HEALTHCARE LITERACY GUIDE



FOR AGING AND DISABLED

Understanding at-risk health-related issues, tips for at-risk prevention, and how to manage health-related tasks



Prepared by:

Susan Rauch

For:

The Service-Learning Initiative (SLI) Texas State University-San Marcos Website SLI Intergenerational Webpage

In fulfillment of:

Eng 5314-Medical Rhetoric Service-Learning Course

Instructor: Dr. Libby Allison

Department of English Masters of Arts in Technical Communication

Texas State University-San Marcos

April 28, 2010

Contents

Acknowledgements 5 Healthcare Literacy - Why? 6 Healthy Literacy 7 ◇ Statistics and History 7 ◇ Health and Wellness for Elderly - Statistics and History 8 ◇ Health Information - Medication and Basic Health 10 ◇ Understanding Health Information - Pharmacy/Online 10 ◇ Healthcare Literacy Terms Glossary 12 ◇ Disabilities and Healthcare 16 Home Safety and At-Risk Prevention 18 ◇ Preventing falls and accidents 8 ◇ Exercise 22 ◇ Nutrition 24 Diet and Food Obstacles 24 Making Good Food Choices 25 How much is enough? 32 Smart Shopper 40 Eat Well on a Budget 41 Diabetes Prevention 43 ◇ Food Safety 44 Foodborne Illness and BAC 44 Cross Contamination 45 Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 ◇ EBDDP 54 ◇ CDSMP 55 ◇ SLI-Wii Fit Study 56 ◇ What is Service Learning? Health Incentives 57 ◇ Service-Learning Initiative at Texas State 58 ◇ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ◇ Food: Eating Well and Health Safety 60 A Home Health: Safety and Wellness 74	About This	Guide 4	
Healthy Literacy 7	Acknowled	lgements 5	
♦ Statistics and History 7 ♦ Health and Wellness for Elderly - Statistics and History 8 ♦ Health Information - Medication and Basic Health 10 ♦ Understanding Health Information - Pharmacy/Online 10 ♦ Healthcare Literacy Terms Glossary 12 ♦ Disabilities and Healthcare 16 Home Safety and At-Risk Prevention 18 ♦ Preventing falls and accidents 8 ♦ Exercise 22 ♦ Nutrition 24 Diet and Food Obstacles 24 Making Good Food Choices 25 How much is enough? 32 Smart Shopper 40 Eat Well on a Budget 41 Diabetes Prevention 43 ♦ Food Safety 44 44 Foodborne Illness and BAC 44 Cross Contamination 45 Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 © EBDDP 54 © CDSMP 0 SLI-Wii Fit Study 0 Service-Learning Initiative at Texas State 0 Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 Food: Eating Well and Health Safety 60 	Healthcare	Literacy - Why? 6	
♦ Statistics and History 7 ♦ Health and Wellness for Elderly - Statistics and History 8 ♦ Health Information - Medication and Basic Health 10 ♦ Understanding Health Information - Pharmacy/Online 10 ♦ Healthcare Literacy Terms Glossary 12 ♦ Disabilities and Healthcare 16 Home Safety and At-Risk Prevention 18 ♦ Preventing falls and accidents 8 ♦ Exercise 22 ♦ Nutrition 24 Diet and Food Obstacles 24 Making Good Food Choices 25 How much is enough? 32 Smart Shopper 40 Eat Well on a Budget 41 Diabetes Prevention 43 ♦ Food Safety 44 44 Foodborne Illness and BAC 44 Cross Contamination 45 Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 © EBDDP 54 © CDSMP 0 SLI-Wii Fit Study 0 Service-Learning Initiative at Texas State 0 Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 Food: Eating Well and Health Safety 60 	Healthy Lit	eracy 7	
 ♦ Health and Wellness for Elderly - Statistics and History ♦ Health Information - Medication and Basic Health ♦ Understanding Health Information - Pharmacy/Online ♦ Healthcare Literacy Terms Glossary ♦ Disabilities and Healthcare 16 Home Safety and At-Risk Prevention ♦ Preventing falls and accidents ♦ Exercise 22 ♦ Nutrition 24 Diet and Food Obstacles How much is enough? 32 Smart Shopper How much is enough? 32 Smart Shopper House Health Information Food Safety Prodborne Illness and BAC Clean-Separate-Cook-Chill Reheating What to Avoid Meals-to-go FDA Food Safety Chart EBDDP ♦ EBDDP ♦ CDSMP SLI-Wii Fit Study ♦ Get Creative Stay Young Frequently Asked Questions Food: Eating Well and Health Safety Food: Eating Well and Health Safety Food: Eating Well and Health Safety 	•	•	
 ♦ Understanding Health Information - Pharmacy/Online 10 ♦ Healthcare Literacy Terms Glossary 12 ♦ Disabilities and Healthcare 16 Home Safety and At-Risk Prevention 18 ♦ Preventing falls and accidents 8 ♦ Exercise 22 ♦ Nutrition 24 ■ Diet and Food Obstacles 24 ■ Making Good Food Choices 25 ■ How much is enough? 32 ■ Smart Shopper 40 ■ Eat Well on a Budget 41 ■ Diabetes Prevention 43 ♦ Food Safety 44 ■ Foodborne Illness and BAC 44 ■ Cross Contamination 45 ■ Clean-Separate-Cook-Chill 46 ■ Reheating 48 ■ What to Avoid 48 ■ Meals-to-go 49 ■ FDA Food Safety Chart 50 Intergenerational Programing 54 ♦ EBDDP 54 ♦ CDSMP 55 ♦ SLI-Wii Fit Study 56 ♦ What is Service Learning? Health Incentives 57 ♦ Service-Learning Initiative at Texas State 58 ♦ Get Creative Stay Young 59 ■ National Center for Creative Aging 59 ■ Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60 		•	atistics and History 8
♦ Healthcare Literacy Terms Glossary 12 ♦ Disabilities and Healthcare 16 Home Safety and At-Risk Prevention 18 ♦ Preventing falls and accidents 8 ♦ Exercise 22 ♦ Nutrition 24 Diet and Food Obstacles 24 Making Good Food Choices 25 How much is enough? 32 Smart Shopper 40 Eat Well on a Budget 41 Diabetes Prevention 43 ♦ Food Safety 44 Foodborne Illness and BAC 44 Cross Contamination 45 Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 ♦ EBDDP 54 ♦ CDSMP 55 ♦ SLI-Wii Fit Study 56 ♦ What is Service Learning? Health Incentives 57 ♦ Service-Learning Initiative at Texas State 58 ♦ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60	♦ H	ealth Information - Medication an	nd Basic Health 10
♦ Disabilities and Healthcare 16 Home Safety and At-Risk Prevention 18 ♦ Preventing falls and accidents 8 ♦ Exercise 22 ♦ Nutrition 24 Diet and Food Obstacles 24 Making Good Food Choices 25 How much is enough? 32 Smart Shopper 40 Eat Well on a Budget 41 Diabetes Prevention 43 ♦ Food Safety 44 Foodborne Illness and BAC Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 ♦ EBDDP 54 ♦ CDSMP 55 ♦ SLI-Wii Fit Study 56 ♦ What is Service Learning? Health Incentives 57 ♦ Service-Learning Initiative at Texas State 58 ♦ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60	♦ U	nderstanding Health Information	- Pharmacy/Online 10
Home Safety and At-Risk Prevention ○ Preventing falls and accidents ○ Exercise 22 ○ Nutrition 24 Diet and Food Obstacles 24 Making Good Food Choices 25 How much is enough? 32 Smart Shopper 40 Eat Well on a Budget 41 Diabetes Prevention 43 ○ Food Safety 44 Foodborne Illness and BAC 44 Cross Contamination 45 Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 ○ EBDDP 54 ○ CDSMP 55 ○ SLI-Wii Fit Study 56 ○ What is Service Learning? Health Incentives 57 ○ Service-Learning Initiative at Texas State 58 ○ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ○ Food: Eating Well and Health Safety 60	♦ H	ealthcare Literacy Terms Glossary	12
♦ Preventing falls and accidents 8 ♦ Exercise 22 ♦ Nutrition 24 Diet and Food Obstacles 24 Making Good Food Choices 25 How much is enough? 32 Smart Shopper 40 Eat Well on a Budget 41 Diabetes Prevention 43 ♦ Food Safety 44 44 Foodborne Illness and BAC 44 Cross Contamination 45 Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 © EBDDP 54 © CDSMP 55 ♦ SLI-Wii Fit Study 56 ♦ What is Service Learning? Health Incentives 57 ♦ Service-Learning Initiative at Texas State \$8 ♦ Get Creative Stay Young 59 National Center for Creative Aging 59 Frequently Asked Questions 60 Food: Eating Well and Health Safety 60	◊ D	isabilities and Healthcare	16
♦ Exercise 22 ♦ Nutrition 24 Diet and Food Obstacles 24 Making Good Food Choices 25 How much is enough? 32 Smart Shopper 40 Eat Well on a Budget 41 Diabetes Prevention 43 ♦ Food Safety 44 Foodborne Illness and BAC 44 Cross Contamination 45 Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 ♦ EBDDP 54 ♦ CDSMP 55 ♦ SLI-Wii Fit Study 56 ♦ What is Service Learning? Health Incentives 57 ♦ Service-Learning Initiative at Texas State 58 ♦ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60	Home Safet	y and At-Risk Prevention	18
Diet and Food Obstacles 24 Making Good Food Choices 25 How much is enough? 32 Smart Shopper 40 Eat Well on a Budget 41 Diabetes Prevention 43 ◇ Food Safety 44 Foodborne Illness and BAC 44 Cross Contamination 45 Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 ◇ EBDDP 54 ◇ CDSMP 55 ◇ SLI-Wii Fit Study 56 ◇ What is Service Learning? Health Incentives 57 ◇ Service-Learning Initiative at Texas State 58 ◇ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ◇ Food: Eating Well and Health Safety 60	♦ P	reventing falls and accidents	8
Diet and Food Obstacles 24 Making Good Food Choices 25 How much is enough? 32 Smart Shopper 40 Eat Well on a Budget 41 Diabetes Prevention 43 Food Safety 44 Foodborne Illness and BAC 44 Cross Contamination 45 Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 EBDDP 54 CDSMP 55 Mit Sul-Wii Fit Study 56 What is Service Learning? Health Incentives 57 Service-Learning Initiative at Texas State 58 Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 Food: Eating Well and Health Safety 60	♦ E:	xercise 22	
Making Good Food Choices 25 How much is enough? 32 Smart Shopper 40 Eat Well on a Budget 41 Diabetes Prevention 43 ♦ Food Safety 44 Foodborne Illness and BAC 44 Cross Contamination 45 Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 ♦ EBDDP 54 ♦ CDSMP 55 ♦ SLI-Wii Fit Study 56 ♦ What is Service Learning? Health Incentives 57 ♦ Service-Learning Initiative at Texas State 58 ♦ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60	◊ N	utrition 24	
Making Good Food Choices 25 How much is enough? 32 Smart Shopper 40 Eat Well on a Budget 41 Diabetes Prevention 43 ♦ Food Safety 44 Foodborne Illness and BAC 44 Cross Contamination 45 Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 ♦ EBDDP 54 ♦ CDSMP 55 ♦ SLI-Wii Fit Study 56 ♦ What is Service Learning? Health Incentives 57 ♦ Service-Learning Initiative at Texas State 58 ♦ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60		Diet and Food Obstacles	24
How much is enough? 32 Smart Shopper 40 Eat Well on a Budget 41 Diabetes Prevention 43 ♦ Food Safety 44 Foodborne Illness and BAC 44 Cross Contamination 45 Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 ♦ EBDDP 54 ♦ CDSMP 55 ♦ SLI-Wii Fit Study 56 ♦ What is Service Learning? Health Incentives 57 ♦ Service-Learning Initiative at Texas State 58 ♦ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60		Making Good Food Choices	25
Eat Well on a Budget Diabetes Prevention Food Safety 44 Foodborne Illness and BAC Cross Contamination Clean-Separate-Cook-Chill Reheating What to Avoid Meals-to-go FDA Food Safety Chart Intergenerational Programing 54 □ EBDDP □ S4 □ CDSMP □ S5 □ SLI-Wii Fit Study □ S6 □ What is Service Learning? Health Incentives □ Service-Learning Initiative at Texas State □ S7 □ Service-Learning Initiat		_	32
Diabetes Prevention 43 ♦ Food Safety 44 Foodborne Illness and BAC 44 Cross Contamination 45 Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 ♦ EBDDP 54 ♦ CDSMP 55 ♦ SLI-Wii Fit Study 56 ♦ What is Service Learning? Health Incentives 57 ♦ Service-Learning Initiative at Texas State 58 ♦ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60		Smart Shopper	40
Food Safety 44 Foodborne Illness and BAC 44 Cross Contamination 45 Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 © EBDDP 54 © CDSMP 55 © SLI-Wii Fit Study 56 © What is Service Learning? Health Incentives 57 © Service-Learning Initiative at Texas State 58 © Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 © Food: Eating Well and Health Safety 60		Eat Well on a Budget	41
Foodborne Illness and BAC 44 Cross Contamination 45 Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 © EBDDP 54 © CDSMP 55 © SLI-Wii Fit Study 56 © What is Service Learning? Health Incentives 57 © Service-Learning Initiative at Texas State 58 © Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 © Food: Eating Well and Health Safety 60		Diabetes Prevention	43
Cross Contamination 45 Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54	♦ Fe	ood Safety 44	
Clean-Separate-Cook-Chill 46 Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54		Foodborne Illness and BAC	44
Reheating 48 What to Avoid 48 Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 © EBDDP 54 © CDSMP 55 © SLI-Wii Fit Study 56 © What is Service Learning? Health Incentives 57 © Service-Learning Initiative at Texas State 58 © Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 © Food: Eating Well and Health Safety 60		Cross Contamination	45
What to Avoid Meals-to-go FDA Food Safety Chart Intergenerational Programing 54 ◇ EBDDP 54 ◇ CDSMP 55 ◇ SLI-Wii Fit Study 56 ◇ What is Service Learning? Health Incentives 57 ◇ Service-Learning Initiative at Texas State 58 ◇ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ◇ Food: Eating Well and Health Safety 60		Clean-Separate-Cook-Chill	46
Meals-to-go 49 FDA Food Safety Chart 50 Intergenerational Programing 54 ◇ EBDDP 54 ◇ CDSMP 55 ◇ SLI-Wii Fit Study 56 ◇ What is Service Learning? Health Incentives 57 ◇ Service-Learning Initiative at Texas State 58 ◇ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ◇ Food: Eating Well and Health Safety 60		Reheating	48
Intergenerational Programing 54 ◇ EBDDP 54 ◇ CDSMP 55 ◇ SLI-Wii Fit Study 56 ◇ What is Service Learning? Health Incentives 57 ◇ Service-Learning Initiative at Texas State 58 ◇ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ◇ Food: Eating Well and Health Safety 60		What to Avoid	48
Intergenerational Programing 54 ◇ EBDDP 54 ◇ CDSMP 55 ◇ SLI-Wii Fit Study 56 ◇ What is Service Learning? Health Incentives 57 ◇ Service-Learning Initiative at Texas State 58 ◇ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ◇ Food: Eating Well and Health Safety 60		Meals-to-go	49
 ♦ EBDDP 54 ♦ CDSMP 55 ♦ SLI-Wii Fit Study 56 ♦ What is Service Learning? Health Incentives 57 ♦ Service-Learning Initiative at Texas State 58 ♦ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60 		FDA Food Safety Chart	50
 ♦ CDSMP 55 ♦ SLI-Wii Fit Study 56 ♦ What is Service Learning? Health Incentives 57 ♦ Service-Learning Initiative at Texas State 58 ♦ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60 	Intergener	ational Programing 54	
 ♦ SLI-Wii Fit Study 56 ♦ What is Service Learning? Health Incentives 57 ♦ Service-Learning Initiative at Texas State 58 ♦ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60 	♦ E	BDDP 54	
 ♦ What is Service Learning? Health Incentives 57 ♦ Service-Learning Initiative at Texas State 58 ♦ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60 	♦ C	DSMP 55	
 ♦ Service-Learning Initiative at Texas State 58 ♦ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60 	◊ S	LI-Wii Fit Study 56	
 ♦ Get Creative Stay Young 59 National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60 	◊ \ \ \ \	hat is Service Learning? Health	Incentives 57
National Center for Creative Aging 59 Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60	♦ Se	ervice-Learning Initiative at Texa	as State 58
Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60	♦ G	et Creative Stay Young 59	
Creativity Matters Toolkit 59 Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60		National Center for Creative	Aging 59
Frequently Asked Questions 60 ♦ Food: Eating Well and Health Safety 60			• •
♦ Food: Eating Well and Health Safety 60	Frequently A	,	
·			etv 60
		ome Health: Safety and Wellne	•
Resources, Citations 82		•	

About This Guide

This Healthcare Literacy Guide is supplemental to the Service-Learning Initiative at Texas State Intergenerational core programs, providing key healthcare wellness and prevention information to aging and disabled participants, as well as online resources for the Greater San Marcos community.

This healthcare literacy guide is created to assist aging and disabled communities in understanding health-related risks, how to prevent being at risk, and how to manage health-related tasks. It points out chronic diseases, behaviors and safety factors that attribute to atrisk health issues. The guide also serves as a reference for community providers and students participating in intergenerational programs, especially those with healthcare outcomes.

Acknowledgements

The Service-Learning Initiative at Texas State University-San Marcos for support of the SLI webpage project and implementation of this guide with the Intergenerational webpage including: SLI directors Dr. Randall Osborne and Dr. Oren Renick, graduate assistants Erin Henry and Phillip Burrell, and SLI Advisory Board 2010.

Dr. Libby Allison, my service learning course professor and Director of the for support of this project.

Susan Schramm, MEd, County Extension Agent, Family and Consumer Sciences, Hays County, who provided me food safety content from a senior food safety workshop at Springtown Villa in San Marcos Texas, and web links access for To Your Health! Food Safety for Seniors including FDA and USDA

Maria Calcaben, Elderly & Disabled Services Coordinator, San Marcos Housing Authority, Springtown Villas

San Marcos Farmer's Market, San Marcos, Texas.

The following online agencies for web content permissions:

NIHSeniorhealth
MedlinePlus
AOA (Administration on Aging)
HelpGuide.org
National Center for Creative Aging
CDC (Center for Disease Control)
US Dept of Health and Human Services
Stanford University Chronic Disease Self-Management Program
CCPH (Community-campus partnerships for health professions education)
Agency for Healthcare Research and Quality
Americans with Disabilities Act
FoodSafety.gov

Healthcare Literacy - Why?

Many aging or disabled individuals cannot leave their homes because of healthcare issues or are at risk for injury within their homes.

The Service-Learning Initiative (SLI) at Texas State targets the building of intergenerational relationships through service-learning and activities within the Greater San Marcos community. Through the SLI program, faculty and college students provide needed services to such individuals, fostering intergenerational relationships and improving overall quality of life of the Aging and disabled. The Service-Learning Initiative also motivates the aging community to participate in health initiatives such as exercise and nutrition programs. The SLI informational website informs what service-learning is and how it can benefit students and participants. The website outlines intergenerational service-learning projects within the community, allowing students and faculty to become better informed about experiential learning for course credit while providing a needed community service.



AP/Tim Jean

This Healthcare Literacy Guide for Aging and Disabled covers four primary at-risk prevention plans which promote healthier lifestyle and literacy:

Exercise, Nutrition, Home Safety, and Health Wellness Information

What special health issues apply to older adults?

The following guide address health conditions that can impact older adults' health literacy. Highlights of effective strategies and suggestions for you to consider when communicating and working with older adults are included. Adjusting the way you communicate may help older adults increase health literacy skills.

Healthcare Literacy National Assessment of Adult Literacy

Older adults have documented health literacy problems. The 2003 National Assessment of Adult Literacy found that adults age 65 and older have lower health literacy scores than all other age groups surveyed. Only 3 percent of the older adults who were surveyed were measured as proficient.

The Agency for Healthcare Research and Quality online posted the results from the 2003 National Assessment of Adult Literacy, which indicates:

- Many Americans have difficulty understanding and acting upon health information.
- have below basic health literacy—
 meaning that they are either nonliterate in English or can perform no
 more than the most simple and concrete
 health literacy tasks, such as circling
 the date of a medical appointment on an
 appointment slip. Some adults are more
 likely to have limited health literacy
 than others, including those who:

....are Hispanic, Black, and American

....Indian/Alaskan Native

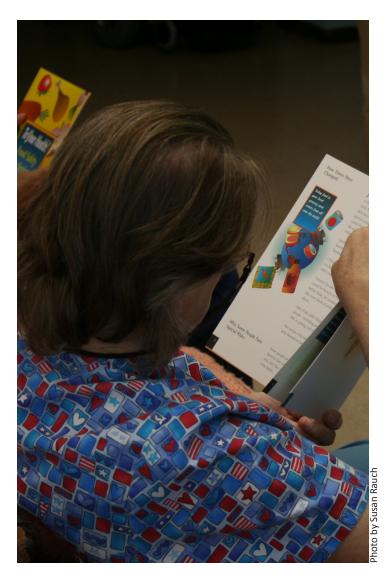
....have lower incomes

....are in poorer health

....have limited English proficiency

....are age 65 and older

- An additional 22 percent (47 million people) have basic health literacy—indicating that they can perform only simple health literacy activities, such as locating one piece of information in a short document.
- While about half (53 percent) of adults have intermediate health literacy—for example, determining a healthy weight for a person on a body mass index chart—just 12 percent of adults have proficient health literacy. In other words, only about one out of ten adults may have the skills needed to manage their health and prevent disease.



Healthcare Literacy - Health and Wellness



AoA (Administration on Aging) Health, Prevention, and Wellness Programs provide seniors with the tools to maintain their health, reduce their risk of developing chronic diseases, and manage their health to live as independently as possible. These programs help seniors to improve and/or maintain physical and mental health, reduce risk of falling, and better manage chronic diseases. AoA also supports a Diabetes Self-Management Training Initiative, the Hispanic Elders Project, and leads the aging component of HHS's Healthy People 2020.

AoA's Diabetes Self Management Training Initiative's goal is to increase the capacity of the Aging Services Network to supply diabetes self-management training programs for seniors with diabetes, including Medicare beneficiaries, to assist them in managing their diabetes. This program gives special emphasis to building program-delivery capacity in communities with large ethnic minority elder populations.

The Hispanic Elders Project is a collaborative learning network of 8 community sites dedicated to developing multiple approaches which address health disparities. Central to each community's approach is the adoption of a chronic disease self-management program that empowers Hispanic elders to take control of their health by engaging in self-management strategies that address behavior change.

Healthcare Literacy - State of Aging in America Report

The State of Aging and Health in America Report 2010, as reported by the CDC, sets goals to improve overall health for all Americans, assesses the health status and health behaviors of U.S. adults aged 65 years and older, and makes recommendations to improve mental and physical health of all Americans in their later years. The report includes national- and state-based report cards examining 15 key indicators of older adult health or *Calls to Action*, recommending strategies to improve the health and quality of life of older adults. Examples highlight innovative healthy aging efforts at state and community levels.

The 15 indicators within this report targeted the health of adults' age 65 years or older. The 2004 and 2007 reports outline progress toward promoting the well-being of older adults, reducing behaviors contributing to premature death and disability. The CDC 2007 report further points out in 2002 the top three causes of death for U.S. adults aged 65 or older were heart disease (32% of all deaths), cancer (22%),and stroke (8%). By participating in proper healthcare lifestyles, risk levels of illness and even death decrease.

Healthcare Literacy - Healthy People 2010 Targets



Healthy People 2010 objectives are national health goals for the United States to achieve over the first decade of the new century. These objectives set specific targets to help guide states, communities, professional organizations, and others in developing programs to improve health for all Americans. Healthy People 2010 objectives and targets were developed in consultation with a wide range of experts on the basis of the best-available and most up-to-date scientific knowledge. In this report, the 15 indicators used to assess the health of adults age 65 years or older are based on the Healthy People 2010 targets.

Please see Resources at the end of this guide for a link to CDC in Spanish.

Healthcare Literacy - Health Information



Photo by Susan Rauch

Educating Adults

As we age our bodies become more susceptible to medication side effects. It is important to understand why we need to know about medications, how to properly store them, and how to properly administer or take them. Checking for expiration dates and recognizing changes in manufacturer are important clues to maintaining good health.

Not All Medications Are Alike

Even though different manufacturers make the same medication, side effects are common as formulations maybe just enough off to cause a reaction. This usually occurs when a pharmacy changes contracts with pharmaceutical companies. If you suddenly have a reaction to a medication you normally take, check the pills. Are they the same color, size or shape? If not, check with your doctor and the pharmacy to see if they changed manufacturers. This includes generic drugs.



Increase in Number of Medications

Elderly people who have multiple diseases usually end up taking many medications at the same time. This increases risk for side effects due to interactions with the other medications. Check with your doctor if this happens. Sometimes the solution is just splitting times of day for taking medications rather than all at once.

Healthcare Literacy - Health Information



Generic Drugs

Sometimes your doctor may authorize you to take a generic equivalent of a drug you are already taking. This can save lots of money in expenses. If you are not taking a generic, ask you doctor to prescribe one. The pharmacy cannot authorize the generic substitute, authorization must come from the doctor.

Understanding Health Information Online and at the Pharmacy

Health literacy is an important factor in an individual's ability to perform various health-related tasks. These include filling a prescription and taking medications correctly, reading and being able to act on information from a disease prevention brochure, filling out forms, and making decisions about health insurance. The need for healthcare literacy is very important in the aging and disabled communities due to the constant changing of information, new medication, and new medical procedures available. The *Pharmacy Health* Literacy Assessment was created for health professionals to detect barriers preventing individuals with limited literacy skills from accessing, comprehending, and taking advantage of health information and services. Also, pharmacies are now required to have patient's sign a HIPAA compliance form, which states you understand what you are receiving and your patient privacy rights. Go to Resources in back of this guide to find out more information about HIPAA or the AHRQ Pharmacy Health Literacy Assessment.



Discount Programs

Many pharmacies are now offering medication discounts if you join their pharmacy program. Check with local pharmacies to see if you are eligible and how the program works.

This option may save money in the long run, but **warning**: have your current medication costs handy. It may be cheaper to stick with your insurance plan or pay for generic alternatives.

Pharmacy and medical literacy is important to understanding medical management.

MedlinePlus online provides an online tutorial from the National Library of Medicine called *Understanding Medical Terms* and the following chart, which supplements the tutorial and outlines key medical terms and definitions:

Abbreviation	Stands for	More information
ABG	Arterial blood gases	You may have an ABG test to detect lung diseases.
ACE	Angiotensin converting enzyme	Drugs called ACE inhibitors are used to treat high blood pressure, heart failure, diabetes and kidney diseases.
ACL	Anterior cruciate ligament	Commonly injured part of the knee
ADHD	Attention deficit hyperactivity disorder	A behavior disorder
AFIB	Atrial fibrillation	A disturbance of the rhythm of the heart
AIDS	Acquired immunodeficiency syndrome	Infection caused by human immunodeficiency virus
ALP	Alkaline phosphatase	You may have a blood test for ALP to detect liver or bone disease.
ALS	Amyotrophic lateral sclerosis.	Also known as Lou Gehrig's Disease
ALT	Alanine aminotransferase	You may have a blood test for ALP to
		detect liver disease.
AMD	Age-related macular degeneration	An eye problem
AMI	Acute myocardial infarction	Heart attack
AODM	Adult onset diabetes mellitus	Type 2 diabetes
AST	Aspartate aminotransferase	You may have a blood test for ALP to
A \ /B 4	A	detect liver disease.
AVM	Arteriovenous malformation	A defect in the circulatory system.
BID	Twice a day	Your doctor may write this on your
DMI	Dady mana index	prescription.
BMI	Body mass index	A measure of how much you should weigh
BP	Pland progrum	based on your height The force of your blood pushing against the
DF	Blood pressure	walls of your arteries
BPH	Benign prostatic hypertrophy	Enlargement of the prostate gland
BRCA	Breast Cancer Gene	People with the gene may be at increased
		risk for breast or ovarian cancer.
BUN	Blood urea nitrogen	You may have a blood test for BUN to detect kidney disease problems.
CA	Cancer OR Calcium	, ,
CA-125	Cancer antigen 125	You may have a blood test for CA-125 A to
	-	measure cancer activity.
CABG	Coronary artery bypass graft	A type of heart surgery
CAD	Coronary artery disease	A common type of heart disease
CAT	Computerized axial tomography	A type of x-ray
CBC	Complete blood count	A blood test that measures many properties of the cells in your blood
CHD	Congenital heart disease	Heart disease you were born with
CHF	Congestive heart failure	Also called heart failure. A condition in
OH	Congestive heart failure	which the heart can't pump enough blood
		throughout the body.
CMV	Cytomegalovirus	A common virus
CNS	Central nervous system	The brain and spinal cord
COPD	Chronic obstructive pulmonary disease	A lung disease that makes it hard to
301 D	On one obstructive pulliformity disease	breathe
CPK	Creatine phosphokinase	You may have a blood test for CPK to see
J	C. Catho phosphothidoo	if you've had a heart attack.
		jou to had a hourt attack.

CPR	Cardiopulmonary resuscitation	An emergency procedure performed when someone's heart has stopped or is no longer
		breathing
CRF CRP	Chronic renal failure C-reactive protein	Failure of the kidneys You may have a blood test for CRP to see if you have inflammation or heart problems.
CSF	Cerebrospinal fluid	A fluid that surrounds the brain and spinal cord
CVA	Cerebrovascular accident	A stroke or "brain attack"
CXR	Chest x-ray	A diagnostic test that uses radiation to make images of your lungs
D&C	Dilatation and curettage	A surgical procedure on the uterus (womb)
DJD	Degenerative joint disease	Another name for arthritis
DM	Diabetes mellitus	
DTP DVT	Diphtheria, tetanus, pertussis	A vaccine for three diseases A blood clot
DX	Deep-vein thrombosis Diagnosis	A blood clot
ECG,	Electrocardiogram	A test that measures electrical
EKG	g	impulses of the heart
ECHO	Echocardiogram	A test that uses sound waves to
		look at the heart
EEG	Electroencephalogram	A test that measures electrical impulses of the brain
EMG	Electromyography	A test that measures electrical
ENT	Ear, nose and throat	impulses of muscles
ERCP	Endoscopic retrograde	A way to diagnose problems in
	cholangiopancreatography	the liver, gallbladder, bile ducts and pancreas
ESR ESRD	Erythrocyte sedimentation rate End-stage renal (kidney) disease	A blood test for inflammation
FSH	Follicle stimulating hormone	If you are a woman, you may
гоп		have a blood test for FSH to
GERD	Gastroesophageal reflux disease	evaluate fertility. A problem that happens when stomach contents leak back into
GERD		evaluate fertility. A problem that happens when stomach contents leak back into your gullet
	Gastroesophageal reflux disease Gastrointestinal	evaluate fertility. A problem that happens when stomach contents leak back into
GERD GI GFR	Gastrointestinal Glomerular filtration rate	evaluate fertility. A problem that happens when stomach contents leak back into your gullet Another term for your digestive system A test of kidney damage
GERD GI GFR GU	Gastrointestinal Glomerular filtration rate Genitourinary	evaluate fertility. A problem that happens when stomach contents leak back into your gullet Another term for your digestive system A test of kidney damage The urinary and sex organs
GERD GI GFR GU HAV	Gastrointestinal Glomerular filtration rate Genitourinary Hepatitis A virus	evaluate fertility. A problem that happens when stomach contents leak back into your gullet Another term for your digestive system A test of kidney damage The urinary and sex organs A virus that causes one type of liver disease
GERD GI GFR GU	Gastrointestinal Glomerular filtration rate Genitourinary	evaluate fertility. A problem that happens when stomach contents leak back into your gullet Another term for your digestive system A test of kidney damage The urinary and sex organs A virus that causes one type of liver disease A virus that causes one type of
GERD GI GFR GU HAV HBV	Gastrointestinal Glomerular filtration rate Genitourinary Hepatitis A virus Hepatitis B virus	evaluate fertility. A problem that happens when stomach contents leak back into your gullet Another term for your digestive system A test of kidney damage The urinary and sex organs A virus that causes one type of liver disease A virus that causes one type of liver disease
GERD GI GFR GU HAV	Gastrointestinal Glomerular filtration rate Genitourinary Hepatitis A virus Hepatitis B virus Hematocrit	evaluate fertility. A problem that happens when stomach contents leak back into your gullet Another term for your digestive system A test of kidney damage The urinary and sex organs A virus that causes one type of liver disease A virus that causes one type of liver disease A blood test measurement
GERD GI GFR GU HAV HBV HCT	Gastrointestinal Glomerular filtration rate Genitourinary Hepatitis A virus Hepatitis B virus	evaluate fertility. A problem that happens when stomach contents leak back into your gullet Another term for your digestive system A test of kidney damage The urinary and sex organs A virus that causes one type of liver disease A virus that causes one type of liver disease
GERD GI GFR GU HAV HBV HCT	Gastrointestinal Glomerular filtration rate Genitourinary Hepatitis A virus Hepatitis B virus Hematocrit	evaluate fertility. A problem that happens when stomach contents leak back into your gullet Another term for your digestive system A test of kidney damage The urinary and sex organs A virus that causes one type of liver disease A virus that causes one type of liver disease A blood test measurement A virus that causes one type of
GERD GI GFR GU HAV HBV HCT HCV HDL HGB	Gastrointestinal Glomerular filtration rate Genitourinary Hepatitis A virus Hepatitis B virus Hematocrit Hepatitis C virus High density lipoprotein Hemoglobin	evaluate fertility. A problem that happens when stomach contents leak back into your gullet Another term for your digestive system A test of kidney damage The urinary and sex organs A virus that causes one type of liver disease A virus that causes one type of liver disease A blood test measurement A virus that causes one type of liver disease A blood test measurement A virus that causes one type of liver disease A type of cholesterol, also known as "good" cholesterol A blood test measurement
GERD GI GFR GU HAV HBV HCT HCV HDL HGB HIV	Gastrointestinal Glomerular filtration rate Genitourinary Hepatitis A virus Hepatitis B virus Hematocrit Hepatitis C virus High density lipoprotein Hemoglobin Human immunodeficiency virus	evaluate fertility. A problem that happens when stomach contents leak back into your gullet Another term for your digestive system A test of kidney damage The urinary and sex organs A virus that causes one type of liver disease A virus that causes one type of liver disease A blood test measurement A virus that causes one type of liver disease A blood test measurement A virus that causes one type of liver disease A type of cholesterol, also known as "good" cholesterol A blood test measurement The virus that causes AIDS
GERD GI GFR GU HAV HBV HCT HCV HDL HGB	Gastrointestinal Glomerular filtration rate Genitourinary Hepatitis A virus Hepatitis B virus Hematocrit Hepatitis C virus High density lipoprotein Hemoglobin	evaluate fertility. A problem that happens when stomach contents leak back into your gullet Another term for your digestive system A test of kidney damage The urinary and sex organs A virus that causes one type of liver disease A virus that causes one type of liver disease A blood test measurement A virus that causes one type of liver disease A type of cholesterol, also known as "good" cholesterol A blood test measurement The virus that causes AIDS A virus that causes cervical
GERD GI GFR GU HAV HBV HCT HCV HDL HGB HIV	Gastrointestinal Glomerular filtration rate Genitourinary Hepatitis A virus Hepatitis B virus Hematocrit Hepatitis C virus High density lipoprotein Hemoglobin Human immunodeficiency virus	evaluate fertility. A problem that happens when stomach contents leak back into your gullet Another term for your digestive system A test of kidney damage The urinary and sex organs A virus that causes one type of liver disease A virus that causes one type of liver disease A blood test measurement A virus that causes one type of liver disease A blood test measurement A virus that causes one type of liver disease A type of cholesterol, also known as "good" cholesterol A blood test measurement The virus that causes AIDS A virus that causes cervical cancer Hormones supplements that
GERD GI GFR GU HAV HBV HCT HCV HDL HGB HIV HPV HRT	Gastrointestinal Glomerular filtration rate Genitourinary Hepatitis A virus Hepatitis B virus Hematocrit Hepatitis C virus High density lipoprotein Hemoglobin Human immunodeficiency virus Human papilloma virus Hormone replacement therapy	evaluate fertility. A problem that happens when stomach contents leak back into your gullet Another term for your digestive system A test of kidney damage The urinary and sex organs A virus that causes one type of liver disease A virus that causes one type of liver disease A blood test measurement A virus that causes one type of liver disease A type of cholesterol, also known as "good" cholesterol A blood test measurement The virus that causes AIDS A virus that causes cervical cancer Hormones supplements that women may take
GERD GI GFR GU HAV HBV HCT HCV HDL HGB HIV HPV	Gastrointestinal Glomerular filtration rate Genitourinary Hepatitis A virus Hepatitis B virus Hematocrit Hepatitis C virus High density lipoprotein Hemoglobin Human immunodeficiency virus Human papilloma virus Hormone replacement therapy Hypertension	evaluate fertility. A problem that happens when stomach contents leak back into your gullet Another term for your digestive system A test of kidney damage The urinary and sex organs A virus that causes one type of liver disease A virus that causes one type of liver disease A blood test measurement A virus that causes one type of liver disease A type of cholesterol, also known as "good" cholesterol A blood test measurement The virus that causes AIDS A virus that causes cervical cancer Hormones supplements that women may take High blood pressure
GERD GI GFR GU HAV HBV HCT HCV HDL HGB HIV HPV HRT HTN	Gastrointestinal Glomerular filtration rate Genitourinary Hepatitis A virus Hepatitis B virus Hematocrit Hepatitis C virus High density lipoprotein Hemoglobin Human immunodeficiency virus Human papilloma virus Hormone replacement therapy	evaluate fertility. A problem that happens when stomach contents leak back into your gullet Another term for your digestive system A test of kidney damage The urinary and sex organs A virus that causes one type of liver disease A virus that causes one type of liver disease A blood test measurement A virus that causes one type of liver disease A type of cholesterol, also known as "good" cholesterol A blood test measurement The virus that causes AIDS A virus that causes cervical cancer Hormones supplements that women may take

A problem with the large intestine **IBS** Irritable bowel syndrome Implantable cardioverter defibrillator A device that monitors heart rhythm ICD problems ICU Intensive care unit Special hospital unit Insulin-dependent diabetes mellitus Type 1 diabetes IDDM A type of injection Intramuscular IM IUD Intrauterine device A type of birth control for women IV Intravenous A type of injection IVP An x-ray test of the urinary system Intravenous pyelogram Low density lipoprotein A type of cholesterol, also known as LDL "bad" cholesterol LFT Liver function tests Myocardial infarction Heart attack MI A vaccine for three diseases **MMR** Measles, mumps, and rubella MRI Magnetic resonance imaging A type of imaging test Methicillin-resistant Staphylococcus aureus A type of infection MRSA MS Multiple sclerosis A disease of the nervous system NG Nasogastric You may need an NG tube to empty the contents of your stomach. **NIDDM** Non-insulin dependent diabetes mellitus Type 2 diabetes No known drug allergies NKDA Non-steroidal anti-inflammatory drug **NSAID** Drugs like ibuprofen OCD Obsessive-compulsive disorder A type of anxiety disorder Peripheral arterial disease Diseases of the arteries outside the PAD heart PAP Papanicolau You may need a PAP test to detect cervical cancer. PAT Paroxysmal atrial tachycardia A disturbance of the rhythm of the heart Positron emission tomography PET A type of x-ray test Pulmonary function test You may need PFTs to find out how **PFT** your lungs are working. PID Pelvic inflammatory disease Infection and inflammation of the female reproductive organs **PMS** Premenstrual syndrome A group of symptoms that may happen before a woman's period You may have a PPD skin test for PPD Purified protein derivative tuberculosis. **PRN** Your doctor may write this on your As needed prescription. **PSA** Prostate specific antigen You may have a blood test for PSA to detect prostate disease. PT A measure of blood clotting Prothrombin time PTH Parathyroid hormone You may have a blood test for PTH to parathyroid disease. detect An illness caused by traumatic events PTSD Post-traumatic stress syndrome PTT Partial thromboplastin time A measure of blood clotting **PUD** Peptic ulcer disease A disease of the stomach

A disturbance of the rhythm of the heart

Premature ventricular contraction

PVC

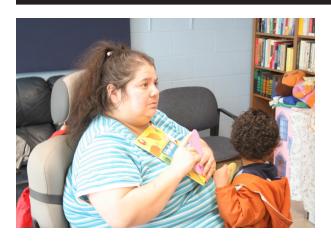
QID	Four times a day	Your doctor may write this on your prescription.
RA	Rheumatoid arthritis	A type of joint disease
RBC	Red blood cell	A type of blood cell
RSV	Respiratory syncytial virus	A virus that causes infections in children
Rx	Treatment	
SAD	Seasonal affective disorder	Depression during seasons with little light
SIDS	Sudden infant death syndrome	z oprocess daming obdesses man maio ng. n
SLE	Systemic lupus erythematosus	Lupus for short
SOB	Shortness of Breath	
STD	Sexually transmitted disease	
T3	Triiodothyronine	You may have a blood test for T3 to detect
. •		thyroid disease.
T4	Thyroxine	You may have a blood test for T4 to detect
	,	thyroid disease.
TB	Tuberculosis	An infection of the lungs
TAH	Total abdominal hysterectomy	Surgery to remove a woman's uterus
	,	(womb)
TIA	Transient ischemic attack	A small stroke
TIBC	Total iron binding capacity	A test that measures the amount of iron in
		your blood
TID	Three times a day	Your doctor may write this on your
	•	prescription.
TMJ	Temporomandibular joint	The joint that connects your jaw to the side
		of your head
TORCH	Stands for a group of infections that may	A newborn will have this test to check for
	cause birth defects	infections. Sometimes the mother also
		needs the test.
TSH	Thyroid stimulating hormone	You may have a blood test for TSH to
		detect thyroid disease.
TURP	Transurethral resection of prostate gland	An operation to remove parts of the
		prostate gland
URI	Upper respiratory infection	Another name for the common cold
UTI	Urinary tract infection	Infection of the bladder and kidneys
XRT	Radiotherapy	Therapy that uses radiation, usually for
		cancer
WBC	White blood cell	A type of blood cell

MedlinePlus also provides A-Z glossaries, which allow you to look up information about a particular drug and read its definition.

Drugs, Supplements, and Herbal Information

Specific Health Topics

Disabilities and Healthcare



By 2050, the number of Americans over age 85 will be five times what it was in 2000, forcing more people to live with sight or hearing loss or mobility limitations from such conditions as obesity, arthritis, or diabetes. It's an ominous challenge for both baby boomers who will need new levels of support and a system that trails most industries in accessibility, flexibility, and compliance with the **Americans with Disabilities Act.**

CDHP (Center for Disability and Health

Policy) is helping providers prepare for this impending age wave by changing perceptions about people with disabilities while advancing policies and creating strategies to make healthcare more accessible. Research projects, including a major study on accessible medical equipment conducted with L.A. Care Health Plan, often demonstrate how adapting to address the needs of those with disabilities results in higher quality care for all patients.

From article: Enhancing Health Care for the Disabled A Profile of the Harris Family Center for Disability & Health Policy Feb 16, 2010 Andrew Leibs



Photos by Susan Rauch and Shannon Williams/txstate/sli





Elderly and disabled residents at Springtown Villas in San Marcos, Texas, attend a workshop to learn more about health safety and nutrition. 2010

Disabilities and Healthcare

CDHP Advocates Health Care Education, Practices

The Harris Center was launched in 1999 to enhance Western University's health professions education programs regarding people with disabilities and to improve patient care delivery through consulting, publishing, and research. Two other goals, according to Premo, are increasing the number of people with disabilities pursuing healthcare careers and promoting active self-advocacy among those seeking healthcare.

In its first decade CDHP:

- Developed curriculum content on accessible healthcare, including units teaching medical students how to examine their attitudes about disability so biases don't interfere with offering quality care
- Designed and conducted workshops and courses, e.g. "Disability Rights Law and Policy: A Curriculum for Health Professionals"
- Issued disability-related publications on topics such as emergency evacuation preparedness

Read more:

Enhancing Health Care for the Disabled: A Profile of the Harris Family Center for Disability & Health Policy







Students learn patient care from the Texas State Health Professions and Physical Therapy Programs

Falls and Older Adults - Causes and Risk Factors

Falls don't just happen because people get older. More than one underlying health risk factor is likely the cause of a fall. A risk factor is something that increases a person's risk or susceptibility to a medical problem or disease. (NIH) The higher number of risk factors, the greater the risk a person has of falling. Causes of most falls include physical condition, medical problem(s) including chronic disease, and safety hazards in the home or environment. At-risk healthcare factors can be reduced by following some basic steps toward improving wellness such as exercise and good nutrition.



Photos courtesy of sxc



Environment

We usually do not think about safety when moving around our home. NIHSeniorhealth. gov states 6 out of 10 falls happen due to risk factors in the home environment, and more than half occur while doing normal daily activities. Programs like Safe at Home at Texas State University-San Marcos and websites such as NIHSeniorhealth, educate and help reduce the risk of injury and death from falls in the homes of the elderly

Contributing Factors within the living environment may include:

- A slick floor
- Poorly lit stairway
- Loose rugs
- Clutter on the floor or stairs
- Carrying heavy or bulky items up or down stairs.
- Lack of stair railings or grab bars in the bathroom



Prevent Falls

Make simple changes to your living environment, as well as personal and lifestyle changes. NIH recommends taking the following steps to "fall proof" your home, both inside and outdoors.

Indoors:

- Remove or avoid safety hazards
- Improve lighting
- Install handrails and grab bars
- Move items to make them easier to reach
- Remove anything that could cause you to trip or slip while walking such as: clutter, small furniture, pet bowls, electrical or phone cords
- Secure loose rugs or carpet with a tacky backing such as double-sided tape
- Remove obstacles from stairs, hallways, and pathways
- Put non-slip strips on slick floors and steps.
- Put non-slip strips or a rubber mat on the floor of bathtub or shower
- Avoid wet floors and clean up spills right away. Use only non-skid wax on waxed floors
- Have good lighting in all rooms.
 Use light bulbs with the highest wattage recommended for fixtures
- Light switches at top and bottom of stairs
- Place a lamp within easy reach of your bed. Keep a flashlight by the bed in case the power is out and you need to get up.
- Place nightlights in bathrooms, hallways, bedrooms, and kitchen.

- Have handrails installed on both sides of stairs and walkways. If you must carry something while walking up or down stairs, hold the item in one hand and use the handrail with the other. Be sure you can see where your feet are stepping.
- Have grab bars properly placed in tubs, showers, and next to toilets and use them!
- Make household items accessible or within easy reach. Many falls occur while standing on a chair or stool.



Photo courtesy of sxc

Prevent Falls

Outdoors:

- Caution when walking: Avoid going out alone on ice or snow. Serious injuries could occur from slips on a slick sidewalk, curb, or icy walkways/stairs.
- Spread sand or salt on icy surfaces.
- Wear boots with good traction if you must go out when it snows.
- Have enough lighting at entrances and outdoor walkways. Use light bulbs with the highest wattage recommended for fixtures.



Assistive Devices Outdoors:

- Appropriate use of assistive devices such as canes, walkers, reachers, can prevent harmful falls. A healthcare professional can advise on which assistive devices would benefit your needs as well instruct in how to properly and safely use them.
- Have a portable telephone. Carrying the phone with you from room to room will prevent a hurried dash for the phone, which can cause an unnecessary fall.



- Have handrails installed on both sides of stairs and walkways. If you must carry something while walking up or down stairs, hold the item in one hand and use the handrail with the other. Be sure you can see where your feet are stepping.
- Have grab bars properly placed in tubs, showers, and next to toilets and use them!
- Make household items accessible or within easy reach. Many falls occur while standing on a chair or stool.





Prevent Falls

Indoors:

- Remove or avoid safety hazards
- Improve lighting
- Install handrails and grab bars
- Move items to make them easier to reach
- Remove anything that could cause you to trip or slip while walking such as: clutter, small furniture, pet bowls, electrical or phone cords
- Have good lighting in all rooms.
 Use light bulbs with the highest wattage recommended for fixtures
- Light switches at top and bottom of stairs.
- Place a lamp within easy reach of your bed. Keep a flashlight by the bed in case the power is out and you need to get up.
- Place night lights in bathrooms, hallways, bedrooms, and kitchen.



For more tips on at-risk prevention and home safety, check out some videos on NIHSeniorhealth website.



- Secure loose rugs or carpet with a tacky backing such as double-sided tape
- Remove obstacles from stairs, hallways, and pathways.
- Put non-slip strips on slick floors and steps.
- Put non-slip strips or a rubber mat on the floor of bathtub or shower
- Avoid wet floors and clean up spills right away. Use only non-skid wax on waxed floors

When to Get Medical Help

If you have fallen contact a physician right away. Your doctor may refer you to a Healthcare specialist, who will assess your home's safety and advise you about making changes to prevent falls. This is one of the many services that students with Safe At Home at Texas State University-San Marcos provide as part of its intergenerational service-learning objectives. (link to SAH) Healthcare providers will also advise in making home improvements or changes to prevent future falls.

Photos courtesy of sxc 21

Exercise

MedlinePlus info on exercise

Regular exercise can prevent or delay diabetes and heart trouble. It can also reduce arthritis pain, anxiety, and depression.

There are four main types of exercise seniors should do to stay healthy:

- Endurance activities like walking, swimming, or riding a bike - which build "staying power" and improve the health of the heart and circulatory system
- Strengthening exercises which build muscle tissue and reduce age-related muscle loss
- Stretching exercises to keep the body limber and flexible
- Balance exercises to reduce the chances of a fall.





Physical activity keeps one strong

Get a total of at least 30 minutes of physical activity a day. Find time for activities like walking, dancing, stair climbing, gardening, and weight-lifting.

Maintain bone health

Quit smoking and limit alcohol use. Smoking and heavy alcohol use can decrease bone mass and increase the chance of fractures.

Maintain a healthy weight - being underweight increases the risk of bone loss and broken bones. A diet that includes enough calcium and vitamin D, and physical activity helps prevent bone loss and fractures. Have your doctor about supplements or other

Ask your doctor about supplements or other medicines to strengthen bones if needed

Exercise

Bone Density Test

A safe, painless test to assess your bone health and risk of future fractures.

Medicare and many private insurers cover this test for eligible people.

Women over age 65 and all men over 70 should have a bone density test.

Check with your doctor to learn more about this test.



Photo by Shannon Williams

More on Exercise

Being physically active on a regular basis provides many health benefits. Even moderate exercise and physical activity can improve the health of people who are frail or who have diseases that accompany aging.

Being physically active can also help you stay strong and fit enough to keep doing the things you like to do as you get older. Exercise and physical activity are great ways to have fun, be with friends and family, and enjoy the outdoors.

The benefits help you stay strong and fit enough to perform daily activities, get around, and maintain independence.

Older adults who are inactive lose: endurance, strength, balance, and flexibility. Four areas important for staying healthy and independent

If you are not currently active, you can still maintain or at least partially restore these four areas through exercise and physical activity to improve fitness.

Increasing your endurance makes it easier to walk farther, faster, and uphill.

- Strengthening muscles makes you stronger
- Improving your balance helps body control
- Increasing flexibility helps keep the body limber and flexible
- Be creative choose from each of four types:
 endurance, strength, balance, and flexibility
- Mixing it up will help reap the benefits of each exercise-type as well as reduce risk for injury

 More FA Os visit: http://pikseniorhoolth.gov/eversigeforelderedults/fog.

More FAQs visit: http://nihseniorhealth.gov/exerciseforolderadults/faq

Nutrition

Elderly people need to be aware of nutrition choices as a measure of at-risk prevention for disease and injury. Having diseases such as diabetes can lower the immune system making you more susceptible to harmful bacteriarelated illnesses such as food poisoning. The Food and Drug Administration (FDA) and U.S. Department of Agriculture Food and Safety Inspection Service offer several recommendations regarding food safety and better nutrition for seniors over the age of 65.



Photo by Susan Rauch

EATING OBSTACLES FOR SENIORS

- **Lifestyle changes.** Newly single seniors may not know how to cook or may not feel like cooking for one. People on limited budgets might have trouble affording a balanced, healthy diet.
- **Activity level.** Seniors often cut back on activity for physical and medical reasons. Weight gain can result from the decrease in calories burned.
- **Metabolism.** Every year over the age of forty, our metabolism slows down. This means that even if you continue to eat the same amount and kinds of food as when you were younger, you're likely to gain weight because you're burning fewer calories. In addition, you may be less physically active now.
- **Taste and appetite.** Your senses of taste and smell diminish, so you may be inclined to season your food more heavily than before—even though seniors need less salt than younger people. You may struggle with loss of appetite due to lifestyle, loneliness or a medical condition.
- **Health issues.** Physical ailments and prescription medications often negatively influence appetite. Talk to your doctor about overcoming side effects of medication or specific physical conditions.
- **Digestion.** Due to changes in your digestive system, you generate less saliva and stomach acid as you get older, making it more difficult for your body to process certain vitamins and minerals, such as B12, B6 and folic acid, which are necessary to maintain mental alertness, a keen memory and good circulation.
- **Emotional factors.** Emotional factors such as loneliness and depression can affect your diet. For some, feeling down leads to not eating and in others it may trigger overeating. If emotional problems are affecting your diet, it is important to talk to your doctor or a therapist. 24

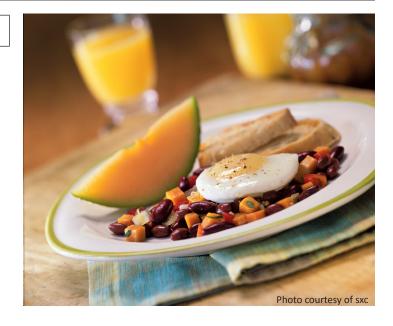
Nutrition

Important Guidelines for Seniors

- reduce sodium (salt) to help prevent water retention and high blood pressure
- monitor fat intake in order to maintain healthy cholesterol levels
- consume more calcium and vitamin D for bone health
- eat more fiber-rich foods to prevent constipation
- cut back on sugar and on dry foods,
- make sure you get the recommended amount of important vitamins and minerals
- increase your water intake
- participate in regular physical activity

Reprinted with permission for personal or non-profit use. Visit www.helpguide.org to see article.





DIET – MAKING GOOD FOOD CHOICES

NIHSeniorhealth offers good advice on how to maintain a healthy lifestyle by making wise food choices. The following pages offer tips from *NIHSeniorhealth*: http://nihseniorhealth.gov/eatingwellasyougetolder/howtoeatwell/02.html

Staying healthy as we get older means making positive lifestyle changes. These changes include eating well to stay healthy, independent, look and feel good. Whatever your age, daily food choices can make an important difference in overall health.

Nutrition

Eating a well-planned, balance of foods everyday along with physical activity:



Improves energy levels. The number of calories needed depends on how old you are, whether you're a man or woman, and how active you are.

Controls Weight – consume the right number of calories for your level of physical activity to control weight.

Note:

Extra weight is a concern for older adults because it can increase the risk for diseases such as type 2 diabetes and heart disease, and increase joint problems. Choose nutrient-dense foods - high in nutrients/low in calories to decrease calorie intake.

Is part of a lifelong healthy lifestyle, not a diet fad.

Reduces the risk of heart disease, stroke, type 2 diabetes, bone loss, some kinds of cancer, and anemia.

Reduce high blood pressure, lower high cholesterol, and manage diabetes. Eating well and being physically active will help you better manage these diseases even if you already have them.

Provides nutrients - that are needed to keep your muscles, bones, organs, and other parts of your body healthy throughout your life. These nutrients include vitamins, minerals, protein, carbohydrates, fats, and water.



Photos courtesy of sxc

Nutrition

Food Choices

- Affects digestion. Example: too little fiber or fluid may cause constipation. Eat whole-grain foods, fruits and vegetables or drinking more water to help with constipation.
- Take baby steps make one food change at a time. Start by substituting a vegetable or meat and build from there.

Note: If you have a specific medical condition, be sure to check with your doctor or dietitian about foods you should include or avoid.





How to Eat Well

- ► Choose a mix of healthy foods that give your body the nutrients it needs.
- ➤ Consume the right number of calories for your age, gender, and level of physical activity. Know what foods to limit.
- ► Choose a mix of nutrient-dense foods every day.

Plan meals and snacks to include

- fruits and vegetables
- grains, especially whole grains
- low-fat or fat-free milk and milk products
- lean meats, poultry, fish, beans, eggs, and nuts
- limited amounts of fats (saturated and trans fats should be as low as possible), cholesterol, salt (sodium), and added sugars

Photos Susan Rauch

Nutrition

Fruits, vegetables, and grains

- 1. Offer important vitamins and minerals to keep your body healthy.
- 2. Contain little fat
- 3. Contain no cholesterol.
- 4. Are a good source of fiber Eating more fiber helps with digestion and constipation, lowers cholesterol and blood sugar
- 5. Contain phytochemicals, which reduce the risk of heart disease, diabetes, and some cancers





- 6. Eat a variety of fresh, frozen, canned, or dried fruits everyday. Eat most fruits whole rather than as juices.
- 7. Eat a variety of colors and types of vegetables every day. Broccoli, spinach, turnip and collard greens, and other dark leafy greens are good choices. Choose orange vegetables, such as carrots, sweet potatoes, pumpkin, or winter squash
- 8. Can be purchased raw or cooked, frozen, canned, or dried/dehydrated. They may be eaten whole, cut-up, or mashed



- Foods made from grains are a major source of energy and fiber. Any food made from wheat, rice, oats, cornmeal, barley, or another cereal grain is a grain product.
- Grains fall into two main categories: whole and refined. Choose at least of half your grains whole and at least half of cereals, breads, crackers, and pastas you eat should be made from whole grains.



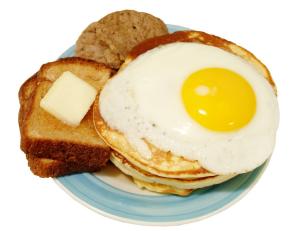


- Whole grains are better sources of fiber and nutrients than refined grains, such as white flour or white rice. Refined grains have had both the bran and germ removed and don't have as much fiber or as many nutrients as whole grains. Note: Most refined grains are enriched with some B vitamins and iron added back in after processing; however, fiber is not replaced.
- Whole-grain foods, such as whole-wheat bread, are made with the entire seed of a plant, including the bran, the germ, and the endosperm. Together, they provide lots of vitamins, minerals, antioxidants, healthy fat, carbohydrates, and fiber.
- Try whole wheat pasta instead of regular pasta or substitute brown rice for white in a casserole.



Nutrition

- Low-fat or fat-free milk and milk products should be among the foods you choose every day, too. These products provide calcium and vitamin D to help maintain strong bones, and contain protein, potassium, vitamin A, and magnesium. Low-fat or fat-free milk, cheese, and yogurt are good options.
- Don't drink milk?
 Have other products containing the nutrients milk provides. Look for cereals and juices fortified with extra calcium and



vitamin D. Example: Salmon, sardines and mackerel are good sources of vitamin D.

- Avoid milk because of lactose (milk sugar) content? Get needed nutrients from lactose-reduced or low-lactose milk products. Take tablets with the enzyme lactase (available in most drugstores and grocery stores) with milk products.
- Other sources of calcium include hard cheese, yogurt, bony canned fish like salmon or sardines, and calcium-fortified tofu or soy beverages.



- Protein builds and maintains muscle, bones, and skin. Include some protein in your diet every day. Lean cuts or low-fat meat or poultry products provide less total fat, less saturated fat, and fewer calories.
- Example: 3 ounces of cooked, regular ground beef (70% lean) has 6.1 grams of saturated fat and 236 calories. Three ounces of cooked, extra-lean ground beef (95% lean) contains 2.6 grams of saturated fat and 148 calories.



Photo Susan Rauch



Photo courtesy of sxc

- Consider varying sources of protein.

 Replace red meats and poultry with fish or bean, tofu, or pea dishes foods lower in saturated fats. Beans provide fiber. Pinto beans, kidney beans, black beans, chickpeas, split peas, and lentils are all healthy options. Add nuts and seeds to your meals and snacks too, but keep amounts small since these foods can contain high amounts of fat.
- Fats are a source of energy and help maintain healthy organs, skin and hair.
 Fats also help the body absorb vitamins A, D, E, and K.





- Some fats are better for you than others. Choose polyunsaturated and monounsaturated fats when possible.
 Sources of better fats include: vegetable oils such as soybean, corn, canola, olive, safflower, and sunflower oils.
 Polyunsaturated fat sources: nuts, seeds, fatty fish, walnuts, flaxseed and salmon.
- Consume plenty of liquids, especially water. This helps prevent constipation and dehydration. Other good choices: Unsweetened tea, low-fat or fat-free milk, and 100 percent fruit juice.
- Read the food labels on packaged foods and canned goods to learn what's in the products you buy.

Important Resources about Healthy Eating and Food Safety:

- MyPyramid Plan from the U.S. Department of Agriculture, or USDA
- DASH (Dietary Approaches to Stop Hypertension) eating plan...or contact: The National Heart, Lung, and Blood Institute at: 1-301-592-8573 or 1-240-629-3255 (TTY)
- FDA Guide: To Your Health! Food Safety for Seniors
- HelpGuide.org

How much should you consume?

- A woman over age 50 should consume about 1,600 calories a day if her level of physical activity is low
- 1,800 calories daily if she is moderately active
- 2,000 to 2,200 calories daily if she has an active lifestyle.

Nutrition

- A man over age 50 should consume about
- 2,000 calories a day if his level of physical activity is low
- 2,200 to 2,400 calories daily if he is moderately active
- 2,400 to 2,800 calories daily if he has an active lifestyle.
- Plan meals and snacks to include the right number of calories for your activity level.

Dietary Guidelines from the U.S. Department of Agriculture, or USDA

Recommends eating the following amounts of food based on 2,000 calories per day. Note: Adjust the amounts depending on daily calorie level.

Someone who eats 2,000 calories per day...

- Should plan to eat 2 2 ½ cups of fruit a day. This might include one large banana, one-half cup of strawberries and a half-cup of orange juice. To help get enough fiber, most daily fruit intake should be in the form of whole fruits rather than fruit juices.
- Should have 2 2 ½ cups of vegetables a day. This might include a half-cup each of broccoli, tomatoes, cauliflower, and a sweet potato. Aim for lots of color on your plate to get a variety of vegetables each day.
- Should eat 7 to 8 ounces of grain foods daily. At least half of grain foods eaten should be whole grains. Approximately one ounce of grain foods should count as a serving. This is about one slice of bread, one roll, or one small muffin. It is also about one cup of dry flaked cereal or a half-cup of cooked rice, pasta, or cereal.



Photos Susan Rauch



Someone who eats 2,000 calories per day...

Nutrition

- Should have the equivalent of 2-3 cups of low-fat or fat-free milk, yogurt, or other milk products daily. One cup of yogurt contains about the same amount of calcium as 1 cup of milk. Eating 1½ ounces of natural cheese or 2 ounces of processed cheese is the same as drinking 1 cup of milk.
- Should eat about 5½ ounces of protein each day. You can get protein from meat, poultry, and fish, as well as eggs, dried beans, tofu, nuts, and seeds. One egg or one-fourth cup of cooked dry beans or tofu counts as 1 ounce of meat, poultry, or fish. One tablespoon of peanut butter or a halfounce of nuts or seeds also is the same as 1 ounce of meat, poultry, or fish. Nuts contain no cholesterol.



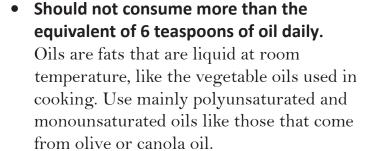




Photo Susan Rauch

Portion Size Nutrition

- 1. When eating out or buying packaged foods, pay attention to portion sizes. A serving size is a standardized amount of food, such as a cup or an ounce.
- 2. Read the Nutrition Facts label on packaged and canned foods. It tells you how many calories and which nutrients the food provides. You can use it to help you keep track of how much fat, saturated fat, trans fat, sodium, cholesterol, sugars, and calories you get from different foods.
- 3. The Percent Daily Value (written as "% daily value") on the right of the label tells you what percentage of the recommended daily amount of a nutrient is in one serving of the food. It is based on the nutritional needs of a person who consumes 2,000 calories per day.

For Example:

On a label for macaroni and cheese, the Percent Daily Value for total fat is 18%. This means that one serving of macaroni and cheese (1 cup) will give you 18 percent of the total amount of fat you should allow yourself each day, assuming you eat about 2,000 calories daily.

4. Pay attention to the serving size and the number of servings in the package.

A package might contain two or more servings, so if you eat two servings, you would consume twice the calories, fat, sodium, carbohydrates, protein, etc., as you would for one serving.

Nutrition Facts Serving Size 2 Tbsp. (13g) Servings Per Container 26					
	Amount Per Serving Calories 60 Calories from Fat 40				
Total Fat 5g	%	Daily Value			
Saturated Fat	0g	0%			
Trans Fat 0g					
Cholesterol 0g		0%			
Sodium 0g					
Total Carbohy	drate 4q	1%			
Dietary Fiber 4g		15%			
Sugars 0g					
Protein 3g					
Vitamin A 0%	Vitamir	n C 0%			
Calcium 2%	Iron 4				
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your caloric needs:					
Calories:	2,000	2,500			
Total Fat Less than Sat Fat Less than Cholesterol Less than Sodium Less than Total Carbohydrate Dietary Fiber	65g 20 g 300mg 2400mg 300g 25g	80g 25g 300mg 2400mg 375g 30g			
Calories per gram: Fat 9 • Carbohydrate 4 • Protein 4					

Avoid "empty calories" - foods and drinks that are high in calories but low in nutrients.

Limit your intake of:

- saturated fats and trans fats
- cholesterol
- sodium
- added sugars.

Learn to limit fats to 20 to 35 percent of your daily calories. If you consume 2,000 calories daily, only 400 to 700 of the calories should be from fats. The number of calories from fat is listed on the Nutrition Facts labels.

Most of the fats you consume should be polyunsaturated or monounsaturated fats.

These healthy fats come from liquid vegetable oils, nuts, flaxseed, and fatty fish such as salmon, trout, and herring.

Limit the amount of saturated fats and trans fats you consume. Saturated fats are found in foods like beef, cheese, milk, butter, oils, and ice cream and other frozen desserts. Trans fats are found in foods like margarine, crackers, icings, French fries, and microwave popcorn, as well as in many baked goods. Many sweets such as cakes, cookies, and doughnuts include saturated and/or trans fats.

No more than 10 percent of your total daily calories should come from saturated fats.

Keep daily intake of trans fats as low as possible. Read the Nutrition Facts label to choose products that are low in these fats.

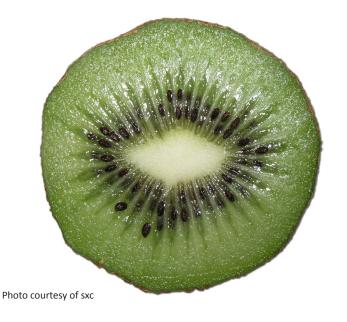
Steps to lower fat in a diet

- Choose lean cuts of meat, fish, or poultry (with the skin removed).
- Trim off any extra fat before cooking.
- Use low-fat or fat-free milk products and salad dressings.
- Use non-stick pots and pans, and cook without added fat.
- If you do use fat, use either an unsaturated vegetable oil or a nonfat cooking spray.
- Broil, roast, bake, stir-fry, steam, microwave, or boil foods. Avoid frying.
- Season your foods with lemon juice, herbs, or spices instead of butter.
- Look for ways to limit the amount of cholesterol you consume. People who have a higher amount of "bad," or LDL cholesterol in their blood have a high risk for heart disease. Consume foods with less than a total of 200 mg of cholesterol daily.
- Older adults should limit sodium intake to 1,500 milligrams daily, or about 2/3 of a teaspoon. This helps control blood pressure. Keeping your blood pressure under control can lower the risk of heart disease, stroke, congestive heart failure, and kidney disease.

Nutrition

Cut back on sodium

- Read Nutrition Facts labels when shopping to select products with low salt content.
- Keep the salt shaker off the table.
- Replace salt with herbs, spices, and lowsodium seasonings when you cook.
- Ask for low-sodium dishes and for sauces on the side when eating out.
- Look for foods labeled "low sodium," "reduced sodium," "sodium free," or "unsalted."





Add Potassium

A diet rich in potassium can counter the effects of salt on blood pressure. Older adults should consume 4,700 milligrams of potassium daily from food sources.

Sources of potassium

Fruits and vegetables such as sweet potatoes, white potatoes, greens, cooked dried beans, and tomato products. Low-fat yogurt and milk. Fish such as halibut, Pacific cod, yellow fin tuna, and rainbow trout.

Nutrition

Limit Calorie Intake

- Minimize or eliminate soft drinks and fruit drinks high in added sugars. Replace sweets and soft drinks with lower-calorie, alternatives like fruits, vegetables, and 100% juices. Unsweetened tea, low-fat or fat-free milk, or plain water are good choices. Be aware some products are low in fat but high in added sugars.
- The Nutrition Facts label tells you the total amount of sugars in one serving of a product BUT added sugars are NOT listed separately on this label. To find out if a product contains added sugars, read the ingredient list on the food package.
 Added sugars include brown sugar, corn sweetener, corn syrup, honey, molasses, and fruit juice concentrates. They also include dextrose, fructose, glucose, lactose, and sucrose.
- Limit alcohol amount to 1 drink daily for women and 2 drinks daily for men.
 Alcoholic beverages give you calories but few nutrients.
- Medicines, medical conditions and alcohol do not mix. Ask your doctor whether you can have an occasional drink if you want to. Otherwise, avoid the alcohol altogether.

Loss of Appetite as We Get Older

Reasons:

- ► Loss of interest in eating as senses of taste and smell change with age. As you age, foods you once enjoyed might seem to have less flavor.
- ► **Hint:** Enhance the flavor of food by cooking meals in new ways or adding different herbs and spices.
- Finding it harder to shop for food or cook
- ▶ Do not enjoy eating meals alone.
- ▶ Problems chewing or digesting food
- ➤ Some medicines can change your sense of taste or make you feel less hungry

Solutions

- **Nutrition**
- 1. Small changes can often help overcome challenges to eating well. Talk with your doctor if you have no appetite, or find that food tastes bad or has no flavor.
- 2. If you have trouble chewing, you might have a problem with your teeth or gums. If you wear dentures, not being able to chew well could also mean that your dentures need to be adjusted. Talk to your doctor or dentist if you're finding it hard to chew food.
- 3. Chewing problems can sometimes be resolved by eating softer foods.
- 4. If you experience a lot of digestive problems, such as gas or bloating, avoid foods that cause gas or other digestive problems. If you do not have an appetite, stomach problems, or seem to be losing weight without trying, talk to your doctor or ask to see a dietitian.





- 6. If food no longer tastes good, try cooking meals in new ways or using different herbs and spices. Experiment with ethnic foods, regional dishes, or vegetarian recipes.
- 7. Try out different kinds of fruits, vegetables, and grains that add color to your meals.
- 8. Look for creative ways to combine foods from the different food groups.
- 9. Try out new recipes.
- 10. Learn new ways to prepare meals and snacks.
- 11. Grocery stores, culinary schools, community centers, and adult education programs offer free cooking classes.

Share Meals With Friends

- Share meals with neighbors at home or dine out with friends or family members Eating with others is another way to enjoy meals more. Join or start a breakfast, lunch, or dinner club. Many senior centers and places of worship host group meals. You might also arrange to have meals brought to your home.
- **If you don't feel like eating because
 of problems with chewing, digestion, or
 gas, talk with your doctor or a registered
 dietitian.

Nutrition



Photo courtesy of sxc/j kucharsk

Eating out

- Select main dishes that include vegetables such as salads, vegetable stir fries, or kebobs.
- Order food baked, broiled, or grilled instead of fried.
- Make sure food is well done, especially dishes with meat, poultry, fish, seafood, or eggs. Choose dishes without gravies or creamy sauces, and ask for dressing on the side to control portions.
- Ordering half portions or splitting a dish with a friend can help keep calorie intake down.
- Don't be afraid to ask for substitutions.
 Many restaurants and eating establishments offer healthful choices and many let you substitute healthier foods.

• For example, substitute fat-free yogurt for sour cream on a baked potato. Instead of a side order of onion rings or French fries, have mixed vegetables.

If you need help shopping or preparing meals or want to find ways to share meals with others, look for services in your community. Your *Area Agency on Aging* can tell you about these services.

To contact your *Area Agency on Aging*, call the Eldercare Locator toll-free at 1-800-677-1116.

Wise Shopper = Smart Shopper

Planning ahead and being creative can help you eat well, even if your budget is limited. In this section, you'll find ideas for buying foods that give you the most nutrition for your food dollars.

Planning ahead can help you choose healthy foods when you shop. It can also help you get the most for your money.



Julie Braune, of Braune Farms in Seguin, helps shoppers make healthy choices at the San Marcos Farmer's Market, San Marcos, Texas. April 2010

hoto Susan

- Plan your meals and snacks for the next few days or a week. Make a shopping list of foods you will need, then buy only the items on your list. To avoid impulse buying, try to do your shopping when you're not hungry or rushed.
- Plan to buy low-fat, nutrient-dense items like fruits and vegetables, lean meats, fish, and whole-grain cereals and breads. Also put other nutrient-dense items like low-fat or fat-free milk and milk products, eggs, dried beans, and nuts on your shopping list.
- Try not to buy a lot of convenience foods, even if they're on sale. These foods, such as baked goods, candy, crackers, and chips, can be high in sodium, sugar, and fat. Limit the amount of lunch meat you buy for the same reasons unless you are buying the special lean, low-fat, low-sodium products.
- Take time to read the Nutrition Facts label on food packages and cans until you are familiar with them. Nutrition Facts help you choose more healthy foods and compare the contents of different brands.
- Before going to the store, check your stock of staples like flour, sugar, rice, and cereal. Also check your supply of canned and frozen foods, which can be handy when you don't feel like cooking or can't go out. Try to choose canned and frozen products that are low in sodium, saturated and trans fats, cholesterol, and added sugars.
- Plan to buy enough ingredients to cook more than one meal and then freeze mealsized portions. These can replace purchased frozen dinners that may have more fat and sodium in them. Many soups, casseroles, fish, and meats freeze well for later use.
- If you find it hard to shop because you don't drive or have trouble walking or carrying groceries, some grocers offer home-delivery services or order on the Internet. Or...ask family or friends, your place of worship, or a local volunteer center for help with shopping. Home-delivered meals are also available for people who can't get out. Your Area Agency on Aging might be able to tell you where to get help if you can't shop or make your own meals. To contact your *Area Agency on Aging*, call the *Eldercare Locator* toll free at 1-800-677-1116.

Eat Well on a Budget

Eating well does not have to mean spending more money or buying costly "health foods." You can eat well on a budget by planning ahead and choosing foods that give you more nutrition for your money. In fact, you might find that you spend less, not more, to eat right.

Save money

- ☐ Choose store brands instead of name brands. You can also clip and use coupons, look for items that are on sale, or use supermarket discount cards.
- □ Plan meals and snacks in advance. Take a shopping list to the grocery store and try to buy only the items on the list. Before you shop, check store flyers to look for nutritious foods and ingredients that are on sale.
- □ **Buy in bulk** save money by buying large sizes of foods. Note: Large sizes may cost less per pound or other unit, but they aren't a bargain if you end up throwing out a lot of the food.
- ☐ Get more nutrition for your money by choosing fruits and vegetables, fat-free or low-fat milk products, whole grains, lean meats, and other healthy foods. Avoid convenience foods, sweets, and snack foods that give you fewer nutrients for your food dollars.

- □ Before you buy, think about how much of a product you'll really use. Buy only enough fresh fruits and vegetables to eat within a few days. Also, try not to buy more perishable items than you will use before the "use-by" date marked on the package.
- If you like to eat out, go to restaurants that offer senior discounts. Look for early-bird dinner specials or go out for lunch instead of dinner. Some restaurants offer two-for-one or discount coupons. When eating out, consider ordering low-fat, low-sodium, and other healthy menu items. Ask for sauces or dressings on the side so you can better control how much you eat.
- □ Share meal preparation and ingredient costs with friends to save money and make it fun. For instance, you might plan a potluck dinner with neighbors. You might also buy ingredients and cook with a friend.

Save money continued

- □ Need financial help to buy food? Find programs for older people with limited budgets. Food stamps from the Federal Government help qualified people to buy groceries. They help people with a low income or salary get enough to eat, and they encourage good nutrition and health. ***The Senior Farmers' Market Nutrition Program can help, too. This Federal Government program gives coupons to older adults with low incomes that can be used at farmers' markets, roadside stands, and some other places. The coupons can be exchanged for fresh, nutritious, locally grown fruits, vegetables, and herbs.
- □ **Enjoy free or low-cost meals** at places in your community. These meals offer good food and a chance to be with other people. Contact your local senior center or places of worship to find out about these meals. Home-delivered meals may be available for people who can't get out.



San Marcos Texas Farmer's Market offers many healthy food options for seniors on a budget. April 2010

Contact your *Area Agency on Aging* to learn more about food stamps, the *Senior Farmers' Market Program*, home-delivered meals, congregate meals, and other food assistance programs. They can give you more information about how to get these services. To contact your *Area Agency on Aging*, call the *Eldercare Locator* toll-free at 1-800-677-1116.

If you would like to read more about *How to Eat Well* visit: http://nihseniorhealth.gov to learn more about how to:

- Choose Nutrient-dense Foods
- Know How Much to Eat.
- Limit Some Foods
- Enjoy Your Meals

		• • •	
	ITE	-	\mathbf{o}
IVL	au.	ILI	on

Diet and Diabetes Prevention

Making healthy food choices is very important to help keep your blood glucose level under control. People with diabetes should have their own meal plan. Ask your doctor to give you the name of a dietitian or a diabetes educator who can work with you to develop a meal plan. In designing a meal plan for you, a dietitian will consider several things, including your weight and daily physical activity, blood glucose levels, and medications. If you are overweight, a plan to help you achieve a weight that is right for you will help control your blood glucose. Your dietitian can help you plan meals to include foods that you and your family like to eat and that are good for you. People with diabetes don't need to eat special foods. The foods that are on your meal plan are good for everyone in your family. Try to eat foods that are low in fat, salt, and sugar and high in fiber, such as beans, fruits, vegetables, and whole grains. Making healthy food choices will help you reach and stay at a weight that's good for your body, keep your blood glucose in a desirable range, and prevent heart and blood vessel disease.

Why are seniors more susceptible to foodborne illness?

The immune system weakens as we age. Stomach acids reduce allowing for foodborne bacteria to exist. Foodborne bacteria takes 1 to 2 days after a meal to cause an illness, sometimes within 20 minutes to even 6 weeks after in some cases. The FDA and USDA recommend four basic rules to staying healthy and prevent the invasion of BAC (bacteria that can cause foodborne illness).

Fight BAC! is a national education campaign designed to teach everyone about food safety.

Fight BAC by following these 4 basic rules: Clean- Separate-Cook-Chill

Use hot soapy water to clean items used when preparing food, especially before going on to prepare another food item:



- Cutting boards
- Utensils
- Sponges
- Countertops
- Dishes

Wash hands with hot soapy water before AND after handling food, using the bathroom, changing diapers, and handing pets. How long should you wash? Singing the Happy Birthday song is a good measurement of time.

Replace excessively worn cutting boards including plastic or non-porous boards that can trap bacteria in the cutting grooves.

Use paper towels instead of cloth towels to clean kitchen surfaces. If you do use cloth towels, wash frequently in hot water.



Separate - Avoid cross contamination

Cross-contamination is how bacteria spreads from one food item to another. This is especially true when handling raw meat, poultry, and seafood. Keep these items away from foods that are not going to be cooked.



Photo courtesy of sxc

- Use a different cutting board for raw meat products.
- Always wash hands, cutting boards, dishes, and utensils with hot soapy water after they come in contact with raw meat, poultry, seafood, eggs and unwashed fresh produce.
 - Place cooked food on a clean plate. An unwashed plate that held raw food can cross-contaminate bacteria onto cooked food.

NOTE:

Important rule when grocery shopping:

Keep meat items away from dry items and fresh produce in the grocery cart and while transporting home. Make sure the bagger keeps meats bagged separate. Keeping a cooler with an ice pack in your car also keeps meat safely stored especially in hot weather and long trips home from grocery store. This is also a good suggestion for frozen foods.



COOK - Use proper temperatures

Food is properly cooked when heated for a long enough time at a high enough temperature to kill harmful bacteria.

- ☐ Use a clean food thermometer to measure internal temperature of food. (See attached chart)
 - Steaks = at least 145°F
 - Whole Poultry = to 180°F (in thigh)
 - Chicken breast = 170°F
 - Ground beef = at least 160°F. (bacteria can spread during processing)



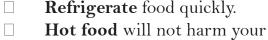
hoto Susan

- Photo courtesy of syc
- ☐ Cook eggs until yolk and white are firm.

 Do not use recipes in which eggs remain raw or are partially cooked.
- ☐ Fish should be opaque and flake easily with a fork. Cooked shrimp appears pink.
- ☐ Microwave cooking:
- To make sure there are not cold spots in food, cover, stir, and rotate dish by hand once or twice during cooking. Use a safe food thermometer to make sure safe internal temperatures are reached.
- Reheated food should be heated to 165°F.
- Sauces, soup, and gravy should be brought to a boil.

Chill – Keep BAC from multiplying!

At room temperature bacteria in food can double every 20 minutes.



Hot food will not harm your refrigerator.

Set your home refrigerator no higher than 40°F and Freezer at 0°F. Check with an appliance thermometer if your refrigerator does not have a temperature gauge built in.

☐ Refrigerate or freeze perishables, prepared food, and leftovers within 2 hours.

Divide large amounts of leftovers into shallow containers for quick cooling in refrigerator.



Photo Susan Rauch

☐ Safe Thawing:

- Never thaw foods at room temperature. Store in refrigerator. 4-5 pounds = 24 hours to thaw.
- Thaw outside refrigerator by immersing in cold water. Change water every half hour to keep cold.
- **Microwave** thawing: Be sure to immediately cook afterwards.
- **Marinate** foods in refrigerator.
- Do not pack refrigerator too full. An over-packed refrigerator prevents cold air from circulating to keep food at a safe temperature.

☐ Doggie Bag:

If you will not be arriving home within 2 hours of being served, it is safer to leave the leftovers at the restaurant



Reheating ready-to-eat foods

Pre-cooked foods can become re-contaminated with bacteria after being processed and packaged, such as:

Hot dogs
Luncheon meats
Cold cuts
Fermented and dry sausage
Deli-style meat and poultry products

Reheating pre-cooked foods

- Reheat these foods until they are steaming.
- Wash hands with hot, soapy water (at least 20 seconds) after handling these types of ready-to-eat foods.
- ☐ Wash cutting boards, dishes, utensils that come into contact with these types of foods.
- ☐ Reheat meals to 165°F and steaming.
- \square Bring gravy to a rolling boil.
- ☐ When using microwave: Cover food and rotate dish so food heats evenly.

What foods Seniors' need to avoid:

Reduce risks of acquiring bacteria in food by avoiding the following foods:

- Raw fish and shellfish including oysters, clams, mussels, scallops.
- Raw or unpasteurized milk or cheese.
- Soft cheeses such as feta, Brie, Camambert, blue-veined, and Mexican-style cheese.
- Hard and processed cheese, cream cheese, cottage cheese, yogurt are okay.
- Raw or lightly cooked egg or egg products including salad dressings and egg nog.
- Raw meat or poultry.
- Raw sprouts: alfalfa, clover, and radish.
- Unpasteurized or untreated fruit or vegetable juice.





Meals-to-Go or Home Delivered Meals

Let someone else do the cooking – just one option to food safety.

Where to find healthy meals on the go:

- Convenience stores
- Grocery stores, deli stores, or restaurants now offer not or cold meals-to-go
- Home delivery from restaurant or restaurant-delivery service.
- Meals on Wheels: http://www.mowaa. org

Note: Hot or cold ready-prepared meals are perishable and may cause illness when mishandled.

Danger Zone - 2-Hour Rule:

Discard any perishable foods left at room temperature longer than 2 hours. When temperatures are above 90°F, discard food after 1 hour.

Hot Foods:

- Eat within 2 hours to prevent harmful bacteria from multiplying. If you cannot eat your meal within 2 hours, keep food warm in an oven set at a high enough temperature. Cover food to keep moist. Or....refrigerate food and then reheat when ready to eat.
- Divide meat or poultry into small portions to refrigerate or freeze.
- Refrigerate or freeze gravy, potatoes, and other vegetables in shallow containers.
- Remove stuffing from whole cooked poultry and refrigerate.

Cold Foods

Eat within 2 hours or refrigerate/freeze.

Internet-Websites on Food Safety:

- Food and Drug Administration and AARP
- Food Safety and Inspection Service
- Joint-Federal Information
- Fight BAC Partnership for Food Safety Education

Other Nutrition and Health Safety Guides:

- Helpguide Online
- Senior Nutrition Nutrition Survey

Useful Toll-free Hotlines:

Food and Drug Administration 1-888-SAFEFOOD

USDA Meat and Poultry 1-800-535-4555

Raw Food	Internal Temperature
Ground Products	
Beef, veal, lamb, pork	160°F
Chicken, turkey	165°F
Beef, Veal, Lamb Roasts & steaks	
medium-rare	145°F
medium	160°F
well-done	170°F
Pork	
Chops, roast, ribs	
medium	160°F
well-done	170°F
Ham, fully cooked	140°F
Ham, fresh	160°F
Sausage, fresh	160°F
Poultry (Turkey & Chicken)	
Whole bird	at least 165°F
Breast	at least 165°F
Legs & thighs	at least 165°F
Stuffing (cooked separately)	165°F
Eggs	
Fried, poached	yolk & white are firm
Casseroles	160°F
Sauces, custards	160°F
Fish	flakes with a fork
	1. 0 1 .1

*This chart provides guidance for cooking foods at home.

Refrigerator and Freezer Storage Chart		
Eggs	Refrigerator (40°F)	Freezer (0°F)
Fresh, in shell	4-5 weeks	Don't freeze
Hardcooked	1 week	Doesn't freeze well
Egg substitutes, opened	3 days	Don't freeze
Egg substitutes, unopened	10 days	1 year
Dairy Products	Refrigerator (40°F)	Freezer (0°F)
Milk	1 week	3 months
Cottage cheese	1 week	Doesn't freeze well
Yogurt	1-2 weeks	1-2 months
Commercial mayonnaise (refrigerate after opening)	2 months	Don't freeze
	Refrigerator (40°F)	Freezer (0°F)
Vegetables	Raw	Blanched/cooked
Beans, green or waxed	3-4 days	8 months
Carrots	2 weeks	10-12 months
Celery	1-2 weeks	10-12 months
Lettuce, leaf	3-7 days	Don't freeze
Lettuce, iceberg	1-2 weeks	Don't freeze
Spinach	1-2 days	10-12 months
Squash, summer	4-5 days	10-12 months
Squash, winter	2 weeks	10-12 months
Tomatoes	2-3 days	2 months

Deli Foods	Refrigerator (40°F)	Freezer (0°F)
Entrees, cold or hot	3-4 days	2-3 months
Store-prepared or homemade salads	3-5 days	Don't freeze
Hot dogs & Luncheon Meats	Refrigerator (40°F)	Freezer (0°F)
Hot dogs, opened package	1 week	
Hot dogs, unopened package	2 weeks	1-2 months in freezer wrap
Lunch meats, opened	3-5 days	1-2 months
Lunch meats, unopened	2 weeks	1-2 months
TV Dinners/Frozen Casseroles	Refrigerator (40°F)	Freezer (0°F)
Keep frozen until ready to serve		3-4 months
Fresh Meat	Refrigerator (40°F)	Freezer (0°F)
Beef-steaks, roasts	3-5 days	6-12 months
Pork-chops, roasts	3-5 days	4-6 months
Lamb-chops, roasts	3-5 days	6-9 months
Veal-roast	3-5 days	4-6 months
Fresh Poultry	Refrigerator (40°F)	Freezer (0°F)
Chicken or turkey, whole	1-2 days	1 year
Chicken or turkey pieces	1-2 days	9 months
Fresh Fish	Refrigerator (40°F)	Freezer (0°F)
Lean fish (cod, flounder, etc.)	1-2 days	6 months
Fatty fish (salmon, etc.)	1-2 days	2-3 months
Ham	Refrigerator (40°F)	Freezer (0°F)
Canned ham (label says "keep refrigerated")	6-9 months	Don't freeze

Ham, fully cooked (Half & slices)	3-5 days	1-2 months
Bacon & Sausage	Refrigerator (40°F)	Freezer (0°F)
Bacon	1 week	1 month
Sausage, raw (pork, beef or turkey)	1-2 days	1-2 months
Pre-cooked smoked breakfast links/patties	1 week	1-2 months
Leftovers	Refrigerator (40°F)	Freezer (0°F)
Leftovers Cooked meat, meat dishes, egg dishes, soups, stews and vegetables	O	
Cooked meat, meat dishes, egg dishes, soups,	(40°F)	(0°F)

Fresh Produce

- The quality of certain perishable fresh fruits and vegetables (such as strawberries, lettuce, herbs and mushrooms) can be maintained best by storing in the refrigerator. If you are uncertain whether an item should be refrigerated to maintain quality, ask your grocer.
- All produce purchased pre-cut or peeled should be refrigerated for safety as well as quality.
- Produce cut or peeled at home should be refrigerated within two hours.
- Any cut or peeled produce that is left at room temperature for more than two hours should be discarded

http://www.fda.gov/AboutFDA/AboutThisWebsite/WebsitePolicies/default.htm

Linking To or Copying Information On the FDA Website

FDA appreciates being informed about the use of Web site materials. Contact FDA, HFI-50, Rockville, MD 20857 or e-mail webmail@oc.fda.gov.

Intergenerational Programming - Evidence-based Disease and Disability Prevention Program (EBDDP)

EBDDP Purpose

Older Americans are greatly affected by chronic diseases and conditions, such as arthritis, diabetes and heart disease, as well as disabilities that result from injuries such as falls.

- ▶ More than one-third of adults aged 65 or older fall each year.
- ▶ 21% of the population aged 60 and older 10.3 million people have diabetes.
- ▶ 7 of every 10 Americans over 1.7 million people die of chronic disease each year.



EBDDP programs - Proven to empower older adults to take control of their health.

Seniors with different chronic health conditions attend classes together to learn to maintain a healthy lifestyle through increased self-efficacy and self-management behaviors:

- In their own communities
- In familiar non-clinical settings, such as community centers
- In peer learning groups which provide support, socialization and reinforcement
- Of positive health behavior changes

CDSMP Topics

- ♦ Techniques for dealing with problems: ex: frustration, fatigue, pain, isolation
- ♦ Exercise for maintaining and improving strength, flexibility, and endurance
- ♦ Nutrition
- ♦ Appropriate use of medications
- ♦ Communicating effectively with health professionals.

Stanford University Chronic Disease Self-Management Program (CDSMP) (Example of EBDDP program)

- Emphasizes patient roles in managing illness and building self-confidence to be successful in adopting healthy behaviors.
- Consists of: workshops once a week for two and a half hours over six weeks in community-based settings such as senior centers, congregate meal programs, faith-based organizations, libraries, YMCAs, YWCAs, and senior housing programs.
- Workshops are facilitated by trained and certified leaders, at least one of whom has a chronic illness.

Intergenerational Programming - Stanford University Chronic Disease Self-Management Program (CDSMP)

The **CDSMP** has been shown to be effective in helping people with chronic conditions change their behaviors, improve their health status, and reduce their use of hospital services. 27 states have provided evidencebased programs to older adults in their communities.

AoA requires each participating state to implement the *CDSMP*, but also gives each state the option to select another program which helps reduce chronic disease in its senior population.

These programs may include:

- **Physical Activity Programs** such as Enhance Wellness, Tai Chi or Healthy Moves, which provide seniors with low-impact aerobic exercise, minimal strength training and stretching.
- Fall Programs such as Matter of Balance and Stepping On, that assist seniors with strengthening muscles and behavior changes to prevent their fear of falling
- **Nutrition Programs** such as *Healthy Eating*, teaching older adults the value of choosing and eating healthy foods, and maintaining an active lifestyle.

Depression and/or Substance Abuse

Programs such as PEARLS and Healthy IDEAS, which teach older adults how to manage their mild to moderate depression.



Photo courtesy of Shannon Williams/SLI Wii Fit

Since the program began in 2003

About 44,000 seniors have received services from AoA's Evidence-Based Disease and Disability Prevention program. The number of persons served increases yearly and in the year ending July 2009, approximately 24,000 seniors were served by these programs.

To find a program in your area

Visit: http://www.aoa.gov Type EBDDP in the search box.

Intergenerational Programming - Strong for Life Wii

Project A Service-Learning Initiative Texas State University-San Marcos Study

Question: Does perceived balance skills reflect Balance Performance in Elders?



Investigators:

Dr. Denise Gobert, Shannon Williams, Dr. Jason Hardage, Emily Padgett, Brian McAdams, Dora Ruiz.

Project Initiatives and Outcomes:

Questionnaires are frequently used with elders to document physical capacity in elders. However, how accurate is self-report compared to actual physical performance in elders? The purpose of this part of the Wii Project was to see how perceived balance

predicts actual balance performance in an elderly population participating in a nine week exercise program using the interactive video gaming system called the Wii (Nintendo, Inc.)

Methods:

A total of 25 (9-Males, 16-Females) volunteers were consented according to university policy and screened with a medical history questionnaire. The average age was 62.23 (±14.17) years with an average Mini-Mental score of 26.32 (±3.17). Several in the group also indicated multiple chronic illnesses: Diabetes = 10 (38.46%); Hypertension = 12 (46.15%); Cardiac Problems = 4 (15.38%); Balance Problems = 15 (57.69%); and Stroke = 5 (19.23%). Project tests included the Activities-Specific Balance Confidence questionnaire (ABC), Beck's Geriatric Depression Scale short form, and



balance performance as tested by the NeuroCom EquiTest (Sensory Organization Test-SOT).

Results:

The average ABC score was $69.39 \ (\pm 21.07)$, which indicated a moderate level of confidence in balance while the average SOT score was $587.04 \ (\pm 14.19)$ indicating a moderate level of balance skills. Pearson's Correlation indicated a mild positive relationship between the ABC score and the SOT scores (0.196499) which did not reach significance. However, there was a significant negative correlation between age and balance scores (-0.34932) with a negative trend between depression and balance scores (-0.01947). Alpha level was set at 0.05.

Intergenerational Programming - Strong for Life Wii Project A Service-Learning Initiative Texas State University-San Marcos Study

Conclusion:

Preliminary results indicate that participant balance confidence, as indicated by self report, provides a limited indication of actual balance performance while age and depression may be significant factors which can alter balance performance in study participants. Continued investigation will explore response in geriatric confidence and balance skills to a structured activity program.

What is Service-Learning? The Health Incentives....

Service-learning is a structured learning experience that combines community service with preparation and reflection. Students engaged in service-learning provide community service in response to community-identified concerns and learn about the context in which service is provided, the connection between their service and their academic coursework, and their roles as citizens.

Service-learning differs from traditional clinical education in the health professions in that:

- » Service-learning places an emphasis on addressing community concerns and broad determinants of health
- » In service-learning, there is the integral involvement of community partners service-learning involves a principle-centered partnership between communities and health professions schools.
- » Service-learning places an emphasis on developing citizenship skills and achieving social change - many factors influence health and quality of life. The provision of health services is not often the most important factor. In service-learning, students place their roles as health professionals and citizens in a larger societal context

From: Seifer SD. (1998). Service-learning: Community-campus partnerships for health professions education CCPH. Academic Medicine, 73(3):273-277.

Service-Learning Initiative (SLI) at Texas State

The Service-Learning Initiative (SLI) is a grassroots effort begun in 2001, facilitated by a team of faculty, staff, and students to promote and strengthen campus-wide commitment to service-learning. "Quality service-learning places an emphasis on credit for student learning and not for the service that is provided. Nonetheless, those served must benefit from the service or it is not service-learning" (Howard, 1993). Although service-learning at Texas State includes an experiential component, it is not just experiential learning. The main objective is for students to earn course credit primarily for learning not service. The Service-Learning Initiative (SLI) allows students to assess experience through course-based learning outcomes. The SLI team works to promote and strengthen a campus-wide commitment to servicelearning.

In addition to individually planned service-learning courses developed by faculty fellows, students can participate in three intergenerational core programs that promote community safety and health wellness:

M.A.P. (Mutual Adoption Pact) Safe at Home **Strong for Life**

The Wii Fit Project was conducted under the Strong for Life Program.

One of the yearly projects with Safe At

Home is a wheelchair or ramp build to help a needed disabled community member with mobility in and around the home. The project is co-sponsored with the assistance of community partners, such as McCoys Building Supply.



The Service-Learning Initiative promotes the building of intergenerational relationships through service-learning and activities within the Greater San Marcos community.

SLI defines service-learning as:

A structured teaching and learning approach that integrates the experience of community service with academic study and reflection to enrich learning, promote civic and personal responsibility, and strengthen community.

Get Creative Stay Young

CREATIVITY PROMOTES LONGEVITY of LIFE

The National Center for Creative Aging (NCCA), founded in 2001, is dedicated to fostering an understanding of the vital relationship between creative expression and the quality of life of older people. Creative expression is important for older people of all cultures and ethnic backgrounds, regardless of economic status, age, or level of physical, emotional, or cognitive functioning.

NCCA conducted a research study, directed by Gene Cohen, M.D., PhD., looking at how community-based cultural programs affect physical, and mental health, and social activities of individuals aged 65 and older. Within that study the findings of participants in the intervention group revealed a "higher overall rating of physical health, fewer doctor visits, less medication use, fewer instances of falls, better morale, fewer feelings of lonelieness, and a trend toward increased activity."

For more information on this study go to: www.gwumc.edu/cahh.

Creativity Matters Toolkit

NCCA developed and provide online a toolkit explaining why and how older adults benefit from participating in professionally conducted community arts programs. The toolkit and site offers advice and examples on program design, implementation, and evaluation.

For more information visit: artsandaging.org





Photos by Susan Rauch

Food: Eating Well and Health Safety

1. How can eating well help me stay healthy?

Good nutrition is one of the best ways to stay healthy. Eating a well-planned, balanced mix of healthy foods every day may help prevent heart disease, stroke, type 2 diabetes, bone loss, some kinds of cancer, and anemia. If you already have one or more of these chronic diseases, eating well may help you better manage them. Healthy eating may also help you reduce high blood pressure, lower high cholesterol, and manage diabetes. If you have a specific medical condition, be sure to check with your doctor or dietitian about foods you should include or avoid. Healthy eating also gives you the nutrients needed to keep your muscles, bones, organs, and other parts of your body healthy. These nutrients include vitamins, minerals, protein, carbohydrates, some fats, and water. Eating well helps keep up your energy level, too. By consuming enough calories — a way to measure the energy you get from food — give your body the fuel it needs throughout the day.

2. What kinds of foods are the healthiest?

It's best to eat a mix of nutrient-dense foods every day. Nutrient-dense foods are foods that are high in nutrients and low in calories. Choose foods that contain vitamins, minerals, complex carbohydrates, lean protein, and healthy fats. At the same time, try to avoid "empty calories" — foods and drinks that are high in calories but provide few or no nutrients.

Plan your meals and snacks to include

- plenty of fruits and vegetables
- plenty of grains, especially whole grains
- low-fat or fat-free milk and milk products
- lean meats, poultry, fish, beans, eggs, and nuts
- limited amounts of fats (saturated and trans fats should be as low as possible), cholesterol, salt (sodium), and added sugars.

3. What are calories and how many should I consume each day?

Calories are a way to measure the energy you get from food. They give your body the fuel it needs throughout the day. The number of calories you need daily depends on how old you are, whether you're a man or woman, and how active you are.

Consuming the right number of calories for your physical activity level helps you control your weight. The more physically active you are the more calories you might be able to eat without gaining weight. (For information about exercise and older adults, go to http://nihseniorhealth.gov/exerciseforolderadults/toc.html).

A woman over age 50 should consume about

- 1,600 calories a day if her physical activity level is low
- 1,800 calories daily if she is moderately active
- 2,000 to 2,200 calories daily if she has an active lifestyle.

A man over age 50 should consume about

- 2,000 calories a day if his physical activity level is low
- 2,200 to 2,400 calories daily if he is moderately active
- 2,400 to 2,800 calories daily if he has an active lifestyle.

4. What amounts of food should I eat?

The Dietary Guidelines from the U.S. Department of Agriculture, or USDA, recommend eating the following amounts of food if you are eating 2,000 calories per day. Remember to adjust the amounts depending on your daily calorie level.

A person who consumes 2,000 calories a day should have a daily intake of

- $2-2\frac{1}{2}$ cups of fruits
- $2-2\frac{1}{2}$ cups of vegetables
- 7-8 ounces of grains (one ounce of grain foods is equal to one slice of bread, one cup of ready-to-eat cereal, or a half cup of rice, cooked pasta, or cooked cereal)
- 2-3 cups of fat-free or low-fat milk or milk products
- 5-7 ounces of lean meats, poultry, fish, beans, eggs, and nuts (one egg or ¼ cup of cooked dry beans or tofu equals 1 ounce of meat, poultry, or fish)
- limited amounts of fats (saturated and trans fats should be as low as possible), cholesterol, sodium (salt), and added sugars.

5. What kinds of fruits should I eat?

Eat a variety of fresh, frozen, canned, or dried fruits every day. Fruits contain lots of vitamins, minerals, fiber, and other substances important for good health. Plus, they are low in fat and calories. To make sure you get the benefit of the natural fiber in fruits, you should eat most of your fruits whole rather than as juice. Fruits may be purchased fresh, canned, frozen, or dried and may be eaten whole, cut-up, or pureed.

6. What kinds of vegetables should I eat?

Eat a variety of vegetables everyday. Vegetables contain lots of vitamins, minerals, fiber, and other substances important for good health. Plus, they are low in fat and calories. Aim for lots of color on your plate as a way to get the widest variety possible each day. Broccoli, spinach, turnip, collard greens, and other dark leafy greens are good choices. Choose orange vegetables, such as carrots, sweet potatoes, pumpkin, or winter squash. Vegetables may be purchased raw or cooked, frozen, canned, dried/dehydrated and eaten whole, cut-up, or mashed.

7. What kinds of grains should I eat?

Foods made from grains are a major source of energy and fiber. Include grains in your diet every day. Any food made from wheat, rice, oats, cornmeal, barley or another cereal grain is a grain product. Grains fall into two main categories: whole and refined. When choosing grain foods, try to make half your grains whole at least half of the cereals, breads, crackers, or pastas you eat should be made from whole grains. For example, you might try whole wheat pasta instead of regular pasta or use brown rice in a casserole in place of white rice.

8. What are whole-grain foods?

Whole-grain foods, such as whole-wheat bread, are made with the entire seed of a plant, including the bran, the germ, and the endosperm. Together, they provide lots of vitamins, minerals, antioxidants, healthy fat, carbohydrates, and fiber.

Whole grains are better sources of fiber and nutrients than refined grains, such as white flour or white rice. Refined grains have had both the bran and germ removed, and don't have as much fiber or as many nutrients. Most refined grains are enriched, with some B vitamins and iron added back in after processing. However, fiber is not replaced.

9. How do I know if a food is whole grain?

When you buy a grain food such as cereal or bread, check the ingredient list on the package to see that the main ingredients include a whole grain. Look for "whole wheat" or "whole oats" rather than just "wheat" or "oats." Other whole grains include whole rye, whole-grain corn, bulgur wheat, graham flour, oatmeal, brown rice, and wild rice. Products labeled "multi-grain," "stone-ground," "100% wheat," "cracked wheat," "seven-grain," and "bran" are not always whole-grain foods. You can compare the fiber content in the Nutrition Facts label on packages of bread and other grain products to help identify the best choices.

10. What are the benefits of eating fruits, vegetables, and grains?

Fruits, vegetables, and grains offer important vitamins and minerals to keep your body healthy. Most of these foods have little fat. They also have no cholesterol. Fruits, vegetables, and grains are also a source of fiber, and eating more fiber may help with digestion and constipation and may lower cholesterol and blood sugar. Fruits, vegetables, and grains also give your body phytochemicals. Phytochemicals are natural compounds such as beta-carotene, lutein, and lycopene. Like vitamins, minerals, and fiber, phytochemicals may promote good health and reduce the risk of heart disease, diabetes, and some cancers. Research is underway to learn more about the health benefits of these natural compounds. Fruits, vegetables, and grains also contain antioxidants. Antioxidants are substances that may protect cells in the body from the damage caused by oxidation. They include vitamin C, vitamin E, and other substances. Antioxidants are thought to promote health and to possibly reduce the risk of certain cancers and other diseases. Colorful fruits and vegetables are the best dietary

sources of antioxidants. Deeply and brightly colored fruits and vegetables, such as spinach, carrots, red bell peppers, and tomatoes, have the highest amounts of these healthy substances. Antioxidant supplements may not provide the same health benefits as foods.

11. What are some sources of protein?

Protein helps build and maintain muscle, bones, and skin, and you should include some protein in your diet very day. Meats and poultry are sources of protein as well as B vitamins, iron, and zinc. When buying meats and poultry, choose lean cuts or low-fat products. They provide less total fat, less saturated fat, and fewer calories than products with more fat.

For instance, 3 ounces of cooked, regular ground beef (70% lean) has 6.1 grams of saturated fat and 236 calories. Three ounces of cooked, extra-lean ground beef (95% lean) contains 2.6 grams of saturated fat and 148 calories. Also consider varying your sources of protein. Try replacing meats and poultry with fish or with bean, tofu, or pea dishes. These foods tend to be low or lower in saturated fats, and beans provide fiber. Pinto beans, kidney beans, black beans, chickpeas, split peas, and lentils are all healthy options. Look for ways to add nuts and seeds to your meals and snacks too, but keep the amounts small since these foods can contain high amounts of fat.

12. What about milk products?

Low-fat or fat-free milk and milk products should be among the foods you choose every day. These products provide calcium and vitamin D to help maintain strong bones. They also provide protein, potassium, vitamin A, and magnesium. Low-fat or fat-free milk, cheese, and yogurt are good options. If you don't drink milk, be sure to have other products that contain the nutrients that milk products provide. Some cereals and juices are fortified with extra calcium and vitamin D. Salmon, sardines, and tuna are sources of vitamin D. If you avoid milk because of its lactose (milk sugar) content, you can get needed nutrients from lactose-reduced or low-lactose milk products. You might also drink small amounts of milk several times a day or take tablets with the enzyme lactase (available in most drugstores and grocery stores) before consuming milk products. Other sources of calcium include foods such as hard cheese, yogurt, bony canned fish such as salmon and sardines, and calcium-fortified tofu or soy beverages.

13. What does the Nutrition Facts label on packaged and canned foods tell me?

The Nutrition Facts label on food packages and canned goods tells you how many calories and which nutrients the food provides. You can use it to help you keep track of how much fat, saturated fat, trans fat, sodium, cholesterol, sugars, and calories you are getting from different foods. The Nutrition Facts label also provides the Percent Daily Value (% Daily Value) for nutrients. It tells you what percentage of the recommended daily amount of a nutrient is in one serving of the food, based on the nutritional needs of a person eating 2,000-calories a day. For example, on this label for macaroni and cheese, the Percent Daily Value for total fat is 18%.

This means that one serving of macaroni and cheese (1 cup) will give you 18 percent of the total amount of fat you should allow yourself each day, assuming you eat about 2,000 calories daily.

Keep in mind that the calories, and nutrient amounts, and percentages listed in the Nutrition Facts are for one serving only. The package might contain two or more servings. If you eat two servings, you would consume twice the calories, fat, sodium, carbohydrates, protein, etc., as you would for one serving.

14. Is it okay to eat some fat?

Yes. It's okay to eat limited amounts of certain kinds of fats. In fact, your body needs some fats for energy and for healthy organs, skin, and hair. Fats also help your body absorb vitamins A, D, E, and K. Fats are also needed to provide essential fatty acids, which your body cannot make on its own. On the other hand, fat contains more than twice as many calories as protein or carbohydrates, and eating too many high-fat foods will likely add excess calories and lead to weight gain. Excess weight increases your risk of type 2 diabetes, heart disease, and other health problems. Learn to limit fats to 20 to 35 percent of your daily calories. For instance, if you eat and drink 2,000 calories daily, only 400 to 700 of the calories should be from fats. The number of calories from fat in a serving of packaged foods is listed on the Nutrition Facts label of the package.

15. Are some fats healthier than others?

Yes. Some oils, such as olive oil and canola oil, are better for you than others. Choose polyunsaturated and monounsaturated fats when possible. Sources of better fats include vegetable oils such as soybean, corn, canola, olive, safflower, and sunflower oils. Polyunsaturated fat is also in nuts, seeds, and fatty fish. Walnuts, flaxseed and salmon are examples of foods with polyunsaturated fat.

16. Which kinds of fat should I limit?

Limit the amount of saturated fats and trans fats you consume. Many convenience foods contain saturated or trans fats. Read the Nutrition Facts label on packaged goods to choose products that are low in these fats. Consume less than 10 percent of calories from saturated fats. Keep daily intake of trans fats as low as possible.

Saturated fats are found in foods such as beef, cheese, milk, butter, oils, and ice cream and other frozen desserts. Trans fats are found in foods like margarine, crackers, icings, French fries, and microwave popcorn, as well as in many baked goods. Many sweets such as cakes, cookies, and doughnuts include saturated and/or trans fats. Read the Nutrition Facts label to choose products that are low in these fats.

17. How can I lower the amount of fat in my diet?

Here are steps you can take to lower the fat in your diet.

- Choose lean cuts of meat, fish, or poultry (with the skin removed).
- Trim off any extra fat before cooking.
- Use low-fat or fat-free milk products and salad dressings.
- Use non-stick pots and pans, and cook without added fat. Here are steps you can take to lower the fat in your diet.
- If you do use fat, use either an unsaturated vegetable oil or a nonfat cooking spray.
- Broil, roast, bake, stir-fry, steam, microwave, or boil foods. Avoid frying them.
- Season your foods with lemon juice, herbs, or spices instead of butter.

18. Should I limit the amount of cholesterol I consume?

Look for ways to limit the amount of cholesterol you consume. People with high levels of "bad," or LDL cholesterol in their blood are at high risk for heart disease. They should eat foods with less than a total of 200 mg of cholesterol daily. The Nutrition Facts label tells you how much cholesterol is in one serving of packaged foods.

Cholesterol is only found in animal products so you don't need to worry about it being in fruits or vegetables unless butter, cheese, cream, or sauces and gravies made from meat or meat broths are added. Talk with your doctor or other health care provider about getting your cholesterol checked. Also discuss ways to lower your cholesterol level and limit the cholesterol you consume, if needed.

19. Should I limit the amount of sodium I consume?

Sodium is consumed in the diet as part of salt. Older adults should limit their sodium intake to 1,500 milligrams (mg) daily, or about 2/3 of a teaspoon. This helps to keep your blood pressure under control and lowers your risk of heart disease, stroke, congestive heart failure, and kidney disease. Ways to cut back on sodium include keeping the salt shaker off the table and replacing salt with herbs, spices, and low-sodium seasonings when you cook. Also, eat fewer convenience foods, and ask for low-sodium dishes and for sauces on the side when you eat out. When you shop, choose foods labeled "low sodium," "reduced sodium," "sodium free," or "unsalted." Read the Nutrition Facts label on food packages to find out how much sodium a product contains. Different brands of foods that look the same can contain very different amounts of sodium. A diet rich in potassium can reduce the effects of salt on blood pressure. Older adults should consume 4,700 milligrams of potassium daily from food sources. Sources of potassium include fruits and vegetables such as sweet potatoes, white potatoes, greens, cooked dried beans, and tomato products. Potassium is also found in low-fat yogurt and milk, and in fish such as halibut, Pacific cod, yellow fin tuna, and rainbow trout.

20. What about added sugars?

To help control your calorie intake, limit foods and beverages like candy and fruit drinks that are high in added sugars. Replace sweets and soft drinks with lower-calorie, nutrient-dense alternatives like fruits, vegetables, and 100 percent juices. Unsweetened tea, low-fat or fat-free milk, or water are also good choices. Be aware that some products are low in fat but high in added sugars. The Nutrition Facts label tells you the total amount of sugars in one serving of a product. However, added sugars are not listed separately on this panel.

To find out if a product contains added sugars, read the ingredient list on the food package. Added sugars include brown sugar, corn sweetener, corn syrup, honey, molasses, and fruit juice concentrates. They also include dextrose, fructose, glucose, lactose, and sucrose.

21. Should I limit alcoholic beverages?

If you drink alcohol, limit the amount to 1 drink daily for women and 2 drinks daily for men. Alcoholic beverages give you calories but few nutrients. A drink is 12 fluid ounces of regular beer, 5 fluid ounces of wine, or 1½ fluid ounces of 80-proof distilled spirits.

For safety reasons, avoid alcohol when you plan to drive a vehicle or use machinery. Also avoid alcohol when doing activities that require attention, skill, or coordination. People taking certain medicines and those with some medical conditions should not drink alcohol at all. Ask your doctor whether you can have an occasional drink if you want to.

22. What can I do about constipation?

People often worry too much about having a bowel movement every day. There is no right number of daily or weekly bowel movements. Being regular is different for each person. For some people, it can mean bowel movements twice a day. For others, movements just three times a week may be normal. Constipation is a symptom, not a disease. You may be constipated if you are having fewer bowel movements than usual and your stools are firm and hard to pass. Too little fiber or fluid can cause constipation. Some medicines can cause constipation, too. If you're often constipated, ask your doctor for advice. Eating more foods that contain fiber like fruits, vegetables, and whole grains might help. Drinking plenty of fluids can also help prevent constipation.

Physical activity can help keep your bowel movements more regular, too. Use of bulk-forming products or occasional use of laxatives can also help. Talk with your doctor to learn more these products.

23. Where can I learn more about eating well?

The MyPyramid Plan from the U.S. Department of Agriculture, or USDA, can help you choose a mix of healthy foods that are right for you. This useful online tool suggests what and how much to eat from each food group. The amount depends on your age, sex, and activity level. The MyPyramid.gov website offers information about how to eat healthfully and suggests menu items tailored to your daily needs.

Another balanced eating plan is the DASH eating plan which is designed to help prevent or manage high blood pressure, or hypertension. DASH stands for Dietary Approaches to Stop Hypertension. For more about DASH, contact the National Heart, Lung and Blood Institute at 1-301-592-8573 or 1-240-629-3255 (TTY). Be sure to check with your doctor about eating plans to help manage health conditions that occur as you get older.

24. How can I choose healthier foods when shopping?

Planning ahead can help you choose healthier foods when you shop. It can also help you get the most for your money. Make a shopping list of foods you will need, and then buy only the items on your list. To avoid impulse buying, try to do your shopping when you are not hungry or rushed. Plan to buy low-fat, nutrient-dense foods such as fruits and vegetables, lean meats, fish, and whole-grain cereals and breads. Also put items such as low-fat or fat-free milk and milk products, eggs, dried beans, and nuts on your shopping list. Many of these items are usually found in the outer ring of the grocery store. Try not to buy convenience foods, even if they're on sale. These foods, such as baked goods, candies, crackers, and chips can be high in sodium, sugar, and fat. They give you few nutrients for the calories you consume. Limit the amount of lunch meat you buy for the same reasons unless you are buying the special lean, low-fat, low-sodium products. You might want to take time to read the Nutrition Facts printed on food packages and cans until you are familiar with them. The Nutrition Facts can help you choose more healthy foods and compare the contents of different brands. When reading the Nutrition Facts, be sure to read the serving size and how many servings the package contains.

25. I find it difficult to shop for food. Where can I get help?

If you don't drive or have trouble walking or carrying groceries, help may be available. Many grocers offer home-delivery services. Some supermarkets and chains let you order groceries and other products on the Internet. For a small fee, the groceries can be delivered to your home. You might ask family or friends, your place of worship, or a local volunteer center for help with shopping. Home-delivered meals are also available for people who can't get out. Your Area Agency on Aging might be able to tell you where to get help if you can't shop or make your own meals. To contact your Area Agency on Aging for information about programs in your community, call the Eldercare Locator toll free at 1-800-677-1116.

26. How can I eat well if I'm on a limited budget?

Eating well doesn't have to mean spending more money or buying costly "health foods." You can eat well on a budget by planning ahead and choosing foods that give you more nutrition for your money. In fact, you might find that you spend less, not more, to eat right. To get the most for your money, choose nutritious foods such as fruits and vegetables, fat-free or low-fat milk products, whole grains, and lean meats. Avoid convenience foods, sweets, and snack foods that give you fewer nutrients for your money. You can save money by choosing

store brands instead of name brands, buying foods on sale, and using coupons or supermarket discount cards. Also, only buy what you can use before the food goes bad or before the "useby" date on the package. If you like to eat out, look for restaurants that offer senior discounts, early-bird dinner specials, or two-for-one or discount specials. You can also save money by going out for lunch instead of dinner.

27. Which Federal Government programs help low-income older adults buy food?

The U.S. Food Stamp Program helps qualified people buy groceries. This program helps people with low incomes get enough to eat while encouraging good nutrition and health. The Senior Farmers' Market Nutrition Program can help, too. This Federal Government program gives older adults with low incomes coupons that can be used at farmers' markets, roadside stands, and some other places. The coupons can be exchanged for fresh, nutritious, locally grown fruits, vegetables, and herbs. Contact your Area Agency on Aging to learn more about food stamps, the Senior Farmers' Market Program, home-delivered meals, and other food assistance programs. They can give you more information about how to get these services. To contact these agencies, call the Eldercare Locator toll free at 1-800-677-1116.

28. Why do people lose interest in eating and cooking as they get older?

Some people lose interest in eating and cooking because their senses of taste and smell change with age. Foods a person once enjoyed might seem less flavorful as he or she gets older. Some medicines can change the sense of taste or make a person feel less hungry. Problems with chewing, digestion, or gas can make an older person lose interest in eating. In addition, some older adults don't eat well because they find it hard to shop for food or cook. Others don't enjoy meals because they often eat alone. Not eating enough or avoiding some foods could mean that a person misses out on needed vitamins, minerals, fiber, or protein. Not eating enough could also mean that the person doesn't get enough calories.

29. What should I do if I don't feel like eating?

If you often don't feel like eating, talk with your health care provider. Simple changes could help you overcome challenges to eating well and help you enjoy meals more. These changes can help make sure that you get the nutrients and calories you need for healthy, active living. Your doctor or other health care provider might suggest changing your medicines, eating softer foods, or avoiding foods that cause gas or other digestive problems. If you have trouble chewing food, talk with your doctor or dentist about problems with your teeth or gums. Not being able to chew well could also mean that your dentures need to be adjusted.

If you don't feel like eating because food no longer tastes good, you might try cooking meals

If you don't feel like eating because food no longer tastes good, you might try cooking meals in new ways or using different herbs and spices. Experiment with ethnic foods, regional dishes, or vegetarian recipes. You might also try new recipes and experiment with different kinds of fruits, vegetables, and grains that add interest to your meals.

30. I don't enjoy meals because I often eat alone. Where can I find others to eat with?

Eating with others is one way to enjoy meals more. Contact local senior centers and places of worship to find out if they host group meals. You could also invite neighbors to share meals at home or eat out with friends or family members. Joining or starting a breakfast, lunch, or dinner club is another way to get together with others at mealtime.

31. How can I choose healthier foods when I eat out?

When you eat out, you can still eat well if you choose carefully, know how your food is prepared, and watch portion sizes. Select dishes that include fruits and vegetables, whole grains, lean cuts of meats and poultry, eggs, fish, beans, and low-fat or fat free milk products. Order your food baked, broiled, or grilled instead of fried, and make sure it is well done, especially dishes with meat, poultry, fish, seafood, or eggs. Ask for sauces and toppings on the side so you can control the amounts. Ordering half portions or splitting a dish with a friend can help keep calorie intake down. Also, don't be afraid to ask for substitutions. Many restaurants and eating establishments not only offer healthful choices but will let you substitute healthier foods. For example, you might substitute fat-free yogurt and olive oil for sour cream and butter on your baked potato. Instead of a side order of onion rings or French fries, you could have the mixed vegetables. Ask for brown rice or rice pilaf instead of white rice. Try having fruit for dessert.

32. What is foodborne illness?

Illnesses you get from contaminated food are called foodborne illnesses, also known as food poisoning. These illnesses may come from eating foods contaminated with bacteria, viruses, or parasites, also called pathogens. Each year, about 76 million people in the United States become ill from eating contaminated foods. Of those, about 5,000 die. If you get foodborne illness, you might have upset stomach, abdominal pain, vomiting, or diarrhea. Or, you could have flu-like symptoms with a fever and headache, and body aches. Sometimes people confuse foodborne illness with other types of illness. Foodborne illnesses can be dangerous. Many are caused by bacteria such as E. coli and salmonella, which can cause serious health problems. But if you follow good food safety practices, you can reduce your risk of getting sick from these and other harmful bacteria.

33. How do foodborne illnesses affect older adults?

Foodborne illness can affect anyone, but older adults are at increased risk. As we age, our bodies produce less stomach acid, making it harder to get rid of harmful bacteria that enter our digestive system. Our digestion may also slow down, allowing harmful bacteria to stay in our bodies longer. Also, changes in smell and taste can keep us from knowing when food is spoiled. Foodborne illnesses can cause serious health problems for older adults. An older person who gets a foodborne illness is likely to be sicker longer, and if hospitalized, is likely to have a longer hospital stay.

34. What steps can I take to avoid foodborne illness when handling and preparing food?

You can take these simple steps to avoid foodborne illnesses when handling and preparing food.

- Wash your hands before and after handling food.
- Wash cooking items frequently during food preparation.
- Rinse fresh fruits and vegetables thoroughly.
- Cook foods to safe internal temperatures.
- Store foods properly.

Take these simple steps to avoid foodborne illnesses when handling and preparing food.

- Thaw foods properly.
- Keep raw and ready-to-eat foods separate.
- Avoid some foods entirely.
- Pay attention to expiration dates.

35. How often should I wash my hands to avoid foodborne illness?

Whether at home or away from home, be sure to wash your hands with soap and warm water before and after handling food and after using the bathroom, changing diapers, and handling pets. Hand washing is especially important after handling raw meat, poultry, fish, seafood, and eggs. To wash your hands, wet them, apply soap, and rub them together vigorously for at least 20 seconds. Rinse your hands under clean, running, warm water. Dry your hands completely with a clean paper towel or cloth towel.

36. How should I wash foods before preparing or eating them?

Rinse fresh fruits and vegetables under running tap water, including those with skins and rinds that are not eaten. Do not use detergent or bleach.

Unlike fruits and vegetables, raw meats and poultry do not need to be washed. Washing these raw foods might get rid of some bacteria but can increase the chance of spreading bacteria to other foods, surfaces, and utensils. Cooking these foods to a safe internal temperature will destroy any bacteria on the food.

37. What about washing the items I use to prepare foods?

Wash cutting boards, dishes, utensils, and counter tops with hot, soapy water after preparing each food item and before you go on to the next food. Also, use hot, soapy water to clean up spills in the refrigerator. Some bacteria can still grow slowly at refrigerator temperatures.

38. What foods should older adults avoid to reduce the chance of getting foodborne illness?

To reduce the chance of getting foodborne illness, older adults should avoid certain foods that may carry harmful bacteria, including

- raw or undercooked meat, poultry, fish, and seafood.
- unpasteurized (raw) milk, milk products, and juices.
- raw or partially cooked eggs and foods made with raw eggs such as raw cookie dough and cake batter, protein milkshakes, and Caesar salad dressing.

To reduce the chance of getting foodborne illness, older adults should avoid certain foods that may carry harmful bacteria, including

- hot dogs and luncheon meats, unless they are reheated until steaming hot or 165 degrees Fahrenheit.
- soft cheeses like Brie and Camembert, unless labeled "made with pasteurized milk." Pasteurized food has been heated to high enough temperatures to destroy disease-causing organisms.
- uncooked sprouts, such as bean, alfalfa, clover, or radish sprouts.

39. What are the recommended cooking temperatures for foods?

Meat and poultry need to be cooked to certain temperatures to kill harmful bacteria. Cook these foods to the following safe internal temperatures. Use a food thermometer to check the internal temperature of the food.

- Beef, veal, and lamb steaks, roasts, and chops should be cooked to 145°F.
- Ground beef, veal, and lamb should be cooked to 160°F.
- Pork should be cooked to 160°F
- All poultry should reach a minimum internal temperature of 165°F. Fish, seafood, and eggs need to be cooked to certain temperatures to kill harmful bacteria. Cook these foods to the following safe internal temperatures. Use a food thermometer to check the internal temperature of the food.
- Fish and seafood should be cooked to 145°F.
- Eggs should be cooked to 160°F.
- Leftovers should be reheated to 165°F.

40. What is the proper way to store perishable food?

You should refrigerate or freeze perishables like meat, poultry, fish, seafood, and eggs. Never let these foods, or cut fresh vegetables or fruit, sit at room temperature for more than two hours before storing them in the refrigerator or freezer. If the temperature in the room is 90 degrees Fahrenheit or above, you should put the food away after one hour.

41. Why is it important to keep hot foods hot and cold foods cold?

It is important to keep hot foods hot and cold foods cold because bacteria grow quickly in the "danger zone" between 40 degrees and 140 degrees Fahrenheit. Just keeping food warm (40 to 140 degrees Fahrenheit) is not safe. Most foods are safe after cooking to a safe internal temperature and refrigerating promptly.

42. What are the best temperatures for storing cold food?

Cold foods that you buy or have delivered should be kept at 40 degrees Fahrenheit or below. Refrigerate cold food within two hours of receiving it or within one hour if the air temperature is 90 degrees Fahrenheit or above. To be sure that cold foods are kept cold, set your refrigerator to 40 degrees Fahrenheit or colder, and your freezer at 0 degrees Fahrenheit. Use an appliance thermometer to check the temperatures inside your refrigerator.

43. How should I store leftovers and ready-to-eat meals?

Refrigerate or freeze leftovers and ready-to-eat meals within two hours of receiving them. If the air temperature is 90 degrees Fahrenheit or above, put the food away after one hour. When storing hot foods, divide food into small portions, place in shallow containers, and refrigerate or freeze. If you buy hot food out or have it delivered, keep hot, at a temperature of 140 degrees Fahrenheit or above. Warm using a preheated oven, chafing dishes, warming trays, or slow cookers. Use a food thermometer to check internal temperature of food. If you bring home a doggie bag, make sure to refrigerate your leftovers within two hours of receiving the food, and within one hour if the air temperature is 90 degrees Fahrenheit or above. If you will not be getting home soon enough, put the food in a cooler with ice or freezer gel packs to keep cold. If this is not possible, it is better to leave the leftovers at the restaurant. **Don't keep refrigerated leftovers more than 3 to 4 days.** Even if the food looks and smells fine, it may not be safe to eat after that time. Don't hesitate to get rid of food that is no longer safe.

44. What about reheating food?

If you want to reheat food that has been refrigerated, you should heat it to 165 degrees Fahrenheit until it is hot and steaming. When reheating food in the microwave oven, cover and rotate the food for even heating. Allow the food to stand a short while before checking the internal temperature with a food thermometer. Use a food thermometer to check the temperature of the food.

45. What's the best way to safely thaw frozen food?

Don't put frozen foods on the counter to thaw at room temperature. Put food in the refrigerator. Keep juices from thawing meats and poultry from dripping onto other foods by putting into containers or on a plate. Raw juices may contain harmful bacteria. For faster thawing, frozen foods in leak-proof plastic bags and immerse in cold water. Change water every 30 minutes, and cook the food immediately after thawing. Food can also be thawed in a microwave if cooking immediately after.

46. How can I keep raw and ready-to-eat foods separate?

To prevent the transfer of harmful bacteria, separate raw and ready-to-eat foods while shopping and when preparing or storing them. When handling raw meat, poultry, fish, seafood, and eggs, keep these foods and their juices away from ready-to-eat foods. Use one cutting board for fresh fruits and vegetables and a separate one for raw meat, poultry, fish, seafood, and eggs. Don't place cooked food on a plate that held raw meat, poultry, fish, seafood, or eggs unless you first wash the plate with hot, soapy water.

47. What do expiration dates on food tell me?

Pay attention to "sell-by" and "use-by" dates on packages and cartons. The "sell-by" date tells the store how long to offer a product for sale. Don't buy an item after the "sell-by" date. The "use-by" date is the last date that the manufacturer of the product suggests is best for consuming the food. If an item has a "use-by" date, throw it out after the date has passed.

48. How can I avoid foodborne illness when eating out?

When you go out to eat, check out the eating establishment to see how clean it is. Are the dishes clean? Are the floors swept? Are the bathrooms sanitary? If not, you may be better off finding somewhere else to eat. If the dining room is dirty, the kitchen may be too. A dirty kitchen may lead to unsafe food. When you eat out, always order your food well done. If you order food containing meat, poultry, fish, seafood, or eggs, make sure these foods are thoroughly cooked. Don't hesitate to ask your food server how the food is prepared before placing your order. If the server is not sure or does not know, ask to speak with the chef to make sure these foods will be not be served raw or undercooked. Take a good look at your food when it is served to you. If you ordered a hot meal, make sure it's served to you piping hot. If it's not hot enough, or if it just doesn't look right to you, send it back.

49. What should I do if I think I have a foodborne illness?

If you think you have a foodborne illness, you should take these steps.

- 1. Contact your doctor or health care provider. Seek medical treatment as necessary.
- 2. Preserve the food in question. Wrap it securely, label it "Danger," and then freeze it. The food may be used to diagnose your illness and prevent others from getting sick. If you think you have a foodborne illness, you should take these steps.
- 3. Save all packaging materials, such as cans or cartons. Write down the food, the date and time consumed, and save any identical unopened products. Report the contaminated food to the USDA Meat and Poultry Hotline at 1-888-674-6854.
- 4. Call your local health department if you think you became ill from food you ate at a local restaurant or other eating establishment so they can investigate.

50. Where can I get more information about foodborne illness?

If you have questions and you'd like to talk to an expert, call the following toll-free hotlines. The Food and Drug Administration Hotline can answer questions about safe handling of seafood, fruits, and vegetables as well as rules that govern food safety in restaurants and grocery stores. You can reach them by calling 1-888-SAFEFOOD (1-888-723-3366). The USDA Meat and Poultry Hotline can answer questions about safe handling of meat and poultry as well as many other consumer food issues. Call at 1-800-674-6854.

NIHSeniorhealth 07 May 2008

Home Health: Safety and Wellness

1. How common are falls among older people?

More than one in three people age 65 years or older fall each year. The risk of falling — and the risk of disability and other life-changing problems caused by falls — increases with age. Falls are not an inevitable part of getting older, though. Many falls can be prevented.

2. Why do people fall?

People fall for many reasons. Often, more than one risk factor is involved in a fall. As the number of risk factors rises, so does the risk of falling.

Many falls are linked to personal factors — a person's physical condition or medical problems. Falls may also be linked to safety hazards in the person's home or community environment.

3. What personal factors can lead to falls?

Some personal factors that can lead to falls are:

- muscle weakness, especially in the legs
- poor balance or difficulty walking factors that could be related to a neurological cause, arthritis, or another condition that might be treated.
- blood pressure that drops too much on standing
- vision problems
- taking medications that cause side effects like dizziness and confusion, or that interact with one another.
- · impaired mental abilities and urinary incontinence

4. What environmental factors can lead to falls?

Some environmental factors that can lead to falls are:

- clutter and other tripping hazards
- slick floors, loose rugs, and slippery walkways
- poor lighting, either inside or outdoors
- not having handrails along stairs and grab bars in the bathroom.

5. How do falls affect people?

Falls most often do not result in any injury or result in bruises or minor cuts, but they sometimes affect a person's physical or mental well-being. At least one-tenth of falls result in serious injury to soft tissues or bones. A fall can cause a fracture, head injury, or other problem that can change a person's life. Fractures caused by falls can lead to hospital stays and disability. They can also prevent a person from getting around, doing daily tasks, or socializing. Most often, fall-related fractures are in the person's hip, pelvis, spine, arm, hand, or ankle. Fear of falling again can cause problems. A person who has fallen may avoid doing daily tasks or enjoyable activities. This fear can also cause the person to spend more time at home, away from other people.

6. How common are hip fractures, and what problems do they cause?

Hip fractures are a common and very serious type of fall-related injury among older adults. These fractures are a leading cause of hospitalizations and medical loss of independence. Only half of older adults hospitalized for a broken hip will be able to get around as they did before the hip fracture. Many will need long-term care.

7. What is osteoporosis and who gets it?

Osteoporosis is a disease that involves loss of bone mass. Over time, this disease thins and weakens bones to the point where they break easily, especially in the hip, spine, and wrist. Low bone mass increases the chance of hip fractures and other fractures if you fall. If bones are fragile, even a minor fall can cause fractures. More than two-thirds of people with osteoporosis are women, but men can also have it. Small, thin-boned women and women who are Caucasian or Asian are at greatest risk.

8. How do I know if I have osteoporosis?

Osteoporosis has no symptoms. Many people don't know they have it until a bone breaks. A bone density test can tell you if you are at risk. This safe, painless test uses X-rays or sound waves to measure the strength of your bones. Women over age 65 and men over 70 should have a bone density test.

9. How can I improve my bone health?

Getting enough calcium and vitamin D, and staying physically active can help keep bones healthy and prevent bone loss. Not smoking and limiting the amount of alcohol you drink can help, too. Your doctor might also recommend taking medicines to slow bone loss or help rebuild bone if you are at risk of osteoporosis.

10. How much calcium and vitamin D do I need to keep my bones strong?

People over age 50 should consume 1,200 mg of calcium daily by eating calcium-rich foods and taking calcium supplements. People ages 51 to 70 should consume at least 400 international units (IU) of vitamin D daily. People over age 70 should consume at least 600 IU daily.

11. Can medications increase my risk of falling?

People who take at least four prescription drugs have a greater risk of falling than do people who take fewer drugs. Sometimes the increased risk comes from the health problems for which the person takes the medications. In other cases, the effects of the medications themselves increase a person's risk of falls. Certain medications cause side effects like dizziness, confusion, and sleepiness that increase a person's risk of falling. Some medications don't work well together and may cause problems that lead to falls.

If you think your medicines are causing problems, be sure to talk with your doctor about your risk of falls from medications. Don't stop taking them unless you talk with your doctor first.

12. Should I talk with my doctor about changing my medications to help prevent falls?

It is important to talk with your doctor about your medications. Bring your prescribed medicines with you when you visit the doctor. Also bring any over-the-counter products, vitamins, minerals, and herbal products you are taking.

Ask if any of the medications or other products might increase your risk of falling. Also ask if the doses of any of the medications need to be changed.

13. Does physical activity increase my risk of falls?

You might think that moving about will increase the chance of falling. However, physical activity actually helps lower older adults' risk of falls.

Without the physical activity that comes with doing daily tasks or exercise, your muscles and bones can weaken over time. As a result, you could become more -- not less -- likely to fall. Talk with your doctor about what kinds of physical activity you should do.

14. How does exercise help prevent falls?

Getting regular exercise is one way to prevent falls and fractures that result from falls. Exercise keeps muscles strong and improves balance. It also helps keep joints, tendons, and ligaments flexible. In turn, your balance and the way you walk may improve, lowering your risk of falling.

Your doctor or a physical therapist can help you plan an exercise program that is right for you. A supervised group program can improve your balance and gait. Doing strength and balance exercises at home can also reduce your risk of falls.

15. Does physical activity help prevent fractures?

Regular physical activity helps slow bone loss and builds strong bones. Having strong bones can prevent fractures if you do fall. Walking, dancing, climbing stairs, gardening, and doing other physical activities at least 30 minutes a day can help keep bones healthy.

16. What is Tai Chi and how can it help prevent falls?

Tai Chi is an ancient Chinese method of using slow, flowing movements to coordinate the mind and body. This gentle, relaxing activity can improve strength, balance, postural alignment, and concentration. Some studies have found that Tai Chi helps prevent falls among older people because it improves balance and control. It may also boost self-confidence and reduce the fear of falling.

17. Where can I learn more about exercise and older adults?

NIHSeniorhealth.gov includes a section about exercise and older adults. To visit that section, go to: http://nihseniorhealth.gov/exercise.

The National Institute on Aging also offers Exercise: A Guide from the National Institute on Aging and a companion video, available in both English and Spanish. For ordering information go to: http://www.niapublications.org/shopdisplayproducts

18. Can vision problems lead to falls?

Vision problems can contribute to falls among older people. Problems that can lead to falls include:

- lack of depth perception or visual sharpness
- · not being able to see contrasting objects
- cataracts
- glaucoma.

19. What can I do to prevent vision-related falls?

Have your vision tested regularly or if you think it has changed. Even a small change in vision can increase your risk of falling. To prevent falls, wear your eyeglasses if you need them. Keep the lenses clean and be sure the frames are straight. If you get new glasses, be extra cautious as you get used to them. If you wear reading glasses or multi-focal lenses, take them off when you're walking to avoid missteps.

20. What kind of footwear should I wear to help prevent falls?

Sensible footwear can help prevent falls. Choose shoes that:

- have low heels and non-slip soles
- fit well -- there should be no marks on your feet when you take off your shoes and socks
- completely surround the foot -- no backless shoes
- support your feet.

Avoid wearing only socks or floppy, backless slippers. Also, be sure to wear boots with good traction if you go outside in the snow.

21. Where do most falls happen?

Falls can happen anywhere, but more than half of all falls happen at home. Many of these falls could be prevented by making simple changes in the home.

22. What can I do to prevent falls at home?

One simple way to prevent falls at home is to remove objects from stairs, hallways, and other places where you walk. Tripping on clutter, shoes, small furniture, pet bowls, electrical or phone cords, or other things can cause a fall. Be sure to arrange furniture so you have plenty of room to walk freely, too. Have handrails installed on both sides of stairs and walkways. If you must carry something while walking up or down stairs, hold the item in one hand and use the handrail with the other. When you are carrying something, be sure you can see where your feet are stepping. Secure carpets to the floor and stairs. Remove throw rugs, use non-slip rugs, or attach rugs to the floor with double-sided tape. Put non-slip strips on floors and steps. Put non-slip strips or a rubber mat on the floor of your bathtub or shower.

Have grab bars installed in the tub and shower and next to the toilet. Be sure the handrails and grab bars are firmly attached to the wall. Re-arranging items in your home can also help prevent falls. Place often-used items within easy reach so you don't need to stand on a stool to get them.

23. Can better lighting help prevent falls?

Good lighting can help prevent falls. Make sure you have adequate lighting in each room, at entrances to your home, and on stairways in your home. Light switches at both the top and bottom of stairs can help. Throughout your home, use light bulbs that have the highest wattage recommended for the fixture. Place night lights in the bathroom, hallways, and other areas to guide you when you get up at night. You might also put a lamp within reach of your bed. Keeping a flashlight near your bed can help if the power is out and you need to get up.

Frequently Asked Questions

24. What other devices can I use to prevent falls at home?

A reacher or grabber can also help prevent falls. This simple tool lets you take lightweight items from high shelves and other places and pick up objects from the floor so you do not have to bend over. Use a reacher rather than standing on a stool to get something from above or bending down to pick up something from the floor.

Another helpful device is a portable telephone. Carry the phone with you from room to room. When it rings, you won't have to rush to answer it. Not rushing could avert a harmful fall. Never rush to answer the phone or door.

25. What can I do to prevent falls outdoors?

Be careful when walking outdoors. Slipping on a slick sidewalk, a curb, or icy stairs could result in a disabling fracture or other injury.

To help prevent falls outdoors at home, you should:

- · have handrails installed on both sides of outdoor stairs and walkways
- light stairs and walkways
- · ask someone to spread sand or salt on icy surfaces
- wear shoes or snow boots with traction when walking on slippery surfaces.

26. Should I use a cane to avoid falls?

Talk with your doctor or a physical therapist to find out if a walking aid will help you avoid falls. Depending on the cause of the unsteadiness, a cane or walker could make you more stable when you walk.

27. If I need a cane, what size should I have?

If you need a cane, be sure that it fits you well and that you learn to use it safely. The top of the cane should be the height of your wrist when your arm is hanging down. A physical therapist can help you choose the right size and type of cane and can show you how to use it properly.

28. Should I use a walker to prevent falls?

Ask your physical therapist if a walker would help you prevent falls. A walker could help you stay balanced by giving you a wide base of support. Take time to learn how to use a walker properly. Also, be sure to use the walker when needed.

29. How can I choose the right kind of walker if I need one?

If you need to use a walker, it is important to choose the right kind for you. It's also important to develop a habit of using any walking aid correctly. A physical therapist can help you choose a walker that meets your needs and fits you well. Four-wheeled walkers can be used if you don't need to put your weight on the walker for balance. Those with two tips and two wheels

can roll, depending on where you place your weight. Walkers with tips only are quite common and will not roll. When using a walker, your elbows should be at a comfortable angle of about 30 degrees. Also, when your arms are relaxed at your sides, the inside of your wrist should be at the top of the walker grip.

30. What should I do if I fall?

A sudden fall can be startling and frightening. If you fall, try to stay calm. Take a few deep breaths to help you relax. Stay still on the floor or ground for a few moments to help you get over the shock of falling. It will also give you time to decide if you're hurt before getting up. Getting up too quickly or in the wrong way could make an injury worse.

If you think you can get up safely without help, you should follow these steps:

- 1. Roll over onto your side.
- 2. Rest while your body and blood pressure adjust.
- 3. Slowly get up on your hands and knees, and crawl to a sturdy chair.
- 4. Put your hands on the chair seat and slide one foot forward so that it is flat on the floor. Keep the other leg bent so the knee is on the floor.
- 5. From this kneeling position, slowly rise and turn your body to sit in the chair.
- 6. If you're hurt or can't get up, ask someone for help or call 911. If you're alone, try to get into a comfortable position and wait for help to arrive.

31. Should I tell my doctor if I fall?

Yes. Be sure to tell your doctor if you fall or almost fall, even if you aren't hurt. The fall might be a sign of an underlying problem that can be treated or corrected. Write down when, where, and how you fell so you can discuss the details with your doctor. The doctor can assess whether a medical issue, such as low blood pressure or diabetes, or another cause of the fall should be addressed. **Knowing the cause of a fall can help you and your doctor find ways to prevent future falls.** For instance, your doctor might suggest changing your medication doses or eyewear prescription.

32. How can I cope with my fear of falling?

Many older adults are afraid of falling. This fear becomes more common as people age, even among those who haven't fallen. Getting rid of your fear of falling can help you to stay active, maintain your physical health, and prevent future falls.

Fear of falling might cause you to avoid doing activities you enjoy or need to do. It might also cause you to stay at home, away from your friends, family, and others. In turn, you may become lonely and inactive. If you're worried about falling, talk with your doctor. He or she may be able to help you cope with this concern by referring you to a physical therapist. A physical therapist can help you improve your balance and help build your walking confidence.

Frequently Asked Questions

33. Why do I sometimes feel dizzy when I stand up?

Dizziness might be caused by postural hypotension — a drop in blood pressure when you stand up. This condition might result from a drop in blood volume, dehydration, or certain medications. It might also be linked to diabetes, Parkinson's disease, or an infection.

Talk with your doctor if you sometimes feel dizzy when you stand up. The doctor or a nurse can check your blood pressure to find out if you have postural hypotension. Some people with postural hypotension do not feel dizzy so it is important to ask your doctor or nurse to check your blood pressure while you are lying and standing. They can also suggest ways to avoid the dizziness that could result in a fall. For instance, the doctor may suggest drinking more water or changing some of your medicine doses. There may also be other reasons for your dizziness which your doctor can help you identify. Also, always stand up slowly after eating, lying down, or resting. Getting up too quickly can cause your blood pressure to drop.

34. Should I get a personal emergency response system?

If you have problems with balance or dizziness or live alone, you might want to get a personal emergency response system. This service provides a button or bracelet to wear at all times in your home. If you fall or need emergency medical assistance for any reason, a push of the button will alert the service through the phone system. Emergency medical services will be called. There is a fee for medical monitoring services, but it may be worth the cost.

35. Where can I learn more about preventing falls?

MedlinePlus, a service of the National Library of Medicine, provides more resources about falls and fall prevention. Click here for additional resources available through MedlinePlus: http://www.nlm.nih.gov/medlineplus/falls.html

Resources: Citations and Permissions

Administration on Aging (AOA)

http://www.aoa.gov/AoARoot/AoA_Programs/Special_Projects/Civic_Engagement/index.aspx

Agency for Healthcare Research and Quality

http://www.ahrq.gov/

AoA Health, Prevention, and Wellness Programs

http://www.aoa.gov/AoARoot/AoA_Programs/HPW/index.aspx)

Americans with Disabilities Act

http://www.ada.gov/

Creative Arts for Aging

http://www.creativeaging.org/

Toolkit: http://artsandaging.org/

CDC (Center for Disease Control) and Healthy People 2010 targets.

In English: http://apps.nccd.cdc.gov/SAHA/Default/HealthyTargets.aspx

In Spanish: http://www.cdc.gov/spanish/

CCPH

http://depts.washington.edu/ccph/servicelearningres.html

DASH Eating Plan (Dietary Approaches to Stop Hypertension)

http://dashdiet.org/

For more information contact the National Heart, Lung, and Blood Institute at:

1-301-592-8573 or 1- 240-629-3255 (TTY)

Evidence-based Disease and Disability Prevention Program (EBDDP) (http://www.aoa.gov/

AoARoot/AoA_Programs/HPW/Evidence_Based/index.aspx)

Food and Drug Administration

www.fda.gov

Phone: 1-888-SAFEFOOD

Resources: Citations and Permissions

Internet-Websites on Food Safety:
Food and Drug Administration and AARP
http://vm.cfsan.fda.gov/~dms/seniorsd.html
http://vm.dvsan.fda.gov
Food Safety and Inspection Service www.fsis.usda.gov

Joint-Federal information www.FoodSafety.gov

Leibs, Andrew. *Enhancing Health Care for the Disabled A Profile of the Harris Family Center for Disability & Health Policy.* Suite 101. Feb 16, 2010. Accessed 10 Apr 2010 from http://public-healthcare-issues.suite101.com/article.cfm/enhancing-health-care-for-the-disabled.

MedlinePlus

http://www.nlm.nih.gov/medlineplus/druginformation.html Glossaries / Drugs, Supplements, and Herbal Information

MyPyramid Plan from the U.S. Department of Agriculture and USDA www.MyPyramid.gov

NIHSenior Health:

http://nihseniorhealth.gov/falls/causesandriskfactors/01.html

Pharmacy Health Literacy Assessment: http://www.ahrq.gov/qual/pharmlit/pharmlit.pdf

Quick Guide to Health and Literacy and Older Adults: http://www.health.gov/communication/literacy/olderadults

Seifer SD. (1998).

Service-learning: Community-campus partnerships for health professions education CCPH. Academic Medicine, (733) 273-277

Specific Health Topics http://www.nlm.nih.gov/medlineplus/healthtopics.html Includes a very large index of health topics

Stanford University Chronic Disease Self-Management Program http://patienteducation.stanford.edu/programs/cdsmp.html

Resources: Citations and Permissions

Suite101

Enhancing Health Care for the Disabled: A Profile of the Harris Family Center for Disability & Health Policy

http://public-healthcare-issues.suite101.com/article.cfm/enhancing-health-care-for-the-disabled

USDA Meat and Poultry

http://www.fsis.usda.gov/Food_Safety_Education/usda_meat_&_poultry_hotline/index.asp Phone: 1-800-535-4555

Public Domain, Royalty Free, and Other Image Credits:

AP public domain images of FEMA #41946-Speaker at Bureau visits Senior Center accessed from Examiner.com.

All royalty-free images public domain/permissions accessed from SXC @istockphoto.com including image IDs:

212032 (Jkucharski), 995326, 95288 (cover), 26870, 245929, 333971, 351853, 452194, 477799, 477986, 521032, 659142, 718085, 728423, 731146, 735910, 818980, 821534, 915227, 938735, 948090, 951931, 986818, 1040192, 1097378, 1170293, 1179776, 1193678, 1194851, 1227787, 1239214, 1259952, 1267951, 502438, 801960, 757780

All royalty-free images public domain/permissions accessed from CCommons Wiki including images: Tsai Chi photo by Donna Bella, and Upstream Fitness (author unknown)

SLI-SAH ramp build by Phillip Burrell.