditioning choreography	Healthy 65+	English All SES groups	Balance, cardiorespiratory endurance, coordination, flexibility, strength	*SilverSneakers* fitness centers	Certified fitness instructors	Medical doctor's permission recommended	Fitness instructors: • Must be 18 yr and older • CPR certified • Attend a 4-hr *SilverSneakers* workshop and return at least once every 2 yr • Must have a 2- or 4-yr degree in Physical Education or a related field, or certified by a nationally recognized fitness education provide	Variable–dependent on facility Members of participating Medicare health plans can enroll in *SilverSneakers* at no additional cost	Evaluation: *SilverSneakers* administers self-report measures to a sample of members and results consistently show that *SilverSneakers* members' physical functioning is higher than the general Medicare population (as measured by the SF-12), and members report that their level of physical activity increases after they join the *SilverSneakers* Fitness Program	Participating fitness centers can be found on *SilverSneakers'* Web site

[1] **SES** = socioeconomic status

[2] **PAR-Q** = Physical Activity Readiness Questionnaire

[3] **E_1** = efficacy, **RCT** = randomized control trial, **HOMA** = homeostatic model assessment, **Home** = home-based training program, **Center** = center-based training program, **RT + WL** = high-intensity, resistance training plus moderate weight loss group, **WL** = moderate weight loss plus control group, **NS** = not significant, **IT** = information technology, **E_2** = effectiveness, **Pre-/post-test** = pre-/post-design, **BNL** = below normal limits, **WNL** = within (at or above) normal limits, **BL** = baseline

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PROGRAM 1: 1. *Healthy Changes*[52] 2. *Cambios Saludables*[51]

Health Status:	Type 1 and type 2 diabetes
Age:	55+ years
Language:	English, Spanish (Cambios Saludables), and Russian
Socioeconomic Status:	All
Educational Format:	Group-led physical activity program with toolkit
Year Published:	Currently on version 4, updated 2006
Cost:	Download free English and Spanish PDF version online at http://www.healthyagingprograms.org/content.asp?sectionid=30
Organizations:	Providence Center on Aging (Portland, OR) and the National Council on Aging (NCOA)
Contact Information:	The National Council on Aging P.O. Box 411 Annapolis Junction, MD 20701 800-373-4906 (voice) ncoa@pmds.com (email)

The *Healthy Changes* model program was designed as an educational and support program as part of the National Council on Aging's (NCOA's) Model Programs Project. This project tests evidence-based model health programs with the goal of improving the health of older adults. *Healthy Changes'* curriculum includes information on diabetes self-management and the importance of nutrition and physical activity in maintaining good diabetes control. The toolkit supplies curricula for weekly sessions on diabetes, nutrition, and physical activity. *Healthy Changes* can be implemented in community settings (e.g., senior centers, churches, or retirement communities).

The toolkit recommends that trainers coach group leaders in implementing *Healthy Changes*. Trainers with backgrounds as Certified Health Education Specialists or Certified Diabetes Educators are the most appropriate for this role. The training section is equipped with training requirements and an agenda outlining two training sessions (6 hours each) for group leaders. Trained group lay leaders are required to guide the weekly classes using the detailed curriculum.

In the Group Leader Instruction Manual, each session is scripted for delivering the program to participants. The logistics of each session are provided to assist in the implementation of *Healthy Changes*.

The following are 26 weekly sessions (1.5 hours each):

Introductory Sessions

1. *Diabetes and You*: overview of the *Healthy Changes* program, and the importance of self-care in diabetes self-management.
2. *Goal Setting*: information on goal setting and outlining a plan for achieving any goal.
3. *Problem Solving*: provides information on goal setting and techniques for problem-solving skills.
4. *Principles of Healthy Eating*: overview of the importance of healthy eating in diabetes self-management.
5. *Principles of Physical Activity*: overview of the importance of physical activity plays in diabetes self-management.

Nutrition Sessions

1. *Making Healthy Food Choices*: following the food guide pyramid to achieve a well-balanced diet.
2. *The Nutrients We Eat*: essential nutrients of healthy foods.
3. *Meal Planning Methods*: exchange lists, carbohydrate counting, and the plate method.
4. *Getting the Fat Out*: describes "bad" and "good" fats.
5. *Weight Management*: information on maintaining healthy weight.
6. *Cooking with Fewer Calories*: provides healthy-cooking tips.
7. *Shopping Tips*: provides shopping tips.
8. *Eating Away From Home*: making healthy choices when deciding to eat out.
9. *Social Situations*: making healthy food choices when in social situations.
10. *Craving and Emotional Eating*: how to overcome food triggers.
11. *Support from Family and Friends*: tips for getting support from family and friends.

Physical Activity Sessions

1. *The Basics About Physical Activity*: benefits of exercising for people with diabetes (cardiorespiratory endurance, strength, balance, flexibility), and proper diabetes care for exercising.
2. *How Much is Too Much?*: recommendations for exercise length and intensity; target heart rate.
3. *Knowing Your Preferences*: things to consider when developing your own physical activity program.
4. *Managing Diabetes and Exercise Safely*: ways to manage diabetes when exercising.
5. *Parts of an Exercise Program*: describes warm-up, workout, and cool-down.
6. *Maintaining an Activity Program*: lists motivational tips.
7. *Are You F.I.T.T.?*: describes the F.I.T.T. (frequency, intensity, time, type of activity) principle.
8. *Community Resources*: finding and using community resources.
9. *Planning for the Unexpected*: alternatives for exercising during bad weather.
10. *The Buddy System*: advantages of having an exercise partner.

The toolkit supplies resources and references from public health organizations, handouts for participants, and handouts for group leaders. The evaluation tool consists of pre- and post-program surveys, a progress chart, and a session evaluation form. However, no information on tracking data collection is available. Even though *Healthy Changes* includes evaluation materials, no testing for evidence of efficacy or effectiveness has been done on this program. For more information on obtaining a copy of *Healthy Changes*, visit http://wwwhealthyagingprograms.org.

PROGRAM 2:

1. ***Exercise for Life! A Physical Activity Program for Prevention and Management of Diabetes*** (exercise program)[8]
2. ***Diabetes Prevention and Management for Older Adults Small Steps with Big Rewards*** (educational module for providers)[7]

Health Status:	Type 2 diabetes and prediabetes
Age:	55+ years
Language:	English
Socioeconomic Status:	All
Educational Format:	Self-administered text with provider manual
Year Published:	2005
Cost:	Download free PDF versions online at: 1. http://www.asaging.org/cdc/module7/phase6/index.cfm (exercise program) 2. http://www.asaging.org/cdc/module7/home.cfm (educational module)
Organizations:	American Society on Aging (ASA) *Live Well, Live Long: Steps to Better Health Series*, and Centers for Disease Control and Prevention. Endorsed by the National Diabetes Education Program (NDEP)
Contact Information:	American Society on Aging 883 Market Street Suite 511 San Francisco, CA 94103 Chaya Gordon (Senior Research Manager) 415-974-9604 (voice) cgordon@asaging.org (email)

The *Exercise for Life! A Physical Activity Program for Prevention and Management of Diabetes* program is part of the *Diabetes Prevention and Management: Small Steps with Big Rewards* module that offers materials to professionals in aging services for preventing and properly managing type 2 diabetes in older adults. The online version of the module consists of five chapters. Chapter 1 outlines the risks and prevention of diabetes and its effects on older adults. Chapter 2 introduces information on diabetes self-management, including managing diabetes through nutrition and physical activity. Chapter 3 outlines the importance of access to diabetes care, barriers and support for diabetes care, fostering partnerships, and empowering people for diabetes care. Chapter 4 lists existing curricula and tools in diabetes management. The *Exercise for Life! A Physical Activity Program for Prevention and Management of Diabetes* tool is found in this section. Chapter 5 provides guidelines on planning and evaluating programs.

Exercise for Life! A Physical Activity Program for Prevention and Management of Diabetes is designed for individual or group use. The program supplies information relevant to diabetes care that should be incorporated before, during, and after exercises. Exercise activities focus on strength and stretching exercises for upper and lower body, balance exercises, and building cardiorespiratory and muscular endurance. Illustrations of older adults from culturally diverse backgrounds demonstrating the prescribed exercises are found throughout the program. A facilitator's guide for the program is also available in the module.

No testing for evidence of efficacy or effectiveness has been done on this program. For more information on *Exercise for Life! A Physical Activity Program for Prevention and Management of Diabetes*, visit http://www.asaging.org/cdc/module7/phase6/index.cfm. For more information on *Diabetes Prevention and Management: Small Steps with Big Rewards*, visit http://www.asaging.org/cdc/module7/home.cfm.

PROGRAM 3: *What I Need to Know About Physical Activity and Diabetes*[43]

Health Status:	Type 1 and type 2 diabetes
Age:	Adults of all ages
Language:	English and Spanish
Socioeconomic Status:	All
Educational Format:	Self-administered text
Year Published:	2004
Cost:	Download PDF version online (http://diabetes.niddk.nih.gov/dm/pubs/physical_ez/index.htm) or order single copy for free. Packages of 25, $10.00
Collaborators:	National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, National Diabetes Information Clearinghouse, and U.S Department of Health and Human Services
Contact Information:	National Diabetes Information Clearinghouse 1 Information Way Bethesda, MD 20892-3560 800-860-8747 (voice) ndic@info.niddk.nih.gov (email)

The *What I Need to Know About Physical Activity and Diabetes* self-help informational booklet briefly describes the benefits of leading a physically active lifestyle to maintain good diabetes control. The booklet focuses on activities to improve cardiorespiratory endurance, flexibility, and strength. Examples of activities varying from low to high intensity are listed. Some low-intensity examples include walking a dog, working in the garden, and taking the stairs instead of the elevator. To increase intensity level, the booklet describes aerobic and strength training activities to perform throughout the week.

The latter portion of the booklet provides diabetes information relevant to exercising—diabetes foot care, recommendations on blood glucose concentrations and how they are affected during exercising, and a chart on treating hypoglycemia.

The booklet concludes with resources on organizations that offer diabetes information. No evidence of efficacy or effectiveness was found. For more information on obtaining a copy of *What I Need to Know About Physical Activity and Diabetes*, visit http://diabetes.niddk.nih.gov.

PROGRAM 4: *Lift for Life*®[35]

Health Status:	Type 2 diabetes, prediabetes, multiple diabetes risk factors
Age:	50-80 years
Language:	English
Socioeconomic Status:	All
Educational Format:	Group-led physical activity program
Year Published:	Research—from 2002; pilot programs—2002 to 2006; national roll-out—commenced 2006.
Cost:	Variable. Contact manager for more information
Organizations:	International Diabetes Institute (IDI) (Melbourne, Australia) and Diabetes United Kingdom (UK)
Contact Information:	*Lift for Life*® International Diabetes Institute 250 Kooyong Road Caufield, Victoria Australia 3162 Renee Slade (Manager) 61 3 9258 5017 (voice) rslade@idi.org.au (email) http://www.liftforlife.com.au (Web site)

The *Lift for Life*® program is a sustainable evidence-based strength training program based in Australia for older adults with, or at risk for, diabetes. *Lift for Life*® aims to improve diabetes control, decrease body fat, increase strength, and enhance general health and wellbeing through a structured approach of strength training.

Lift for Life® introduces participants to strength training and assists them in establishing a regular strength training habit. In total, *Lift for Life*® is an 8-month program comprised of four 8-week strength training programs. *Lift for Life*® includes diligent assessments using a standardized assessment process; two supervised sessions per week by instructors trained by IDI; individually tailored strength training programs reviewed by *Lift for Life*® Exercise Consultants; small group sessions; and regular feedback to the participants and their health professionals.

Lift for Life® is based on findings from the Lift, Loosen and Lose for Diabetes study. Three published research articles were found describing the efficacy and effectiveness of the program in a sedentary population (aged 40–80) with type 2 diabetes in Australia.[25,26,27] One article describes the effect of high-intensity resistance training on bone mass in older adults with type 2 diabetes.[23] For more information on *Lift for Life*®, contact Renee Slade at rslade@idi.org.au.

PROGRAM 5: *Active Living Every Day*[12]

Health Status:	Sedentary
Age:	50+ years
Language:	English
Socioeconomic Status:	All
Educational Format:	Self-administered text
Year Published:	2001
Cost:	*Active Living Every Day* textbook: $29.95 *Active Living Every Day* Participant's Packet—access to the Active Living Partners Web site, textbook, online study guide**,** and online journal: $49.00
Organizations:	The Cooper Institute and Brown University Center for Behavioral and Preventive Medicine
Contact Information:	Human Kinetics P.O. Box 5076 Champaign, IL 61825 800-747-4457 (voice) info@hkusa.com (email) http://www.activeliving.info (Web site)

Active Living Every Day is a 20-week behavioral change program for sedentary adults. The program is available in two formats—an online course and a textbook. Participants may complete the program on their own or with a licensed and trained facilitator. *Active Living Every Day* was developed by The Cooper Institute and researchers from Brown University with the objective of encouraging people to overcome any barriers to becoming more physically active.

The *Active Living Every Day* textbook contains 20 chapters. Each chapter leads participants, step-by-step and at an appropriate pace, to improve their level of physical activity. Before beginning the program, it is recommended that the PAR-Q and You[16] questionnaire is completed. A copy of the questionnaire is provided in the textbook. The textbook offers charts, forms, and checklists to assist participants in recording their progress throughout the program. *Active Living Every Day* focuses on helping participants incorporate physical activity into their daily activities. Specific activities are also illustrated throughout the textbook, such as stretching exercises. Step counters are introduced to help monitor fitness progress.

The online course is a 20-week study guide that introduces participants to concepts and activities designed to achieve a more active lifestyle. Each week an online study guide familiarizes participants with eight components that help guide them from week to week. The online course offers a *My Journal* feature that allows participants to document activities and information relating to the program. In addition, participants are matched up with virtual *Active Living Every Day* buddies to help them through the behavioral change process.

Active Living Every Day was found to be efficacious among sedentary older adults (aged 50+ years) in a community setting. Participants reported a significant increase in physical activity after completing the program.[71] For more information on *Active Living Every Day*, visit http://www.activeliving.info.

PROGRAM 6: *CHAMPS II*[34]

Health Status:	Sedentary, underactive
Age:	65+ years
Language:	English
Socioeconomic Status:	All
Educational Format:	Group-led physical activity program with toolkit
Year Published:	2001
Cost:	Variable—dependent on facility
Organizations:	University of California, San Francisco and Stanford University
Contact Information:	University of California, San Francisco Institute for Health and Aging 3333 California Street, Suite 340 San Francisco, CA 94143-0646 Anita L. Stewart (Professor in Residence) 415-502-5207 (voice) anita.stewart@ucsf.edu (email) http://www.ucsf.edu/champs (Web site**)**

The *Community Healthy Activities Model Program for Seniors (CHAMPS)* is a lifestyle program to improve physical activity levels in older adults. *CHAMPS* targets sedentary older adults aged 65+ years. The program was first established with *CHAMPS I*, a public health model intervention that referred participants to existing physical activity classes and programs. *CHAMPS II* emerged from C*HAMPS I* as a choice-based promotional program to increase physical activity in sedentary adults aged 65+. *CHAMPS II* was developed by researchers at the University of California, San Francisco (UCSF) and Stanford University. The main goal for *CHAMPS II* is to significantly increase overall physical activity levels through taking part in structured and unstructured physical activities of light to moderate intensity.

CHAMPS II is comprised of physical activity counselors (PA counselors) who plan and conduct the program. PA counselors are health and fitness professionals with expertise in exercise safety for older adults, exercise instruction skills, principles and information related to exercise recommendations for older adults, and motivational counseling styles and strategies to encourage behavioral change. PA counselors can also receive additional training in exercise for older adults, Motivational Interviewing,[38] and self-management for people with chronic disease.

Before enrollment, participants are required to undergo a medical screening and receive a functional fitness assessment. During the medical screening process, participants complete a self-reported medical history. This process filters out those with medical problems who are not eligible to participate in *CHAMPS II*. For the functional fitness assessment, it is recommended that functional fitness tests developed by Guralnik et al.[33] or Rikli and Jones[56] be used. The assessment is repeated at 6- and 12-months to measure any changes in fitness.

Five mechanisms are used to encourage and support participants to increase their activity levels:

1. Personal planning session
2. Telephone support
3. Group workshops
4. Newsletters
5. Activity logs

Materials for *CHAMPS II* are supplied at the back of the manual, including participant and physician consent forms and a medical history questionnaire. Evaluation tools are available for PA counselors to schedule the 6-month functional fitness assessments and to record the 6-month medical history. Tips on recording activity logs from participants and a telephone follow-up form are also included. *CHAMPS II* was found to be effective in older adults aged 65+ enrolled in Medicare health maintenance organizations (HMOs).[62] In that study, participants in the intervention group significantly increased their estimated caloric expenditure in moderate-intensity and all physical activities. For more information on *CHAMPS II*, visit http://www.ucsf.edu/champs.

PROGRAM 7: *EnhanceFitness*[58]

Health Status:	Sedentary and healthy
Age:	65+ years
Language:	English, Spanish, Chinese, Hmong/Lao
Socioeconomic Status:	All
Educational Format:	Group-led physical activity program
Year Published:	1993
Cost:	Basic fee (year 1): $5,600 Renewal fee: $300 Capital (one-time only) costs: $850 Personnel: $9,220 Equipment and supplies: $10,245
Organizations:	Senior Services, Group Health Cooperative, and University of Washington Health Promotion Research Center
Contact Information:	Project Enhance Senior Services 2208 Second Avenue, Suite 100 Seattle, WA 98121 206-727-6219 (voice) projectenhance@seniorservies.org (email) http://www.projectenhace.org (Web site)

EnhanceFitness is a fitness program designed for sedentary older adults to improve their overall physical functioning. Developed by researchers at the University of Washington, in partnership with Senior Services and Group Health Cooperative, *EnhanceFitness* was initiated with the purpose of providing older adult communities with accessibility to a physical activity program. Exercise activities focus on balance, strength, cardiorespiratory endurance, and flexibility.

EnhanceFitness consists of a Project Coordinator or Manager who administers class scheduling, marketing, and training. However, organizations with multiple sites may want to hire a Program Manager to oversee these sites. Classes are taught by an *EnhanceFitness* Instructor who leads each class for 1 hour, three times per week. Fitness instructors are required to have certification as a fitness instructor and be certified in CPR. In addition, fitness instructors must complete all 1.5-day trainings in *EnhanceFitness* New Instructor Training.

A typical *EnhanceFitness* class includes:

- Ten to 25 participants with a fitness instructor
- 5-minute warm-up
- 20-minute cardiovascular workout
- 5-minute cool-down
- 20-minute strength training workout with soft ankle and wrist weights (0-20 lbs)
- 10-minute stretch

EnhanceFitness participants are evaluated by testing their performance measures to determine improvements in functional fitness. Performance measures are collected upon enrollment and at 4-month intervals. Participants are tested on three measures of functional fitness: upper-extremity strength, lower-extremity strength, and balance and walking skill. Also, participants are surveyed concerning their self-perception of general health and improvement in physical function, recent fall history, and how often they are physically active outside of class. Senior Services of Seattle/King County provides reports and analysis of performance measures to all participating organizations. One published article was found testing the efficacy of the program when it was known as the Lifetime Fitness Program.[61] Evidence of effectiveness was found at 4 and 8 months of participation in a community-based group exercise program for older adults enrolled in *EnhanceFitness*.[11] For more information on *EnhanceFitness*, visit http://www.projectenhace.org or email projectenhance@seniorservies.org.

PROGRAM 8: *Active Start*[47]

Health Status:	Sedentary, chronic conditions, and healthy
Age:	50+ years
Language:	English, some materials in Spanish
Socioeconomic Status:	Low income
Educational Format:	Group-led physical activity program with toolkit
Year Published:	Replication toolkit will be released in 2007 by NCOA
Cost:	Variable—dependent on facility
Organizations:	The OASIS Institute, City of Los Angeles Department on Aging, the U.S. Administration on Aging (AoA), and the National Council on the Aging
Contact Information:	The OASIS Institute 7710 Carondelet Avenue St. Louis, MO 63105 Jocelyn K. Tobnick (National Health Director) 314-862-2933 extension 237 (voice) jtobnick@oasisnet.org (email) http://www.oasisnet.org (Web site)

Active Start is a program consisting of two classes taught by trained leaders. The program combines *ExerStart* and *Active Living Every Day* for 20 weekly sessions—twice per week and once per week, respectively. *ExerStart* is a moderately paced exercise program developed by Dr. Jessie Jones, codirector of the Center for Successful Aging at California State University, Fullerton. The other component, *Active Living Every Day*, is a behavioral change program developed by The Cooper Institute.

Active Start is designed for use by senior centers and other providers of aging services to encourage sedentary older adult populations to increase their physical activity. Trained lay leaders—older adults in the community—lead both sessions. A staff sponsor is suggested to assist lay leaders. The physical activity session, *ExerStart*, which meets twice a week and lasts 45 minutes, uses low-intensity exercises designed to be led by older adult peers to improve cardiorespiratory endurance, flexibility, and muscle strength. During *Active Living Every Day* sessions, participants meet for 1 hour in a class that uses the support-group style. Participants are facilitated in learning about lifestyle physical activity and how to set goals, identify barriers to physical activity, and establish a social support system.

The Senior Fitness Test[56] is used to determine fitness levels during the first and last sessions of *Active Start*. Completion of the Canadian Physical Activity Readiness-Questionnaire (PAR-Q)[65] is encouraged before participation in the physical activity program but is not a program requirement. Two research papers are expected to be released sometime in the fall of 2007. A toolkit for *Active Start*, currently under development, will be released as part of the National Council on Aging's model programs project. *Active Start* can currently be accessed by contacting Jocelyn Tobnick from the OASIS Institute at Jtobnick@oasisnet.org.

PROGRAM 9: *Healthy Moves for Aging Well*[50]

Health Status:	Frail, homebound
Age:	65+ years
Language:	English, Spanish, Russian, Korean, Chinese, Armenian, Farsi
Socioeconomic Status:	Low income
Educational Format:	Group-led physical activity program with toolkit
Year Published:	2004
Cost:	Download free materials from http://www.picf.org, obtain a PDF version of the toolkit online, or order a free toolkit
Organizations:	Partners in Care Foundation (Partners), Archstone Foundation, The California Endowment, UniHealth, the U.S. Administration on Aging
Contact Information:	Partners in Care Foundation 732 Mott Street, Suite 150 San Fernando, CA 91340 Jennifer Wieckowski (Project Manager) 818-837-3775, extension 115 (voice) jwieckowski@picf.org (email)

Healthy Moves for Aging Well is a physical activity program designed to increase activity levels for frail and sedentary older adults enrolled in community-based care management programs. *Healthy Moves* was part of the National Council on the Aging's model programs project funded by the John A. Hartford Foundation, 2002 to 2004. *Healthy Moves* is currently funded privately by the Archstone Foundation and The California Endowment and UniHealth Foundation. *Healthy Moves* is part of the U.S. Administration on Aging's Evidence-based Prevention Initiative, 2004 to 2008. *Healthy Moves* uses care managers to teach simple, safe, functionally linked exercises to frail clients living at home. The main goal of the program is to improve functioning among frail older adults to delay or prevent their institutionalization.

Existing care managers from community agencies implementing *Healthy Moves* receive training to apply the elements of the program. The *Healthy Moves* toolkit contains information on behavioral change from research discussing interventions that have been tested for efficacy or effectiveness. Training in *Brief Negotiation* as a method for counseling about lifestyle change is required for care managers. This training should be facilitated by a trainer with a background in counseling about lifestyle change. Also, care managers need training from an expert to learn the program's exercises, which have been adapted from the research-based program the Senior Fitness Test.[54]

Following formal trainings, care managers visit clients on their regularly scheduled visits and invite eligible clients to participate in the *Healthy Moves* program. With consent, the care managers assess the physical condition of their clients, engage them to participate with proven Motivational Interviewing9 strategies, and teach their clients the exercises. One of two sets of exercises is taught: chair or advanced exercises.

Chair Exercises

1. Arm curl
2. Ankle point and flex
3. Seated step in place

Advanced Exercises

1. Chair stand
2. Standing step in place

At enrollment, participating clients receive colorful exercise handouts and have the option of receiving follow-up phone calls from a motivational coach to encourage adoption of the new behavior. Care managers partner with volunteer coaches from the community and local universities to closely monitor client progress by phone for 6 months. Volunteers conduct biweekly phone calls for the first 3 months and monthly phone calls for months 4, 5, and 6.

Healthy Moves materials can be found on the Partners in Care Web site, http://www.picf.org. The Web site features handouts for the clients, including illustrations and descriptions of the exercises in multiple languages, a monthly client exercise log, and a client consent form. Evaluation tools are available for the care manager to document pre-/post- client performance scores on the fitness tests; to track client improvements in pain, depression and fear of falling; and to document the number of falls in the last 3 months. In addition, care managers can track each client's progress in reaching her/his specified goal at enrollment and the client's likelihood of continuing to exercise after the monitoring period.

Process and client-level evaluation outcomes are being conducted by academic researchers, and the results will be published in 2008. The 2004 pilot project of *Healthy Moves* succeeded in getting very frail older adults with multiple functional losses and chronic conditions to adopt and continue in-home exercises. After 6 months, 76% continued to participate in regular exercise. In the current study, self-reported data shows evidence of increased strength and confidence and significant improvements in pain, in number of falls, and in the number of arm curls that can be performed in 30 seconds. For more information on *Healthy Moves*, visit http://www.picf.org. To obtain a copy of the *Healthy Moves for Aging Well* toolkit visit http://www.healthyagingprograms.org.

PROGRAM 10: *Exercise: A Guide from the National Institute on Aging*[45]

Health Status:	Frail, chronic conditions, and healthy
Age:	50+ years
Language:	English and Spanish (El Ejercicio y Su Salud44)
Socioeconomic Status:	All
Educational Format:	Self-administered text with video
Year Published:	2004
Cost:	Download free English and Spanish PDF version online at: http://www.nia.nih.gov/HealthInformation/Publications/ExerciseGuide (English) http://www.niapublications.org/pubs/ejercicio/index.asp (Spanish) $7 for the VHS or DVD version of Exercise: a Video from the National Institute on Aging.46 To order, visit http://www.niapublications.org/exercisevideo/exercisevhs.asp
Organization:	National Institute on Aging
Contact Information:	National Institute on Aging Building 31, Room 5C27 31 Center Drive, MSC 2292 Bethesda, MD 20892 800-222-2225 (voice) http://www.nia.nih.gov (Web site)

Exercise: A Guide from the National Institute on Aging is a self-help guide aimed at improving the health of older adults who want to start a safe and effective exercise program in a community setting. The book emphasizes four areas of ability that older adults should improve or maintain: cardiorespiratory endurance, strength, balance, and flexibility.

The first three chapters have general information about 1) the health benefits of exercise and physical activity, 2) how to exercise safely, and 3) how to stay motivated to exercise in everyday activities. The sample exercise chapter includes instructions and illustrations showing how to perform specific exercises. In the 48-minute video version, Margaret Richards of *The Body Electric* discusses safety issues and then demonstrates the exercises.

The book offers both self-tests for readers to track their exercise progress and a discussion of the role of nutrition in maintaining health. The appendix has information on target heart rate, a sample exercise plan, worksheets to record weekly exercise activities and monthly progress, and resources that can provide information about exercise and exercise programs especially for older adults.

The content of the *Guide* is evidence based, primarily from NIH/NIA-supported research. Even so, no testing for evidence of efficacy or effectiveness has been done on *Exercise: A Guide from the National Institute on Aging*. To see the online version in English, visit http://www.nia.nih.gov/HealthInformation/Publications/ExerciseGuide. For the online version in Spanish, visit http://www.niapublications.org/pubs/ejercicio/index.asp. To see a video clip, visit http://www.niapublications.org/exercisevideo/exercisevhs.asp.

PROGRAM 11: *Growing Stronger: Strength Training for Older Adults*[66]

Health Status:	Chronic conditions and healthy
Age:	50+ years
Language:	English
Socioeconomic Status:	All
Educational Format:	Self-administered text
Year Published:	2002
Cost:	Download free PDF version online or purchase a hard copy for $9.95 at: www.nutrition.tufts.edu/research/growingstronger/book.html
Organizations:	John Hancock Center for Physical Activity and Nutrition, the Friedman School of Nutrition Science and Policy at Tufts University; Division of Nutrition and Physical Activity (DNPA), Centers for Disease Control and Prevention
Contact Information:	For purchase information: 973-383-4811 (voice) tuftsbooks@customfulfillment.com (email) http://www.nutrition.tufts.edu/research/growingstronger (Web site)

The *Growing Stronger: Strength Training for Older Adults* exercise informational book was written with the goal of improving lifelong strength training for healthy older adults. In addition to improving strength, the exercises are designed to help maintain bone density; improve balance, coordination and mobility; and reduce risk of falling. The prescribed exercise program was developed and tested in an exercise research laboratory at Tufts University. The book is designed to be used at home, but the program could also be used effectively in a community setting.

The chapters include benefits of strength training, guidance, and advice on ways to remain motivated. The Starting Your Journey: 6 Simple Steps chapter has the following steps:

1. Complete the PAR-Q and You16 to evaluate whether the reader should seek medical guidance before starting the program.
2. Fill out the progress report worksheets on strength training to record strength improvements every 3 months for up to a year or longer.
3. Complete the goal-setting worksheets to identify short- and long-term goals.
4. Lists of basic exercise necessities (i.e., equipment and appropriate exercise clothing).
5. Advice on maintaining an exercise routine.
6. Safety issues.

The exercise chapter features three phases which:

1. Illustrate activities to slowly start the strength program using the participant's own body weight and functional movements.
2. Introduce exercises that use additional weight activities (i.e., dumbbells) to increase strength.
3. Illustrate a variety of more advanced exercises that include dumbbells and adjustable ankle weights to expand the scope of the program and its benefits using a stepwise process.

The online version of the program animates all the prescribed exercises, creating an interactive program. A 12-week supply of exercise log sheets is included to monitor progress. The resources provide contact information on public health organizations, books references, an equipment checklist, and an exercise glossary.

No testing for evidence of efficacy or effectiveness has been done. For more information on purchasing *Growing Stronger: Strength Training for Older Adults*, visit http://www.nutrition.tufts.edu/research/growingstronger.

PROGRAM 12: *Canada's Physical Activity Guide to Healthy Active Living for Older Adults*[53]

Health Status:	Chronic conditions and healthy
Age:	55+ years
Language:	English and French
Socioeconomic Status:	All
Educational Format:	Self-administered text
Year Published:	1999
Cost:	Order free copy online at: http://www.phac-aspc.gc.ca/pau-uap/fitness/order.html
Organization:	Public Health Agency of Canada (PHAC), Active Living Coalition for Older Adults (ALCOA), Canadian Society for Exercise Physiology (CSEP)
Contact Information:	Canada's Physical Activity Guide c/o Canada Communications Group Ottawa, Ontario K1A 0S7 Canada 888-334-9769 (voice) http://www.paguide.com (Web site)

Canada's Physical Activity Guide to Healthy Active Living for Older Adults is designed to promote physical activity in older adults. The booklet begins with information explaining the benefits of physical activity for maintaining good health and improving quality of life. It encourages older adults to check off recommended physical activities that are best suited to their individual needs. Older adults are encouraged to select activities from four activity groups —cardiorespiratory endurance, flexibility, strength, and balance. In addition, the booklet suggests activities for specific health conditions (i.e., arthritis and osteoporosis). Information on community contacts is included to assist older adults in starting their own physical activity program.

Inserted within the centerfold of the booklet is a pull-out 31-day calendar on one side and a brief description of *Canada's Physical Activity Guide to Healthy Active Living for Older Adults* on the other. The purpose of the calendar is to track activities and progress. An example of a typical week of daily activities is included.

No testing for evidence of efficacy or effectiveness has been done on this program. For more information on how to order a copy of *Canada's Physical Activity Guide to Healthy Active Living for Older Adults*, visit http://www.paguide.com.

PROGRAM 13: *1. First Step to Active Health*® (exercise program)[4] *2. Active Aging Toolkit* (healthcare provider manual)[3]

Health Status:	Healthy
Age:	50+ years
Language:	English, Spanish, and Korean
Socioeconomic Status:	All
Educational Format:	Self-administered text
Year Published:	2005
Cost:	1. Access free version online or purchase for $9.95, but it may be purchased for less depending on the distributor and the quantity: http://firststeptoactivehealth.com/youcan/ (exercise program) 2. Download free PDF version online at: http://firststeptoactive health.com/providers/ (healthcare provider manual)
Organizations:	American Academy of Family Physicians (AAFP), American College of Sports Medicine (ACSM), American Geriatrics Society (AGS), American Physical Therapy Association (APTA), National Center for Physical Activity and Disability (NCPAD), The President's Challenge (TPC), and Hygenic Corporation (HC)
Contact Information:	info@firststeptoactivehealth.com (email) http://www.firststeptoactivehealth.com (Web site)

First Step to Active Health® is part of the *Active Aging Toolkit*, which was developed in response to the *National Blueprint Increasing Physical Activity Among Adults Age 50 and Older*.[57] The Active Aging Toolkit offers health care providers specific interventions and programs to improve health and functional ability, to promote independence, and to prevent chronic disease and disability in older adults.

First Step to Active Health®, a well-rounded, evidence-based, individualized physical activity program for older adults, was created as a 4-step program of progressive exercise to improve physical and functional ability and to prevent or manage chronic disease in older adults. The 4-step routine focuses on:

1. Cardiorespiratory/Aerobic Endurance
2. Flexibility
3. Strength
4. Balance

Each step is divided into sub-steps:

1. Why: states the importance of the exercise activity.
2. What: lists what body parts to use in the exercise activity.
3. When: how often the activity should be performed each week.
4. Where to start: recommends starting level of intensity.
5. How to progress: recommends how to increase level of intensity.
6. Goal: states intensity levels that the person should reach at the end of each step.
7. When to move to the next step: incorporates the next step of the exercise program.
8. Recommended activities: lists examples of exercise activities.

After establishing the physical activity program, *First Step to Active Health*® has a How to Progress section with guidelines to maintain a well-rounded physical activity program. A physical activity log is included to track progress. This section also lists information on Ways to Stay Motivated and Exercise Hints. A section on resources (i.e., brochures, Web sites, videos, workshops, programs) on physical activity is included.

The effectiveness of *First Step to Active Health*® was tested in two pilot studies.[37,48] Both of these studies used the Senior Fitness Test[55] before and after the 10-week program to assess physical fitness. Improvements in physical fitness were found in both of the studies. For more information on the *First Step to Active Health*®, visit http://www.firststeptoactivehealth.com. For more information on the *Active Aging Toolkit*, visit http://firststeptoactivehealth.com/providers.

PROGRAM 14: *Eat Better and Move More*[70]

Health Status:	Healthy
Age:	60+ years
Language:	English, with Spanish versions of the evaluation tools
Socioeconomic Status:	All
Educational Format:	Group-led physical activity program with toolkit
Year Published:	2004
Cost:	$8.00 per manual (plus shipping and handling) Orders over 10 manuals, $7.50 each (plus shipping and handling) Orders over 250 manuals, $7.00 each (plus shipping and handling)
Organizations:	National Resource Center on Nutrition, Physical Activity and Aging at Florida International University (FIU), the U.S. Administration on Aging (associated with AoA's You Can! Steps to Healthier Aging Campaign)
Contact Information:	National Policy and Resource Center on Nutrition and Aging Florida International University OE 200 Miami, FL 33199 305-348-1517 (voice) http://nutritionandaging.fiu.edu (Web site)

The *Eat Better and Move More* program is designed to encourage older adults to eat healthier and increase their physical activity by walking. The program is part of the *You Can! Steps to Healthier Aging* Campaign, which is designed to help older adults improve their lifestyle in nutrition and physical activity. The main objective of *Eat Better and Move More* is to maintain the quality of life and independence of older adults. Community settings where older adults congregate are the best locations to implement *Eat Better and Move More*.

A program facilitator/leader, preferably a professional with a health or certified fitness background, leads the program. A facilitator/leader leads groups of 15 to 25 participants. Community volunteers can assist in each session. Volunteers can recruit participants, distribute questionnaires, and mentor participants. Program costs include step counters, staff time, paper supplies, and food. The manual does not describe a specific cost.

The program is comprised of 12-weekly sessions, with two components: *Eat Better and Move More*. *Eat Better* includes nutrition education. *Move More* includes exercise education and walking sessions. Exercise is measured (using step counters) by the number of steps that participants walk each day. Each week participants engage in "mini-talks," activities.

Week	*Eat Better* Mini-Talk	*Move More* Mini-Talk
1	Health Orientation and Enrollment	No session
2	No session	Orientation to Step Counters
3	5-a-Day, Fruits and Vegetables—importance of eating fruits and vegetables.	Set a New Step Goal—solve any problems incurred in wearing step counters.
4	5-a-Day with Variety and Color—increasing variety in choosing fruits and vegetables.	Stretching and Movement—introduce safe ways to stretch and to improve balance and flexibility while adding steps.
5	3-a-Day for Calcium—importance of calcium for bone health.	Stepping Up Your Pace—how to monitor how your body is working, add steps to walking regimen.
6	3-a-Day for Strong Bones—recognize the 3-a-Day for Stronger Bones campaign.	Stepping for Strong Bones—identify the benefits of physical activity for bone health.
7	Fiber Fitness—health benefits of fiber.	Walking in All Weather—how to keep up activities in different weather conditions.
8	More Options for Fiber—review benefits of fiber.	Keeping Regular—value of activity for intestinal health.
9	Sensible Portion Sizes—recognize healthy food portions.	Walking Tall—activities to do in addition to walking (e.g., proper posture).
10	Conquering Portion Distortion—review and practice sensible portion sizes.	Stepping to Healthy Weight—the role of physical activity in weight control.
11	Food Guide Pyramid—the health benefits of using the Food Guide Pyramid to guide food choices.	Activity at Home and Away—identify physical activities to do in addition to walking.
12	Celebrate Success—closing comments, distribute and collect questionnaires.	Celebrate Success—closing comments, distribute and collect questionnaires.

The appendices include data collection tools to measure outcomes: pre-program screening tool, consent forms for participants and their physicians, start-of-program assessment tools, and end-of-program assessment tools.

A pilot study for an additional 12 weeks of sessions was recently completed, focusing on the recommendations of the Dietary Guidelines for Americans 2005 and adding some strength training using elastic bands. Two additional weekly sessions were added: diabetes and hypertension. Part II of *Eat Better and Move More* is available on the program's Web site. The effectiveness of the program was tested in a 10-site intervention study.69 Participants reported a significant increase ($P<0.001$) in the number of steps walked per day at postintervention (4183) that at preintervention (3110). Tracking forms for data collection and a Spanish version of many of the program materials are available online. For more information, visit http://www.nutritionandaging.fiu.edu.

PROGRAM 15: *Get Fit for Active Living*[15]

Health Status:	Healthy and mobile. Residing in retirement home or community
Age:	55+ years
Language:	English and French
Socioeconomic Status:	All
Educational Format:	Group-led physical activity program
Year Published:	2001
Cost:	*For facilitators:* Seniors Fitness Instructors Course (and manual): $175 Evaluation of instructor to certify: $75 Instructor's biannual renewal fee: $50 (to maintain certification) *Get Fit for Active Living* facilitator training course (and manual): $300 *For participants:* $150 for 8 weeks
Organization:	Canadian Centre for Activity and Aging (CCAA)
Contact Information:	519-661-1603 (voice) ccaa@uwo.ca (email)

The *Get Fit for Active Living* program is an exercise and education program for older adults. The program teaches older adults how to get started on a regular exercise program, and it stresses the importance of a healthy, active lifestyle for maintaining independence. The program encourages older adults with an effective exercise program to lead physically active healthy lifestyles. The *Get Fit for Active Living* is delivered at host facilities.

For 8 weeks, participants are involved in two exercise classes, one strengthening class, and one educational class per week. Here are the foci for the 8 weeks:

1. Getting Started: The Benefits of Physical Activity
2. Exercise Adherence
3. Cardiorespiratory Endurance Exercise
4. Muscle Strength and Endurance
5. Flexibilty and Stretching/Balance Basics
6. Healthy Eating
7. Disease Prevention
8. Exercising at Home/Exercise Program Options

The exercise sessions include warm-up, walking and/or aerobics, balance exercise, stretching, and a cool-down. Strength training is also included in the exercise regimen. Qualified and certified fitness instructors teach the exercise sessions.

An evaluation report is available from participants who attended *Get Fit for Active Living* programs between March 2000 to March 2003. In a 1-month follow-up, 73% exercised regularly, and at 12 months, 64% exercised regularly.[36] For more information on *Get Fit for Active Living*, visit http://www.uwo.ca/actage.

PROGRAM 16: *Texercise*[63]

Health Status:	Healthy
Age:	60+ years
Language:	English and Spanish
Socioeconomic Status:	All
Educational Format:	Self-administered text
Year Published:	1999
Cost:	Download free PDF version online
Organization:	Texas Department of Aging and Disability Services
Contact Information:	Texas Department of Aging and Disability Services 701 West 51st Street MCW616 Austin, TX 78751 512-438-4293 (voice) http://www.texercise.com (Web site)

Texercise is a fitness campaign developed by the Texas Department of Aging and Disability Services to promote physical activity in older adults. The *Texercise Handbook* is a tool available through Texercise designed to prescribe physical activity and proper nutrition lifestyles for older adults.

The handbook begins with facts on vitamins and minerals—listing recommendations, food sources, and how each nutrient functions in the body. The handbook also includes sections on physical activity and exercise. Four types of exercises are recommended: cardiorespiratory endurance, strength, balance, and flexibility. The section on muscular endurance provides activities for different levels of physical activity—beginner, beginner-intermediate, and intermediate-advanced. Walking is one muscular endurance activity used in the *Texercise Handbook*. Instructions on checking your pulse while exercising are included, along with a target heart rate chart. In addition, a 3-phase fitness-walking program is included to assist participants in slowly starting a regular exercise regimen.

The strength, balance, and flexibility sections provide examples of activities for each exercise type. All the exercise activities come with instructions and illustrations to assist participants in performing each exercise properly. The handbook concludes with two sheets of a Daily Physical Activity Log and one Daily Exercise Log.

Texercise recently developed the *Texercise 12-Week Fitness Program*. The packet provides seven how-to instructions on implementing and maintaining that program:

1. Define your approach
2. Plan an event to launch your *Texercise 12-Week Fitness Program*
3. Identify the launch date and location for your *Texercise 12-Week Fitness Program*
4. Create awareness of the event
5. Event resources
6. Motivate
7. Wrap-up

Texercise donates resources to organizations that implement the *Texercise 12-Week Fitness Program* with at least 25 participants. No testing for evidence of efficacy or effectiveness has been done. For more information on the tools and resources provided by *Texercise*, visit http://www.texercise.com.

PROGRAM 17: *The SilverSneakers Fitness Program*[10]

Health Status:	Healthy
Age:	65+ years
Language:	English
Socioeconomic Status:	All
Educational Format:	Group-led physical activity program
Year Published:	1992
Cost:	Variable—dependent on facility. No cost to members of a participating Medicare health plan
Organization:	Axia Health Management
Contact Information:	The SilverSneakers Fitness Program 9280 South Kyrene Road, Suite 134 Tempe, AZ 85284 888-423-4632 (voice) http://www.silversneakers.com (Web site)

The SilverSneakers Fitness Program is an evidenced-based physical activity and preventive health program managed by Axia Health Management for Medicare-eligible populations. SilverSneakers is designed for older adults to improve their physical activity and mental well-being.

Participants enrolled in *The SilverSneakers Fitness Program* receive a free fitness center membership at any participating location throughout the U.S., access to SilverSneakers classes, information on health education seminars and social events, and a trained Senior Advisor. SilverSneakers classes focus on increasing balance, cardiorespiratory endurance, flexibility, and strength. Classes are led by certified fitness instructors trained by SilverSneakers.

The SilverSneakers Fitness Program offers two types of group fitness classes:

SilverSneakers I – Muscular Strength and Range of Movement

This class is designed to increase strength in all muscle groups and in range of movement to improve daily activities. Participants use hand-held hand weights, elastic tubing with handles, a *SilverSneakers* ball for resistance, and a chair for standing and/or seated support.

SilverSneakers II – Cardio Circuit Class

This is an advanced class designed for participants who are currently physically active. Non-impact training for cardiovascular conditioning is taught in a circuit format (a group of 6 to 10 strength exercises that is completed one after another) with alternating resistance-tool work and choreography that promotes aerobic conditioning.

No testing for evidence of efficacy and effectiveness has been done on this program. However, two preliminary studies have been conducted on the impact that *SilverSneakers* has on health care utilization and cost; results from both studies are currently in review. For more information on *The SilverSneakers Fitness Program*, visit http://www.silversneakers.com.

Contact Table

Program Title (year)/Sponsoring Organization(s)/Web site	Contact Information (to order materials)
Healthy Changes (2006, version 4) ***Cambios Saludables*** (2004, version 3) Providence Center on Aging (Portland, OR) and National Council on Aging http://www.healthyagingprograms.org	The National Council on the Aging P.O. Box 411 Annapolis Junction, MD 20701 800-373-4906 (voice) 301-604-0158 (fax) ncoa@pmds.com (email)
Exercise for Life! A Physical Activity Program for Prevention and Management of Diabetes (exercise program, 2005) http://www.asaging.org/cdc/module7/phase6/index.cfm ***Diabetes Prevention and Management for Older Adults: Small Steps with Big Rewards*** (educational module for providers, 2005) http://www.asaging.org/cdc/module7/home.cfm American Society on Aging, Centers for Disease Control and Prevention. Endorsed by the National Diabetes Education Program	American Society on Aging 883 Market Street Suite 511 San Francisco, CA 94103 Chaya Gordon (Senior Research Manager) 415-974-9604 (voice) cgordon@asaging.org (email)
What I Need to Know about Physical Activity and Diabetes (2004) National Institute of Diabetes and Digestive and Kidney Diseases, National Diabetes Information Clearinghouse, U.S. Department of Health and Humans Services http://diabetes.niddk.nih.gov http://diabetes.niddk.nih.gov/dm/pubs/physical_ez	National Diabetes Information Clearinghouse 1 Information Way Bethesda, MD 20892-3560 800-860-8747 (voice) ndic@info.niddk.nih.gov (email)
Lift for Life® (2002) International Diabetes Institute (Melbourne, Australia), Diabetes United Kingdom http://www.liftforlife.com.au	Life for Life® International Diabetes Institute 250 Kooyong Road Caufield, Victoria Australia 3162 Renee Slade (Manager) 61 3 9258 5017 (voice) rslade@idi.org.au (email)
Active Living Every Day (2001) Cooper Institute, Brown University http://www.activeliving.info	Human Kinetics P.O. Box 5076 Champaign, IL 61825 800-747-4457 (voice) 217-351-1549 (fax) info@hkusa.com (email)
CHAMPS II: Community Healthy Activities Model Program for Seniors (2001) University of California, San Francisco, Stanford University http://www.ucsf.edu/champs	University of California, San Francisco Institute for Health and Aging 3333 California Street, Suite 340 San Francisco, CA 94143-0646 Anita L. Stewart (Professor in Residence) 415-502-5207 (voice) 415-502-5208 (fax) Anita.Stewart@ucsf.edu (email)
EnhanceFitness (1993) Senior Services, Group Health Cooperative, University of Washington http://projectenhance.org	Project Enhance Senior Services 2208 Second Avenue, Suite 100 Seattle, WA 98121 206-727-6219 (voice) 206-448-5766 (fax) projectenhance@seniorservices.org (email)

Program Title (year)/Sponsoring Organization(s)/Web site	Contact Information (to order materials)
Active Start (implementation toolkit is currently under development and expected to be available in 2007. This program can currently be accessed by calling OASIS.) The OASIS Institute, City of Los Angeles Department of Aging, the U.S. Administration on Aging, National Council on Aging http://www.oasisnet.org http://www.healthyagingprograms.org	The OASIS Institute 7710 Carondelet Ave. St. Louis, MO 63105 Jocelyn K. Tobnick (National Health Director) 314-862-2933, extension 237 (voice) 314-862-2149 (fax) jtobnick@oasisnet.org (email)
Healthy Moves for Aging Well (2004) Partners in Care Foundation, Archstone Foundation, The California Endowment, UniHealth, the U.S. Administration on Aging http://www.picf.org http://www.healthyagingprograms.org	Partners in Care Foundation 732 Mott Street, Suite 150 San Fernando, CA 91340 818-837-3775 (voice) 818-837-3799 (fax) Jennifer Wieckowski (Project Manager) 818-837-3775, extension 115 (voice) jwieckowski@picf.org (email) June Simmons (CEO/President) 818-837-3775, extension 101 (voice) jsimmons@picf.org (email) The National Council on the Aging P.O. Box 411 Annapolis Junction, MD 20701 800-373-4906 (voice) 301-604-0158 (fax) ncoa@pmds.com (email)
Exercise: A Guide from the National Institute on Aging (2004) http://www.nia.nih.gov/HealthInformation/Publications/ExerciseGuide ***Exercise: A Video from the National Institute on Aging*** (2000) http://www.niapublications.org/exercisevideo/exercisevhs.asp ***El Ejercicio y Su Salud*** (2001) http://www.niapublications.org/pubs/ejercicio/index.asp National Institute on Aging http://www.nia.nih.gov	National Institute on Aging Building 31, Room 5C27 31 Center Drive, MSC 2292 Bethesda, MD 20892 800-222-2225 (voice)
Growing Stronger: Strength Training for Older Adults (2002) Tufts University, the Centers for Disease Control and Prevention http://nutrition.tufts.edu/research/growingstronger	973-383-4811 (voice) 973-579-3760 (fax) tuftsbooks@customfulfillment.com (email)
Canada's Physical Activity Guide to Healthy Active Living for Older Adults (1999) Public Health Agency of Canada, Active Living Coalition for Older Adults, Canadian Society for Exercise Physiology http://www.paguide.com	Canada's Physical Activity Guide c/o Canada Communications Group Ottawa, Ontario K1A 0S7 Canada 888-334-9769 (voice)
First Step to Active Health (exercise program, 2004) http://www.firststeptoactivehealth.com/youcan ***Active Aging Toolkit*** (provider manual, 2004) http://www.firststeptoactivehealth.com/providers American Academy of Family Physicians, American College of Sports Medicine, American Geriatrics Society, American Physical Therapy Association, National Center for Physical Activity and Disability, The President's Challenge, and Hygenic Corporation http://www.firststeptoactivehealth.com	info@firststeptoactivehealth.com (email)

Program Title (year)/Sponsoring Organization(s)/Web site	Contact Information (to order materials)
Eat Better and Move More (2004) Florida International University, U.S. Administration on Aging http://nutritionandaging.fiu.edu http://www.aoa.gov/youcan	National Policy and Resource Center on Nutrition and Aging Florida International University OE 200 Miami, FL 33199 305-348-1517 (voice) 305-348-1518 (fax)
Get Fit For Active Living (2004) Canadian Centre for Activity and Aging http://www.uwo.ca/actage http://www.ccaa-outreach.com	519-661-1603 (voice) 519-661-1612 (fax) ccaa@uwo.ca (email)
Texercise (2006) Texas Department of Aging and Disability Services http://www.texercise.com	Texas Department of Aging and Disability Services 701 W. 51st Street MCW616 Austin, TX 78751 512-438-4293 (voice)
The SilverSneakers Fitness Program (1992) Axia Health Management http://www.silversneakers.com	The SilverSneakers Fitness Program 9280 South Kyrene Road, Suite 134 Tempe, AZ 85284 888-423-4632 (voice) 480-598-3540 (fax)

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